08/10/2023	Kit Components	
Product code	Description	
ECS-K-050	KIT (Primary)	
Components:		
ECS-A-030	Base/Neutrals Mix 1	
ECS-A-031	8270 Add-ons Mix	
ECS-A-032	PAH Analyte Mix	
ECS-A-006	Phenols Mix	
ECS-A-007	Benzidines Mix	



Safety Data Sheet acc. to OSHA HCS

Reviewed on 08/10/2023

1 Identification

· Product identifier

- · Product Name: <u>Base/Neutrals Mix 1</u>
- Part Name: ECS-A-030
- · Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

· Application of the substance / the mixture Certified Reference Material

• Details of the supplier of the safety data sheet

Manufacturer/Supplier: Spex CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA 732-549-7144 USMet-CRMSales@antylia.com

 Information department: product safety department
 Emergency telephone number: Emergency Phone Number (24 hours)
 CHEMTREC (800-424-9300)
 Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

GHS08 Health hazard

Carcinogenicity 1B Toxic to Reproduction 1B



Acute Toxicity - Oral 4 Acute Toxicity - Inhalation 4 Skin Irritation 2 Sensitization - Skin 1 H302 Harmful if swallowed. H332 Harmful if inhaled. H315 Causes skin irritation. H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

H350 May cause cancer.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

· Label elements

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling: dichloromethane bis(2-chloroethyl) ether nitrobenzene dimethylnitrosoamine 4-Bromodiphenyl ether Hazard statements H302+H332 Harmful if swallowed or if inhaled. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H350 May cause cancer. H360 May damage fertility or the unborn child.
- H336 May cause drowsiness or dizziness.
- · Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.



Product Name: Base/Neutrals Mix 1

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P270 Do not eat, drink or smoke when using this product.
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P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)

 $\begin{array}{c} Health = 1\\ Fire = 1\\ Reactivity = 0 \end{array}$

· HMIS-ratings (scale 0 - 4)



• Other hazards

· Results of PBT and vPvB assessment

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

75-09-2 dichloromethane	94.0%
62-75-9 dimethylnitrosoamine	0.2%
67-72-1 hexachloroethane	0.2%
77-47-4 hexachlorocyclopentadiene	0.2%
78-59-1 3,5,5-trimethylcyclohex-2-enone	0.2%
84-74-2 dibutyl phthalate	0.2%
85-68-7 BBP	0.2%
86-30-6 nitrosodiphenylamine	0.2%
86-74-8 carbazole	0.2%
87-68-3 hexachlorobuta-1,3-diene	0.2%
98-95-3 nitrobenzene	0.2%
101-55-3 4-Bromodiphenyl ether	0.2%
103-33-3 azobenzene	0.2%
106-46-7 1,4-dichlorobenzene	0.2%
108-60-1 bis(2-chloro-1-methylethyl) ether	0.2%
110-86-1 PYRIDINE	0.2%
111-44-4 bis(2-chloroethyl) ether	0.2%
111-91-1 bis(2-chloroethoxy)methane	0.2%
117-81-7 bis(2-ethylhexyl) phthalate	0.2%
117-84-0 Di-n-octyl Phthalate	0.2%
118-74-1 hexachlorobenzene	0.2%
120-82-1 1,2,4-trichlorobenzene	0.2%
121-14-2 2,4-dinitrotoluene	0.2%

Product Name: Base/Neutrals Mix 1

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		(Contd. of page 2
	dimethyl phthalate	0.2%
	2,6-dinitrotoluene	0.2%
	nitrosodipropylamine	0.2%
7005-72-3	4-Chlorophenyl-phenyl ether	0.2%
	identification of the substance/preparation	
	diethyl phthalate	0.2%
	2-Chloronaphthalene	0.2%
	1,2-dichlorobenzene	0.2%
541-73-1	1,3-dichlorobenzene	0.2%

4 First-aid measures

· Description of first aid measures

• General information:

- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
- Supply fresh air and to be sure call for a doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:
- Immediately call a doctor.
- Do not give anything to eat or drink Do not induce vomitting
- · Information for Doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

75-09-2	dichloromethane	200 ppm
62-75-9	dimethylnitrosoamine	0.082 mg/m ²
67-72-1	hexachloroethane	3 ppm
77-47-4	hexachlorocyclopentadiene	0.03 ppm
78-59-1	3,5,5-trimethylcyclohex-2-enone	12 ppm
84-66-2	diethyl phthalate	15 mg/m ³
84-74-2	dibutyl phthalate	15 mg/m ³
85-68-7	BBP	15 mg/m ³
86-30-6	nitrosodiphenylamine	$5.5 mg/m^{3}$
86-74-8	carbazole	0.66 mg/m ³
87-68-3	hexachlorobuta-1,3-diene	1 ppm
91-58-7	2-Chloronaphthalene	6.2 mg/m ³
95-50-1	1,2-dichlorobenzene	50 ppm
I		Contd. on pag

Product Name: Base/Neutrals Mix 1

		Contd. of page 1
98-95-3	nitrobenzene	3 ppm
101-55-3	4-Bromodiphenyl ether	0.33 mg/m ³
106-46-7	1,4-dichlorobenzene	30 ppm
108-60-1	bis(2-chloro-1-methylethyl) ether	0.15 ppm
	PYRIDINE	3 ppm
111-44-4	bis(2-chloroethyl) ether	10 ppm
111-91-1	bis(2-chloroethoxy)methane	0.04 ppm
	bis(2-ethylhexyl) phthalate	10 mg/m ³
117-84-0	Di-n-octyl Phthalate	41 mg/m ³
118-74-1	hexachlorobenzene	0.006 mg/m
120-82-1	1,2,4-trichlorobenzene	0.45 ppm
121-14-2	2,4-dinitrotoluene	0.6 mg/m ³
131-11-3	dimethyl phthalate	15 mg/m ³
541-73-1	1,3-dichlorobenzene	6 ppm
606-20-2	2,6-dinitrotoluene	0.6 mg/m ³
621-64-7	nitrosodipropylamine	5.6 mg/m ³
7005-72-3	4-Chlorophenyl-phenyl ether	$1.5 mg/m^3$
· PAC-2:		
	dichloromethane	560 ppm
	dimethylnitrosoamine	0.9 mg/m ³
	hexachloroethane	36 ppm
	hexachlorocyclopentadiene	0.55 ppm
	3,5,5-trimethylcyclohex-2-enone	33 ppm
	diethyl phthalate	300 mg/m ³
	dibutyl phthalate	1,600 mg/m
85-68-7		77 mg/m ³
	nitrosodiphenylamine	60 mg/m ³
	carbazole	7.2 mg/m ³
	hexachlorobuta-1,3-diene	3 ppm
	2-Chloronaphthalene	69 mg/m ³
	1,2-dichlorobenzene	170 ppm
	nitrobenzene	20 ppm
	4-Bromodiphenyl ether	3.6 mg/m ³
	1,4-dichlorobenzene	170 ppm
	bis(2-chloro-1-methylethyl) ether	1.6 ppm
	PYRIDINE	1.0 ppm 19 ppm
	bis(2-chloroethyl) ether	25 ppm
	bis(2-chloroethoxy)methane	0.44 ppm
	bis(2-ethylhexyl) phthalate	1,000 mg/m
	Di-n-octyl Phthalate	$\frac{1,000 \text{ mg/m}}{450 \text{ mg/m}^3}$
	hexachlorobenzene	14 mg/m^3
	1,2,4-trichlorobenzene	5 ppm
	2,4-dinitrotoluene	12 mg/m^3
	dimethyl phthalate	12 mg/m ² 1,600 mg/m
	1,3-dichlorobenzene	66 ppm
	2,6-dinitrotoluene	$\frac{66 \text{ ppm}}{47 \text{ mg/m}^3}$
	nitrosodipropylamine	$\frac{47 \text{ mg/m}^3}{62 \text{ mg/m}^3}$
	4-Chlorophenyl-phenyl ether	$\frac{62 \text{ mg/m}^3}{35 \text{ mg/m}^3}$
		55 mg/m ²
· PAC-3:		6.000
	dichloromethane	6,900 ppm
	dimethylnitrosoamine	10 mg/m ³
	hexachloroethane	300 ppm
	hexachlorocyclopentadiene	1 ppm
	3,5,5-trimethylcyclohex-2-enone	200 ppm
84-66-2	diethyl phthalate dibutyl phthalate	1,800 mg/m ³ 9300* mg/m ³

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Product Name: Base/Neutrals Mix 1

		(Contd. of page 4)
85-68-7	BBP	460 mg/m ³
86-30-6	nitrosodiphenylamine	360 mg/m ³
86-74-8	carbazole	43 mg/m ³
87-68-3	hexachlorobuta-1,3-diene	10 ppm
91-58-7	2-Chloronaphthalene	410 mg/m ³
95-50-1	1,2-dichlorobenzene	1,000 ppm
98-95-3	nitrobenzene	200 ppm
101-55-3	4-Bromodiphenyl ether	21 mg/m ³
106-46-7	1,4-dichlorobenzene	1,000 ppm
108-60-1	bis(2-chloro-1-methylethyl) ether	22 ppm
110-86-1	PYRIDINE	3600* ppm
111-44-4	bis(2-chloroethyl) ether	250 ppm
111-91-1	bis(2-chloroethoxy)methane	2.7 ppm
117-81-7	bis(2-ethylhexyl) phthalate	6,100 mg/m ³
117-84-0	Di-n-octyl Phthalate	11000* mg/m ³
118-74-1	hexachlorobenzene	91 mg/m ³
120-82-1	1,2,4-trichlorobenzene	20 ppm
121-14-2	2,4-dinitrotoluene	200 mg/m ³
131-11-3	dimethyl phthalate	9300* mg/m ³
541-73-1	1,3-dichlorobenzene	400 ppm
606-20-2	2,6-dinitrotoluene	200 mg/m ³
621-64-7	nitrosodipropylamine	95 mg/m ³
7005-72-3	4-Chlorophenyl-phenyl ether	210 mg/m ³

7 Handling and storage

· Handling:

· Precautions for safe handling

- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see section 7.

· Control parameters

• Components with limit values that require monitoring at the workplace: The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At th	At this time, the other constituents have no known exposure limits.		
75-0	9-2 dichloromethane		
	Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052		
REL	See Pocket Guide App. A		
	Long-term value: 50 ppm BEI, A3		
62-7.	5-9 dimethylnitrosoamine		
PEL	see 29 CFR 1910.1003		
REL	See Pocket Guide App. A		
TLV	Skin; L, A3		
-	(Contd. on page 6)		

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certiprep
Printing date 08/10/2023

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Product Name: Base/Neutrals Mix 1

Reviewed on 08/10/2023

67-72 Harachinerihane 67-72 Harachinerihane 67-72 Harachinerihane 58 h			(G 1. 6
PEL Long-term value: 10 mg/m ¹ , 1 ppm Skin: Skin:	67-7	72-1 harachlaraethane	(Contd. of page 5
Sin Sin Sin Son Sin S			
Not: Schoolse Order Glude Appen A and C Schoolse Order Glude Appen A Schoolse Order Appen A	I LL		
Skii, See Pocket Guide Apps. A and C TJ Long-term value: 10 mg/m1 0.01 mg/m REL Long-term value: 0.01 mg/m1 0.01 gm Ad Ad Start Addition Color mg/m1 0.01 gm REL Long-term value: 0.01 mg/m1 2.5 gm REL Long-term value: 10 mg/m1 2.5 gm REL Long-term value: 2 mg/m1 4 gm Ad Addition value: 2 mg/m1 4 gm Cling limit value: 3 mg/m1 4 gm REL Long-term value: 3 mg/m1 7 gm REL Long-term value: 3 mg/m1 7 gm	REL		
Ski, A37-8-7-4-SubarosyclopentalieneRELRELJeng-term value: 0.01 ppmA1A2A3RELJeng-term value: 0.01 mpm, 25 ppmRELJeng-term value: 10 mpm, 20 mpm, 10 mpmRELJeng-term value: 10 mpm, 20 mpm, 10 mpmRELJeng-term value: 10 mpm, 20 mpm, 20 mpmRELJeng-term value: 10 mpm, 20 mpm, 20 mpmSkir, 12 mp, 20 mpm, 20 mpmSkir, 12 mp, 20 mpm, 20 mpm, 20 mpmSkir, 12 mp, 20 mpm, 20 mpmSkir, 12 mp, 20 mpm, 20 mpm, 20 mpmSkir, 12 mp, 20 mpm, 2	nill l		
Ski, A37-8-7-4-Subaros/coloratadionRELRel:R	TLV	/ Long-term value: 1 ppm	
REFL Integration white: 0.0 ppm WI Integration white: 0.0 ppm MA Advector REFL Integration white: 0.0 ppm REFL Integration white: 0.0 ppm REFL Integration white: 0.0 ppm Stain 825-83-85-825-810 Stain 825-83-85-825-810 REFL Integration white: 0.0 ppm Stain 825-83-810-800-800-800-800-800-800-800-800-800			
$TV \ Long-term value: 0.01 ppm At the second sec$	77-42	47-4 hexachlorocyclopentadiene	
$TV \ Long-term value: 0.01 ppm At the second sec$	REL	Long-term value: 0.1 mg/m ³ , 0.01 ppm	
Ad 75-59.1 35.5 rime/hytyclobex-2-enone PEL Long-term value: 23 mg/ml, 25 ppm BEL Long-term value: 23 mg/ml, 4 ppm U Celling timt value: 5 mg/ml 84.74.2 dibut/ phthalate Ad 84.75.3 harcherohana 1-3 diene Ad 84.76.5 harcherohana 1-3 diene Ad 84.76.5 harcherohana 1-3 diene Ad 85.87.5 Adveckhordate 4.79.4 mg/ml, 0.02 ppm Statis, 85 mg/ml, 20 ppm Statis, 85 mg/ml, 75 ppm Statis, 85 mg/ml, 1 ppm Statis, 85 mg/ml, 75 ppm Statis, 85 mg/ml, 75 ppm REL Long-term value: 1 mg/ml, 75 ppm Statis, 85 mg/ml, 75 ppm Statis, 85 mg/ml, 75 ppm REL Long-term value: 1 mg/ml, 75 ppm REL Long-term value: 1 mg/ml, 75 ppm REL Long-term value: 1 mg			
PEL Lang-term value: 24 mg/m², 4 ppm PEL Lang-term value: 32 mg/m², 4 ppm PEL Lang-term value: 3 mg/m², 4 ppm PEL Lang-term value: 5 mg/m² PES Lang-term value: 5 mg/m² Stain, SE = Packet Guide App, A PAC PEL Lang-term value: 0 20 ppm Stain, SE = Packet Guide App, A PAC PEL Lang-term value: 0 20 ppm Stain, SE = Packet Guide App, A PAC PEL Lang-term value: 5 mg/m², 1 ppm Stain, SE = Packet Guide App, A PAC PEL Lang-term value: 5 mg/m², 7 ppm REL Lang-term value: 1 mg/m², 75 ppm REL L			
REL Long-term value: 3 mg/m ² , 4 µm IV Ceiling intivatue: 5 µm 84-74-2 dibutg hthalate REL Long-term value: 3 mg/m ² 84-74-2 dibutg hthalate REL Long-term value: 3 mg/m ² 84-74-2 dibutg hthalate 87-85-3 hexachlarabuta 1.3-diene 88-95-3 hexachlarabuta 1.3 mg/m ² , 1 ppm Skin 88-10-10-10-10-10-10-10-10-10-10-10-10-10-	78-59	59-1 3,5,5-trimethylcyclohex-2-enone	
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	PEL	L Long-term value: 140 mg/m ³ , 25 ppm	
$A3^{-1}$ PEL lang-term value: 5 mg/m ¹ PEL lang-term value: 5 mg/m ¹ VL lang-term value: 5 mg/m ¹ VL lang-term value: 5 mg/m ¹ $STORS$ hexek/horbutu-1, 3-diffene SEL lang-term value: 20 appm/show $STORS$ hexek/horbutu-1, 3-diffene SEL lang-term value: 0.02 ppm $SSin, See Pocket Guide App. A NU VL lang-term value: 5 mg/m1, 102 ppm SSin, A3 Samplet Sin, Sin, Sin, See Pocket Guide App. A VL lang-term value: 5 mg/m1, 1 ppm Sin, Sin, BLm, A3 Sin SIn, EL lang-term value: 5 mg/m1, 7 ppm Sin, Sin, BLm, A3 Samplet Out-47-1/4-dichorobertare Pete Iong-term value: 10 pm Samplet A3 Samplet Samplet Iong-term value: 10 ppm Samplet A3 Samplet Samplet Iong-term value: 10 ppm Samplet A3 Samplet Samplet Iong-term value: 10 mg/m^1, 5 ppm Samplet $	REL	Long-term value: 23 mg/m ³ , 4 ppm	
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FPE. Long-term value: 5 mg/m ⁴ REL Long-term value: 5 mg/m ⁴ 87.68.3 Nexachborobuto.1.3-diene 887.68.3 Nexachborobuto.1.3-diene 887.68.3 Nexachborobuto.1.3-diene 887.68.3 Nexachborobuto.1.3-diene 881. Sim: See Pocket Guide App. A TV Long-term value: 0.20 ppm Skin: See Pocket Guide App. A Sixi VI. Long-term value: 5 mg/m ⁴ , 1 ppm Skin: REL. Long-term value: 5 mg/m ⁴ , 1 ppm Skin: REM. A3 Skin: Skin: VI. Long-term value: 15 mg/m ³ , 5 ppm REL Long-term value: 15 mg/m ³ , 5 ppm REL Long-term value: 15 mg/m ³ , 5 ppm REL Long-term value: 15 mg/m ³ , 5 ppm REL Long-term value: 15 mg/m ³ , 5 ppm REL Long-term			
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REL long-term value: 5 mg/m ⁴ TIV Long-term value: 5 mg/m ⁴ Star. See Devoler Guide App. A Star. See Transvalue: 5 mg/m ⁴ , 1 ppm Star. Star. See Transvalue: 5 mg/m ⁴ , 1 ppm Star. Star. See Transvalue: 5 mg/m ⁴ , 1 ppm Star. Star. See Transvalue: 5 mg/m ⁴ , 7 ppm Star. See Transvalue: 1 ppm Star. See Transvalue: 5 mg/m ⁴ , 7 ppm Star. See Transvalue: 1 ppm A3 TIV Long-term value: 1 ppm Star. Star. See Devoler Guide App. A TV Long-term value: 1 ppm Star. See Devoler Guide App. A Star. See Devoler Guide App. A Star. See Devoler Guide App. A <	PEL	L Long-term value: 5 mg/m ³	
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US —

Product Name: Base/Neutrals Mix 1

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	(Contd. of page 6)
120-82-1 1,2,4-trichlorobenzene	
REL Ceiling limit value: 40 mg/m ³ , 5 ppm	
TLV Ceiling limit value: 5 ppm	
131-11-3 dimethyl phthalate	
PEL Long-term value: 5 mg/m ³	
REL Long-term value: 5 mg/m ³	
TLV Long-term value: 5 mg/m ³	
· Ingredients with biological limit values:	
75-09-2 dichloromethane	
BEI 0.3 mg/L	
Medium: urine	
Time: end of shift	
Parameter: Dichloromethane (semi-quantitative)	
98-95-3 nitrobenzene	
BEI 5 % of hemoglobin	
Medium: blood	
Time: during or end of shift	
Parameter: Methemoglobin (background, nonspecific,)	

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- · Eye protection:

Safety glasses



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties · General Information		
· Appearance:		
Form:	Liquid	
Color:	According to product specification	
· Odor:	Characteristic	
· Odour Threshold:	Not applicable.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	40 °C (104 °F)	

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	(Contd. of pag
· Flash point:	> 100 °C (> 212 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto igniting:	605 °C (1,121 °F)
· Decomposition temperature:	Not applicable.
· Ignition temperature:	Product is not selfigniting.
• Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits: Lower: Upper:	13 Vol % 22 Vol %
· Vapor pressure at 20 °C (68 °F):	453 hPa (339.8 mm Hg)
· Density · Relative density · Vapor density · Evaporation rate	Not applicable. Not applicable. Not applicable. Not applicable.
• Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	r): Not applicable.
· Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.
· Solvent content: Organic solvents: VOC content:	94.8 % 0.80 %
Solids content:	1.6 %
• Other information	No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute	toxicity:
---------	-----------

· LD/LC50	values	that are	e relevant	for	classification:

	•	•	
75-09-2 dichloromethane			

- Oral LD50 1,600 mg/kg (rat)
- Inhalative LC50/4 h 88 mg/l (rat)

· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

- on the eye: No irritating effect.
- \cdot Sensitization: Sensitization possible through skin contact.
- $\cdot \textit{Additional toxicological information:}$

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

Product is suspected to cause damage to fertility.

Product is suspected to cause birth defects.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
75-09-2 dichloromethane	2A
62-75-9 dimethylnitrosoamine	2A
	(Contd. on page 9)

Product Name: Base/Neutrals Mix 1

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		(Contd. of page 8
	hexachloroethane	28
	3,5,5-trimethylcyclohex-2-enone	2B
85-68-7		3
86-30-6	nitrosodiphenylamine	3
86-74-8	carbazole	28
	hexachlorobuta-1,3-diene	3
95-50-1	1,2-dichlorobenzene	3
98-95-3	nitrobenzene	28
103-33-3	azobenzene	3
106-46-7	1,4-dichlorobenzene	28
108-60-1	bis(2-chloro-1-methylethyl) ether	3
110-86-1	PYRIDINE	28
111-44-4	bis(2-chloroethyl) ether	3
	bis(2-ethylhexyl) phthalate	28
118-74-1	hexachlorobenzene	28
121-14-2	2,4-dinitrotoluene	28
541-73-1	1,3-dichlorobenzene	3
606-20-2	2,6-dinitrotoluene	28
621-64-7	nitrosodipropylamine	28
	ional Toxicology Program)	
75-09-2	dichloromethane	R
62-75-9	dimethylnitrosoamine	R
67-72-1	hexachloroethane	R
98-95-3	nitrobenzene	R
106-46-7	1,4-dichlorobenzene	R
117-81-7	bis(2-ethylhexyl) phthalate	R
118-74-1	hexachlorobenzene	R
621-64-7	nitrosodipropylamine	R
· OSHA-C	a (Occupational Safety & Health Administration)	
	lichloromethane	
62-75-9	limethylnitrosoamine	

12 Ecological information

· Toxicity

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

- Danger to drinking water if even extremely small quantities leak into the ground.
- Results of PBT and vPvB assessment

```
· PBT:
```

	hexachlorobuta-1,3-diene
120-82-1	1,2,4-trichlorobenzene
· vPvB:	

87-68-3 hexachlorobuta-1,3-diene

• Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

[·] Aquatic toxicity: No further relevant information available.



Product Name: Base/Neutrals Mix 1

• Uncleaned packagings: • Recommendation: Disposal must be made according to official regulations.

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14 Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	UN1593
· DOT, ADR, IMDG, IATA · UN proper shipping name · DOT · ADR · IMDG, IATA	Dichloromethane 1593 DICHLOROMETHANE DICHLOROMETHANE
· Transport hazard class(es)	
·DOT	
· Class	6.1 Toxic substances
· Label	6.1
· ADR, IMDG, IATA	
· Class · Label	6.1 Toxic substances 6.1
· Packing group · DOT, ADR, IMDG, IATA	111
· Environmental hazards:	Not applicable.
 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups 	Warning: Toxic substances 60 F-A,S-A (SGG10) Liquid halogenated hydrocarbons
· Transport in bulk according to Annex II of MARPOL73/78 and	the IBC Code Not applicable.
· Transport/Additional information:	
· ADR · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1593 DICHLOROMETHANE, 6.1, III

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15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture • Sara

· Section 3.	13 (Specific toxic chemical listings):
75-09-2	dichloromethane
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
	hexachlorocyclopentadiene
84-74-2	dibutyl phthalate
86-30-6	nitrosodiphenylamine
	(Contd. on page 11)

- US —

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07 (0.2	(Contd. of page 10)
	hexachlorobuta-1,3-diene 1.2-dichlorobenzene
	nitrobenzene
	1,4-dichlorobenzene
	bis(2-chloro-1-methylethyl) ether
	PYRIDINE
	bis(2-chloroethyl) ether
	bis(2-chloroethoxy)methane
	bis(2-ethylhexyl) phthalate
	hexachlorobenzene
	1,2,4-trichlorobenzene
	2,4-dinitrotoluene
131-11-3	dimethyl phthalate
	1,3-dichlorobenzene
606-20-2	2,6-dinitrotoluene
	nitrosodipropylamine
· TSCA (To	oxic Substances Control Act):
consumer	nical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for paint or coating removal.
All compo	onents have the value ACTIVE.
· Hazardou	ts Air Pollutants
75-09-2	dichloromethane
62-75-9	dimethylnitrosoamine
	hexachloroethane
77-47-4	hexachlorocyclopentadiene
	3,5,5-trimethylcyclohex-2-enone
	dibutyl phthalate
	hexachlorobuta-1,3-diene
	nitrobenzene
	1,4-dichlorobenzene
	bis(2-chloroethyl) ether
	bis(2-ethylhexyl) phthalate
	hexachlorobenzene
	1,2,4-trichlorobenzene
	2,4-dinitrotoluene
	dimethyl phthalate
• Propositi	
•	
	s known to cause cancer:
	dichloromethane
	dimethylnitrosoamine
	hexachloroethane
	nitrosodiphenylamine
	carbazole
	hexachlorobuta-1,3-diene
	nitrobenzene
	azobenzene
	1,4-dichlorobenzene
	bis(2-chloro-1-methylethyl) ether
	PYRIDINE
	bis(2-chloroethyl) ether
	bis(2-ethylhexyl) phthalate
	hexachlorobenzene
	2,4-dinitrotoluene
	2,6-dinitrotoluene
621-64-7	nitrosodipropylamine
· Chemical	s known to cause reproductive toxicity for females:
	libutyl phthalate
	(Contd. on page 12)

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Chemical	s known to cause reproductive toxicity for males:	(contai or page
84-74-2	dibutyl phthalate	
98-95-3	nitrobenzene	
117-81-7	bis(2-ethylhexyl) phthalate	
121-14-2	2,4-dinitrotoluene	
	2,6-dinitrotoluene	
	s known to cause developmental toxicity:	
	dibutyl phthalate	
85-68-7		
	bis(2-ethylhexyl) phthalate	
	hexachlorobenzene	
	enic categories	
	vironmental Protection Agency)	
	dichloromethane	
	dimethylnitrosoamine	B2
	hexachloroethane	L
	hexachlorocyclopentadiene	Ε,
	3,5,5-trimethylcyclohex-2-enone	С
	diethyl phthalate	D
	dibutyl phthalate	D
85-68-7		C
	nitrosodiphenylamine	B2
	hexachlorobuta-1,3-diene	С
95-50-1	1,2-dichlorobenzene	D
98-95- <i>3</i>	nitrobenzene	
01-55-3	4-Bromodiphenyl ether	D
03-33-3	azobenzene	B2
11-44-4	bis(2-chloroethyl) ether	B2
	bis(2-chloroethoxy)methane	D
	bis(2-ethylhexyl) phthalate	B2
	hexachlorobenzene	B2
	1,2,4-trichlorobenzene	D
	dimethyl phthalate	D
	1,3-dichlorobenzene	D
	nitrosodipropylamine	
	eshold Limit Value)	
	dichloromethane	
	dimethylnitrosoamine	
	hexachloroethane	
	hexachlorocyclopentadiene	
	3,5,5-trimethylcyclohex-2-enone	
	diethyl phthalate	
	hexachlorobuta-1,3-diene	
	1,2-dichlorobenzene	
	nitrobenzene	
	1,4-dichlorobenzene	
	bis(2-chloroethyl) ether	
	bis(2-ethylhexyl) phthalate	
18-74-1	hexachlorobenzene	
VIOSH-C	Ca (National Institute for Occupational Safety and Health)	
	dichloromethane	
75-09-2	dimethylnitrosoamine	
	laimeinyiniirosoamine	
62-75-9	hexachloroethane	
62-75-9 67-72-1	· ·	
62-75-9 67-72-1 87-68-3	hexachloroethane	

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Product Name: Base/Neutrals Mix 1

117-81-7 bis(2-ethylhexyl) phthalate

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).



· Signal word Danger

· Hazard-determining components of labeling:

- dichloromethane bis(2-chloroethyl) ether nitrobenzene
- dimethylnitrosoamine

4-Bromodiphenyl ether

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

- H315 Causes skin irritation.
- May cause an allergic skin reaction. H317
- H350 May cause cancer.
- H360 May damage fertility or the unborn child.
- H336 May cause drowsiness or dizziness.

· Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product. P270

P280 Wear protective gloves/protective clothing/eye protection/face protection.

- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label). P321

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

· Contact:

Spex CertiPrep, LLC. 1-732-549-7144

· Date of preparation / last revision 08/10/2023

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value

PEL: Permissible Exposure Limit



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Product Name: Base/Neutrals Mix 1

REL: Recommended Exposure Limit BEI: Biological Exposure Limit Acute Toxicity - Oral 4: Acute toxicity – Category 4 Skin Irritation 2: Skin corrosion/Irritation – Category 2 Sensitization - Skin 1: Skin sensitisation – Category 1 Carcinogenicity 1B: Carcinogenicity – Category 1B Toxic to Reproduction 1B: Reproductive toxicity – Category 1B Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3 Reviewed on 08/10/2023

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1 Identification

· Product identifier

- · Product Name: 8270 Add-ons Mix
- Part Name: ECS-A-031
- · Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

 \cdot Application of the substance / the mixture Certified Reference Material

· Details of the supplier of the safety data sheet

Manufacturer/Supplier: Spex CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA 732-549-7144 USMet-CRMSales@antylia.com

 Information department: product safety department
 Emergency telephone number: Emergency Phone Number (24 hours)
 CHEMTREC (800-424-9300)
 Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Toxicity - Oral 4H302 Harmful if swallowed.Skin Irritation 2H315 Causes skin irritation.Sensitization - Skin 1H317 May cause an allergic skin reaction.Specific Target Organ Toxicity - Single Exposure 3H336 May cause drowsiness or dizziness.

· Label elements

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Warning

- Hazard-determining components of labeling: dichloromethane aniline
 4-chloroaniline
 o-nitroaniline
 Hazard statements
 H302 Harmful if swallowed.
- H315 Causes skin irritation. H317 May cause an allergic skin reaction.
- 11317 Muy cause an anergic skin reaction
- H351 Suspected of causing cancer.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- · Precautionary statements
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.



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P330 Rinse mouth.

- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P321 Specific treatment (see on this label).
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
 Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)



· Other hazards

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerou	s components:	
75-09-2	dichloromethane	97.6%
62-53-3	aniline	0.2%
88-74-4	o-nitroaniline	0.2%
95-48-7	o-cresol	0.2%
95-95-4	2,4,5-trichlorophenol	0.2%
99-09-2	m-nitroaniline	0.2%
	p-nitroaniline	0.2%
106-44-5	p-cresol	0.2%
106-47-8	4-chloroaniline	0.2%
· Chemical	identification of the substance/preparation	
65-85-0	Benzoic acid	0.2%
91-57-6	2-methylnaphthalene	0.2%
100-51-6	Benzyl alcohol	0.2%
132-64-9	dibenzofuran	0.2%

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4 First-aid measures

· Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation:

- Supply fresh air and to be sure call for a doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- $\cdot \textit{After eye contact: Rinse opened eye for several minutes under running water.}$

• After swallowing:

Immediately call a doctor.

Do not give anything to eat or drink - Do not induce vomitting

· Information for Doctor:

· Most important symptoms and effects, both acute and delayed No further relevant information available.



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· Indication of any immediate medical attention and special treatment needed No further relevant information available.

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5 Fire-fighting measures

· Extinguishing media

- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to section 13.
- Ensure adequate ventilation. Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals
- · PAC-1·

9 mg/m ³ 2.5 mg/m ³ 1.6 mg/m ³ 9 mg/m ³ 30 ppm 6.1 mg/m ³ 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
13 mg/m³ 6.2 mg/m³ 9 mg/m³ 2.5 mg/m³ 1.6 mg/m³ 9 mg/m³ 30 ppm 6.1 mg/m³ 30 mg/m³ 560 ppm 12 ppm 140 mg/m³ 54 mg/m³
6.2 mg/m ² 9 mg/m ³ 2.5 mg/m ² 1.6 mg/m ³ 9 mg/m ³ 30 ppm 6.1 mg/m ² 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 54 mg/m ³
9 mg/m ³ 2.5 mg/m ³ 1.6 mg/m ³ 9 mg/m ³ 30 ppm 6.1 mg/m ³ 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
2.5 mg/m ³ 1.6 mg/m ³ 9 mg/m ³ 30 ppm 6.1 mg/m ³ 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
1.6 mg/m³ 9 mg/m³ 30 ppm 6.1 mg/m³ 30 mg/m³ 30 mg/m³ 12 ppm 140 mg/m³ 68 mg/m³ 54 mg/m³
9 mg/m ³ 30 ppm 6.1 mg/m ³ 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
30 ppm 6.1 mg/m ³ 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
6.1 mg/m ³ 30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
30 mg/m ³ 560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
560 ppm 12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
12 ppm 140 mg/m ³ 68 mg/m ³ 54 mg/m ³
140 mg/m³ 68 mg/m³ 54 mg/m³
68 mg/m ³ 54 mg/m ³
54 mg/m ³
, in the second s
27 mg/m ³
18 mg/m ³
71 mg/m ³
52 ppm
68 mg/m ³
330 mg/m ³
·
6,900 ppm
20 ppm
830 mg/m ³
410 mg/m ³
320 mg/m ³
160 mg/m ³
110 mg/m ³
300 mg/m ³
740 ppm
100 mg/m ³
2,000 mg/m ³
-



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7 Handling and storage

- · Handling:
- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

· Control parameters

- · Components with limit values that require monitoring at the workplace:
- The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
- At this time, the other constituents have no known exposure limits.

75 00 2 diablamamatha

75-09-2 dichloromethane
PEL Short-term value: 125 ppm
Long-term value: 25 ppm
see 29 CFR 1910.1052
REL See Pocket Guide App. A
TLV Long-term value: 50 ppm BEI, A3
62-53-3 aniline
PEL Long-term value: 19 mg/m ³ , 5 ppm and Homologues; Skin
REL And Homologues; See Pocket Guide App. A
TLV Long-term value: 2 ppm
Skin; BEI, A3
95-48-7 o-cresol
PEL Long-term value: 22 mg/m ³ , 5 ppm
Skin
REL Long-term value: 10 mg/m ³ , 2.3 ppm
TLV Long-term value: 20* mg/m ³
Skin; *as inhalable fraction and vapor, A4
100-01-6 p-nitroaniline
PEL Long-term value: 6 mg/m³, 1 ppm Skin
REL Long-term value: 3 mg/m ³
Skin
TLV Long-term value: 3 mg/m ³
Skin; BEI-M, A4
106-44-5 p-cresol
PEL Long-term value: 22 mg/m ³ , 5 ppm Skin
REL Long-term value: 10 mg/m ³ , 2.3 ppm
TLV Long-term value: 20* mg/m ³
Skin;*as inhalable fraction and vapor, A4
· Ingredients with biological limit values:
75-09-2 dichloromethane
BEI 0.3 mg/L
Medium: urine
Time: end of shift Parameter: Dichloromethane (semi-quantitative)
(Contd. on page 5)
(Conta. on page 5)

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62-53-3	aniline

02-	55-5 anune
BE	I 0.5 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Aniline (with hydrolysis)
100	-01-6 p-nitroaniline
BE	I 1.5 % of hemoglobin
	Medium: blood
	Time: during or end of shift
	Parameter: Methemoglobin (background, nonspecific, semi-quantitative)
· Add	ditional information: The lists that were valid during the creation were used as basis.
$\cdot Ext$	posure controls
	sonal protective equipment:

Safety Data Sheet acc. to OSHA HCS

• General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. • Eye protection:

Safety glasses



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and	chemical properties
• General Information	
· Appearance: Form:	Liquid
Color:	According to product specification
· Odor:	Characteristic
· Odour Threshold:	Not applicable.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	40 °C (104 °F)
· Flash point:	> 100 °C (> 212 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto igniting:	605 °C (1,121 °F)
· Decomposition temperature:	Not applicable.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
	(Contd on page 6)

(Contd. on page 6)

Product Name: 8270 Add-ons Mix

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		(Contd. of page 5)
· Explosion limits:		
Lower:	13 Vol %	
Upper:	22 Vol %	
· Vapor pressure at 20 °C (68 °F):	453 hPa (339.8 mm Hg)	
• Density at 20 °C (68 °F)	1.32569 g/cm ³ (11.06288 lbs/gal)	
· Relative density	Not applicable.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wate	r): Not applicable.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	98.0 %	
TIO G	0.40.97	

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VOC content:	0.40 %	
Solids content:	2.0 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

75-09-2 dichloromethane

Oral LD50 1,600 mg/kg (rat)

Inhalative LC50/4 h 88 mg/l (rat)

· Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: No irritating effect.

· Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful Irritant

· Carcinogenic categories

· IARC (In	ternational Agency for Research on Cancer)	
75-09-2	dichloromethane	2A
62-53-3	aniline	2A
95-95-4	2,4,5-trichlorophenol	28
106-47-8	4-chloroaniline	28
	ional Toxicology Program)	
75-09-2 dichloromethane		
· OSHA-Ca	(Occupational Safety & Health Administration)	
75-09-2	lichloromethane	
		(Contd. on page 7)

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12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 3 (Self-assessment): extremely hazardous for water
- Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- Danger to drinking water if even extremely small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- \cdot Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

14 Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	UN1593
· UN proper shipping name · DOT · ADR · IMDG, IATA	Dichloromethane 1593 DICHLOROMETHANE DICHLOROMETHANE
· Transport hazard class(es)	
·DOT	
· Class	6.1 Toxic substances
·Label	6.1
· ADR, IMDG, IATA	
· Class	6.1 Toxic substances
·Label	6.1
· Packing group · DOT, ADR, IMDG, IATA	111
· Environmental hazards:	Not applicable.
 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups Stowage Category Stowage Code 	Warning: Toxic substances 60 F-A,S-B (SGG1) Acids B SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Cod	le Not applicable.
	(Contd. on page 8)

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	(Contd. of page 7
· Transport/Additional information:	
·ADR	
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
\cdot Excepted quantities (\widetilde{EQ})	Code: E1
1 1 (2)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1593 DICHLOROMETHANE, 6.1, III

15 Regulatory information

· Section 3	13 (Specific toxic chemical listings):	
	dichloromethane	
62-53-3		
95-48-7	o-cresol	
	2,4,5-trichlorophenol	
	<i>p</i> -nitroaniline	
106-44-5	*	
106-47-8	4-chloroaniline	
132-64-9	dibenzofuran	
	oxic Substances Control Act):	
consumer	nical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section paint or coating removal.	n 3(13)) j
All compo	ments have the value ACTIVE.	
· Hazardou	is Air Pollutants	
75-09-2	dichloromethane	
62-53-3	aniline	
95-48-7	o-cresol	
95-95-4	2,4,5-trichlorophenol	
106-44-5	p-cresol	
132-64-9	dibenzofuran	
· Propositio	on 65	
· Chemical	s known to cause cancer:	
75-09-2	dichloromethane	
62-53-3	aniline	
106-47-8	4-chloroaniline	
· Chemical	s known to cause reproductive toxicity for females:	
None of th	ne ingredients is listed.	
· Chemical	s known to cause reproductive toxicity for males:	
	he ingredients is listed.	
· Chemical	s known to cause developmental toxicity:	
	he ingredients is listed.	
-	enic categories	
· EPA (Env	vironmental Protection Agency)	
75-09-2	dichloromethane	L
62-53-3	aniline	В
65-85-0	Benzoic acid	L
91-57-6	2-methylnaphthalene	Ι
95-48-7		0
106-44-5	p-cresol	0
	dibenzofuran	

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	(Contd. of page 8					
• TLV (Thr	· TLV (Threshold Limit Value)					
75-09-2	dichloromethane	A3				
62-53-3	aniline	A3				
91-57-6	2-methylnaphthalene	A4				
100-01-6	p-nitroaniline	A4				
· NIOSH-Ca (National Institute for Occupational Safety and Health)						
75-09-2 dichloromethane						
62-53-3 aniline						

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



· Signal word Warning

- · Hazard-determining components of labeling:
- dichloromethane
- aniline
- 4-chloroaniline
- o-nitroaniline
- · Hazard statements
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

- P321 Specific treatment (see on this label).
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

- · Contact:
- Spex CertiPrep, LLC. 1-732-549-7144

· Date of preparation / last revision 08/10/2023

· Abbreviations and acronyms:

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation IATA: International Air Transport Association

- EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic

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Product Name: 8270 Add-ons Mix

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Acute Toxicity - Oral 4: Acute toxicity – Category 4 Skin Irritation 2: Skin corrosion/irritation – Category 2 Sensitization - Skin 1: Skin sensitisation – Category 1 Carcinogenicity 2: Carcinogenicity – Category 2 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3 Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2 Reviewed on 08/10/2023

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- US —



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1 Identification

· Product identifier

- · Product Name: PAH Analyte Mix
- · Part Name: ECS-A-032
- · Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

· Application of the substance / the mixture Certified Reference Material

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Spex CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA 732-549-7144 USMet-CRMSales@antylia.com

· Information department: product safety department · Emergency telephone number: Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.

H310 Fatal in contact with skin.

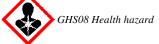
H340 May cause genetic defects.

H350 May cause cancer.

H331 Toxic if inhaled.

GHS06 Skull and crossbones

Acute Toxicity - Dermal 2 Acute Toxicity - Inhalation 3



Germ Cell Mutagenicity 1B Carcinogenicity 1B Toxic to Reproduction 1B





Eye Irritation 2A Sensitization - Skin 1 Specific Target Organ Toxicity - Single Exposure 3

H360 May damage fertility or the unborn child. Specific Target Organ Toxicity - Repeated Exposure 1 H372 Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure. H304 May be fatal if swallowed and enters airways.

Skin Irritation 2 H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

· Label elements

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



Spex

Product Name: PAH Analyte Mix

· Hazard-determining components of labeling:

H225 Highly flammable liquid and vapor. H310 Fatal in contact with skin.

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· Signal word Danger

H331 Toxic if inhaled.

benzene dichloromethane acenaphthylene benzo[a]pyrene · Hazard statements

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H331 10X	ic if innalea.			
H315 Cau	uses skin irritation.			
H319 Cau	H319 Causes serious eye irritation.			
	y cause an allergic skin reaction.			
	y cause genetic defects.			
	v cause cancer.			
-	y damage fertility or the unborn child.			
	y cause drowsiness or dizziness.			
	uses damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.			
	y be fatal if swallowed and enters airways.			
	nary statements			
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.			
P240	Ground/bond container and receiving equipment.			
P241	Use explosion-proof electrical/ventilating/lighting/equipment.			
P260	Do not breathe dust/fume/gas/mist/vapors/spray.			
P260 P262	Do not get in eyes, on skin, or on clothing.			
P262 P280	Do not get in eyes, on skin, or on cloining. Wear protective gloves/protective clothing/eye protection/face protection.			
P301+P3				
P321	Specific treatment (see on this label).			
P331	Do NOT induce vomiting.			
	61+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.			
P304+P34				
	51+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
P361+P3				
P405	Store locked up.			
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.			
	tion system:			
• NFPA rat	tings (scale 0 - 4)			
2	Health = 3			
	Fire = 3			
	$Q \rightarrow Reactivity = 0$			
· HMIS-rat	tings (scale 0 - 4)			
HEALTH	$\frac{*3}{}$ Health = *3			
FIRE	3 Fire = 3			
	$\mathbf{P}_{\text{constitute}} = 0$			
REACTIV				
04 1				
• Other haz				
	f PBT and vPvB assessment			
· PBT:				
50-32-8	benzo[a]pyrene			
56-55-3	benz[a]anthracene			
120-12-7	anthracene			
120.00.0				

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	anthracene
129-00-0	
	Benzo(g,h,i)perylene
	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene
· vPvB:	
	benzo[a]pyrene
	benz[a]anthracene
85-01-8	phenanthrene, pure
129-00-0	
191-24-2	Benzo(g,h,i)perylene
	(Contd on page 3)

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Product Name: PAH Analyte Mix

206-44-0 fluoranthene		(Contd. of page 2
	206-44-0	<i>fluoranthene</i>
207-08-9 benzo[k]fluoranthene	207-08-9	benzo[k]fluoranthene
218-01-9 chrysene	218-01-9	o chrysene

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerou	us components:	
71-43-2	benzene	48.4%
	dichloromethane	48.4%
50-32-8	benzo[a]pyrene	0.2%
53-70-3	dibenz[a,h]anthracene	0.2%
56-55-3	benz[a]anthracene	0.2%
85-01-8	phenanthrene, pure	0.2%
86-73-7	fluorene	0.2%
91-20-3	naphthalene	0.2%
120-12-7	anthracene	0.2%
129-00-0	pyrene	0.2%
191-24-2	Benzo(g,h,i)perylene	0.2%
193-39-5	indeno[1,2,3-cd]pyrene	0.2%
	benz[e]acephenanthrylene	0.2%
206-44-0	fluoranthene	0.2%
207-08-9	benzo[k]fluoranthene	0.2%
208-96-8	acenaphthylene	0.2%
218-01-9	chrysene	0.2%
· Chemical	l identification of the substance/preparation	
83-32-9 d	acenaphthene	0.2%

4 First-aid measures

· Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- Remove breathing apparatus only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- · After inhalation:
- Supply fresh air or oxygen; call for doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · Information for Doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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Product Name: PAH Analyte Mix

• Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

· Reference to other sections

120-12-7

129-00-0 pyrene

anthracene

191-24-2 Benzo(g,h,i)perylene

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

Protective Action Criteria for Chemicals

· PAC-1: 71-43-2 benzene 52 ppm 75-09-2 dichloromethane 200 ppm 50-32-8 benzo[a]pyrene 0.6 mg/m^3 53-70-3 dibenz[a,h]anthracene 0.093 mg/m³ 56-55-3 benz[a]anthracene 0.6 mg/m 83-32-9 acenaphthene 3.6 mg/m³ 85-01-8 phenanthrene, pure 5.4 mg/m³ 86-73-7 fluorene 6.6 mg/m³ 91-20-3 naphthalene 15 ppm 120-12-7 anthracene 48 mg/m³ 129-00-0 pyrene 0.15 mg/m³ 191-24-2 Benzo(g,h,i)perylene 30 mg/m³ 193-39-5 indeno[1,2,3-cd]pyrene 1.2 mg/m³ 205-99-2 benz[e]acephenanthrylene 0.12 mg/m³ 206-44-0 fluoranthene 8.2 mg/m³ 208-96-8 acenaphthylene 10 mg/m³ 218-01-9 chrysene 0.6 mg/m³ · PAC-2: 71-43-2 benzene 800 ppm 75-09-2 dichloromethane 560 ppm 50-32-8 benzo[a]pyrene 120 mg/m³ 53-70-3 dibenz[a,h]anthracene $1 mg/m^3$ 56-55-3 benz[a]anthracene 120 mg/m³ 83-32-9 acenaphthene 40 mg/m³ 85-01-8 phenanthrene, pure 59 mg/m³ 86-73-7 fluorene $72 mg/m^3$ 91-20-3 naphthalene 83 ppm 120-12-7 anthracene 530 mg/m³ 129-00-0 pyrene 1.7 mg/m³ 191-24-2 Benzo(g,h,i)perylene 330 mg/m³ 193-39-5 indeno[1,2,3-cd]pyrene 13 mg/m³ 205-99-2 benz[e]acephenanthrylene 1.3 mg/m³ 206-44-0 fluoranthene 90 mg/m³ 208-96-8 acenaphthylene 110 mg/m³ 218-01-9 chrysene 12 mg/m³ PAC-3: 71-43-2 benzene 4000* ppm 75-09-2 dichloromethane 6,900 ppm 50-32-8 benzo[a]pyrene 700 mg/m³ 53-70-3 dibenz[a,h]anthracene 2.9 mg/m³ 56-55-3 benz[a]anthracene 700 mg/m³ 83-32-9 acenaphthene 240 mg/m³ 85-01-8 phenanthrene, pure 360 mg/m³ 86-73-7 fluorene 430 mg/m³ 91-20-3 naphthalene 500 ppm

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3,200 mg/m³

110 mg/m³

2,000 mg/m³

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193-39-5	indeno[1,2,3-cd]pyrene	79 mg/m ³
205-99-2	benz[e]acephenanthrylene	7.9 mg/m ³
206-44-0	fluoranthene	400 mg/m ³
208-96-8	acenaphthylene	660 mg/m ³
218-01-9	chrysene	69 mg/m ³

7 Handling and storage

· Handling:

- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
 Prevent formation of aerosols.
 Information about protection against explosions and fires:
- *Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.*
- \cdot Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters

• Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

71-43-2 benzene

/1-4.	5-2 benzene
PEL	Short-term value: 15* mg/m ³ , 5* ppm
	Long-term value: 3* mg/m ³ , 1* ppm
	*table Z-2 for exclusions in 29CFR1910.1028(d)
REL	Short-term value: 1 ppm
	Long-term value: 0.1 ppm
	See Pocket Guide App. A
TLV	Short-term value: (2.5) NIC-0.1 ppm
	Long-term value: (0.5) NIC-0.02 ppm
	Skin; BEI, A1
75-0	9-2 dichloromethane
PEL	Short-term value: 125 ppm
	Long-term value: 25 ppm
	see 29 CFR 1910.1052
REL	See Pocket Guide App. A
TLV	Long-term value: 50 ppm
	BEI, A3
50-32	2-8 benzo[a]pyrene
PEL	Long-term value: 0.2 mg/m ³
	see Coal tar pitch volatiles
REL	Long-term value: 0.1 mg/m ³
	Coal tar pitch volatile; Pocket Guide Apps. A+C
TLV	L; BEIp, A2
56-5:	5-3 benz[a]anthracene
TLV	L; BEI-P, A2
91-2	0-3 naphthalene
PEL	Long-term value: 50 mg/m ³ , 10 ppm
REL	Short-term value: 75 mg/m ³ , 15 ppm
	Long-term value: 50 mg/m ³ , 10 ppm
L	(Contd. on page 6)
	US-

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TLV	Long-term value: 10 ppm (Contd. of page
	Skin; BEI, A3
	09-2 benz[e]acephenanthrylene
	L; BEIp, A2
	01-9 chrysene
PEL	Long-term value: 0.2 mg/m ³ see Coal Tar Pitch Volatiles
REL	Long-term value: 0.1* mg/m ³
	*Cyclohexane-extrble.fraction;PocketGuide Apps.A+C
TLV	L, BEIp, A3
-	rdients with biological limit values:
	3-2 benzene
	25 μg/g creatinine Medium: urine
	Time: end of shift Parameter
	Parameter: S-Phenylmercapturic acid (background
	500 µg/g creatinine
	Medium: urine
	Time: end of shift Parameter: t,t-Muconic acid (background)
	9-2 dichloromethane
BEI	0.3 mg/L
	Medium: urine
	Time: end of shift Parameter: Dichloromethane (semi-quantitative)
	2-8 benzo[a]pyrene
BEI	-
	Medium: urine
	Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
	5-3 benz[a]anthracene
BEI	- · · · · • • · · · · · · · · · · · · ·
	Medium: urine
	Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
	0-3 naphthalene
BEI	-
	Medium: -
	Time: end of shift Parameter: 1-Naphthol with hydrolysis + 2-Naphthol with hydrolysis (Nq,Ns)
	99-2 benz[e]acephenanthrylene
BEI	
	Medium: urine
	Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
	01-9 chrysene
BEI	-
	Medium: urine Times and a shift at and a functionali
	Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
	tional information: The lists that were valid during the creation were used as basis.
	sure controls
	onal protective equipment:
	ral protective and hygienic measures:
	away from foodstuffs, beverages and feed. ediately remove all soiled and contaminated clothing.
	hands before breaks and at the end of work.
Store	protective clothing separately.
	d contact with the eyes. d contact with the eyes and skin.
	i contact with the eyes and skin. iratory protection:
In co	use of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that
indep	pendent of circulating air.

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· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. · Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and cl	hemical properties	
General Information		
· Appearance: Form:	Liquid	
Form: Color:	Liquia According to product specification	
· Odor:	Characteristic	
· Odour Threshold:	Not applicable.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	40 °C (104 °F)	
· Flash point:	$< 0 \ ^{\circ}C \ (< 32 \ ^{\circ}F)$	
· Flammability (solid, gaseous):	Highly flammable.	
· Auto igniting:	555 °C (1,031 °F)	
• Decomposition temperature:	Not applicable.	
· Ignition temperature:	Product is not selfigniting.	
• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
· Explosion limits:		
Lower:	1.2 Vol %	
Upper:	22 Vol %	
· Vapor pressure at 20 °C (68 °F):	453 hPa (339.8 mm Hg)	
· Vapor pressure at 50 °C (122 °F):	350 hPa (262.5 mm Hg)	
· Density	Not applicable.	
· Relative density	Not applicable.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/water	r): Not applicable.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	96.8 %	
VOC content:	48.40 %	
Solids content:	2.6 %	
	(Contd. on pa	age 8)

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· Other information

No further relevant information available.

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10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:				
71-43-2 be	71-43-2 benzene			
Oral	Oral LD50 4,894 mg/kg (rat)			
Dermal	LD50	48 mg/kg (mouse)		
Inhalative	LC50/4 h	9,980 mg/l (mouse)		
75-09-2 dichloromethane				
Oral	Dral LD50 1,600 mg/kg (rat)			
Inhalative	Inhalative LC50/4 h 88 mg/l (rat)			

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· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

· on the eye: Irritating effect.

· Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Irritant

Product is suspected to cause damage to fertility.

Product is suspected to cause birth defects.

The product can cause inheritable damage.

· Carcinogenic categories

· IARC (In	ternational Agency for Research on Cancer)	
71-43-2	benzene	1
75-09-2	dichloromethane	2A
50-32-8	benzo[a]pyrene	1
53-70-3	dibenz[a,h]anthracene	2A
56-55-3	benz[a]anthracene	28
83-32-9	acenaphthene	3
85-01-8	phenanthrene, pure	3
86-73-7	fluorene	3
91-20-3	naphthalene	28
120-12-7	anthracene	3
129-00-0	pyrene	3
191-24-2	Benzo(g,h,i)perylene	3
193-39-5	indeno[1,2,3-cd]pyrene	28
205-99-2	benz[e]acephenanthrylene	28
206-44-0	fluoranthene	3
207-08-9	benzo[k]fluoranthene	28
218-01-9	chrysene	28
· NTP (Nat	ional Toxicology Program)	
71-43-2	benzene	K
75-09-2	dichloromethane	R
50-32-8	benzo[a]pyrene	R
53-70-3	dibenz[a,h]anthracene	R
		(Contd. on page 9)

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		Contd. of page 8)
56-55-3	benz[a]anthracene	R
	phenanthrene, pure	R
86-73-7	fluorene	R
91-20-3	naphthalene	R
	anthracene	R
129-00-0	pyrene	R
	indeno[1,2,3-cd]pyrene	R
205-99-2	benz[e]acephenanthrylene	R
206-44-0	fluoranthene	R
207-08-9	benzo[k]fluoranthene	R
218-01-9	chrysene	R
· OSHA-C	a (Occupational Safety & Health Administration)	
71-43-2	benzene	
75-09-2	dichloromethane	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

- Danger to drinking water if even extremely small quantities leak into the ground.
- · Results of PBT and vPvB assessment

· PBT:	
	benzo[a]pyrene
	benz[a]anthracene
	anthracene
129-00-0	
	Benzo(g,h,i)perylene
	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene
· vPvB:	
50-32-8	benzo[a]pyrene
	benz[a]anthracene
	phenanthrene, pure
129-00-0	pyrene
	Benzo(g,h,i)perylene
	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene
· Other adv	erse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- *Recommendation:* Disposal must be made according to official regulations.

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14 Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	UN1992
· UN proper shipping name	011772
·DOT	Flammable liquids, toxic, n.o.s. (Benzene)
· ADR	1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE), ENVIRONMENTALLY HAZARDOUS
·IMDG	FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, NAPHTHALENE, CRUDE), MARINE POLLUTANT
·IATA	FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE)
· Transport hazard class(es)	
·DOT	
· Class · Label	3 Flammable liquids 3, 6.1
· ADR	5, 0.1
· Class · Label	3 Flammable liquids 3+6.1
· IMDG	J+0.1
· Class · Label	3 Flammable liquids 3/6.1
· IATA	3 Flammable liquids
·Label	3 (6.1)
· Packing group · DOT, ADR, IMDG, IATA	11
· Environmental hazards:	Product contains environmentally hazardous substances: benzo[a]pyrene
· Marine pollutant: · Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	336
· EMS Number: · Stowage Category	F-E,S-D B
· Stowage Code	SW2 Clear of living quarters.
\cdot Transport in bulk according to Annex II of MARPOL73/78 and	the IBC Code Not applicable.
· Transport/Additional information:	
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
	(Contd. on page 11)

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· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE), 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

• Section 313 (Spec 71-43-2 benzen		
71 12 2 honzon	ific toxic chemical listings):	
71-45-2 Denzen	2	
75-09-2 dichlor	omethane	
50-32-8 benzo[0	1]pyrene	
53-70-3 dibenz[a,h]anthracene	
56-55-3 benz[a]	lanthracene	
85-01-8 phenan	threne, pure	
91-20-3 naphth		
120-12-7 anthrac	rene	
191-24-2 Benzo()	g,h,i)perylene	
193-39-5 indeno		
	lacephenanthrylene	
206-44-0 fluoran		
207-08-9 benzo[1		
218-01-9 chryser		
	stances Control Act):	
This chemical/pr	oduct is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSC	CA section 3(13)) fo
consumer paint of	r coating removal.	
71-43-2 benzen	2	ACTIVE
75-09-2 dichlor	omethane	ACTIVE
50-32-8 benzo[0	1]pyrene	ACTIVE
53-70-3 dibenz[a,h]anthracene	ACTIVE
56-55-3 benz[a]	lanthracene	ACTIVE
83-32-9 acenap	hthene	ACTIVE
	through music	
85-01-8 phenan	inrene, pure	ACTIVE
85-01-8 phenan 86-73-7 fluoren		
86-73-7 fluoren	e	ACTIVE
	e alene	ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphtha 120-12-7 anthrac	e alene	ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphtha 120-12-7 anthrac 129-00-0 pyrene	e alene cene	ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphtha 120-12-7 anthraa 129-00-0 pyrene 193-39-5 indeno	e alene cene [1,2,3-cd]pyrene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphtha 120-12-7 anthraa 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran	e alene cene [1,2,3-cd]pyrene thene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphtha 120-12-7 anthrad 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap	e alene cene (1,2,3-cd]pyrene thene hthylene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphthi 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser	e alene cene (1,2,3-cd]pyrene thene hthylene ne	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphtha 120-12-7 anthraa 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pa	e alene cene (1,2,3-cd]pyrene thene hthylene ne Dilutants	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphthi 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pa 71-43-2 benzeno	e alene fene [1,2,3-cd]pyrene thene hthylene be pllutants e	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pe 71-43-2 benzen 75-09-2 dichlor	e alene alene [1,2,3-cd]pyrene [1,2,3-cd]pyrene thene hthylene te pllutants e omethane	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chrysen 71-43-2 benzen 75-09-2 dichlor 50-32-8 benzo[d	e alene cene (1,2,3-cd]pyrene thene hthylene te pllutants c comethane a]pyrene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Po 71-43-2 benzen 75-09-2 dichlor 50-32-8 benzo[o 53-70-3 dibenz]	e alene cene (1,2,3-cd]pyrene thene hthylene te pllutants e comethane a]pyrene a,h]anthracene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indenoj 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Po 71-43-2 benzene 75-09-2 dichlor 50-32-8 benzola 53-70-3 dibenz[56-55-3 benz[a]	e alene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indenoj 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pa 71-43-2 benzen 75-09-2 dichlor 50-32-8 benzol 53-70-3 dibenz 56-55-3 benzal 85-01-8 phenam	e alene alene []	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrac 129-00-0 pyrene 193-39-5 indenoj 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pa 71-43-2 benzena 75-09-2 dichlor 50-32-8 benzela 53-70-3 dibenz[56-55-3 benzela 85-01-8 phenana 86-73-7 fluoren	e alene sene (1,2,3-cd]pyrene (1,2,3-cd]	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrad 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pe 71-43-2 75-09-2 dichlor 50-32-8 benzen 56-55-3 benz[a] 85-01-8 phenan 86-73-7 fluoren 91-20-3 naphtha	e dene dene dene de	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrad 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pe 71-43-2 75-09-2 dichlor 50-32-8 benzen 56-55-3 benz[a] 85-01-8 phenan 86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrad	e dene dene dene de	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE
86-73-7 fluoren 91-20-3 naphth 120-12-7 anthrad 129-00-0 pyrene 193-39-5 indeno 206-44-0 fluoran 208-96-8 acenap 218-01-9 chryser • Hazardous Air Pe 71-43-2 75-09-2 dichlor 50-32-8 benzen 56-55-3 benz[a] 85-01-8 phenan 86-73-7 fluoren 91-20-3 naphtha	e delene	ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE

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205-99-2	benz[e]acephenanthrylene	(Contd. of page
	D fluoranthene	
	Denzo[k]fluoranthene	
	D chrysene	
Propositi		
	als known to cause cancer:	
	lis known to cause cancer.	
	2 dichloromethane	
	B benzo[a]pyrene	
	<i>dibenz[a,h]anthracene</i>	
	benz[a]anthracene	
	aphthalene	
	indeno[1,2,3-cd]pyrene	
	benz[e]acephenanthrylene	
	benzo[k]fluoranthene	
) chrysene	
	als known to cause reproductive toxicity for females:	
None of 1	the ingredients is listed.	
Chemica	ils known to cause reproductive toxicity for males:	
	benzene	
	als known to cause developmental toxicity:	
	benzene	
	I	
	genic categories	
	nvironmental Protection Agency)	
71-43-2	2 benzene	A, K
75-09-2	2 dichloromethane	L
50-32-8	8 benzo[a]pyrene	СаН
53-70-3	3 dibenz[a,h]anthracene	B2
	3 benz[a]anthracene	B2
	8 phenanthrene, pure	D
	7 fluorene	D
	3 naphthalene	C, C
	7 anthracene	D
) pyrene	 D
	2 Benzo(g,h,i)perylene	
	5 indeno[1,2,3-cd]pyrene	<u> </u>
	2 benz[e]acephenanthrylene	<u> </u>
	0 fluoranthene	
	benzo[k]fluoranthene	D B2
	•	
	8 acenaphthylene	D
	2 chrysene	B2
	ureshold Limit Value)	
	2 benzene	
	2 dichloromethane	
50-32-8	8 benzo[a]pyrene	
	3 benz[a]anthracene	
56-55-3	3 naphthalene	
56-55-3 91-20-3		
56-55-3 91-20-3	2 benz[e]acephenanthrylene	
56-55-3 91-20-3 205-99-2	2 benz[e]acephenanthrylene 2 chrysene	
56-55-3 91-20-3 205-99-2 218-01-9	P chrysene	
56-55-3 91-20-3 205-99-2 218-01-9 VIOSH- (Ca (National Institute for Occupational Safety and Health)	
56-55-3 91-20-3 205-99-2 218-01-9 NIOSH- 0 71-43-2	P chrysene Ca (National Institute for Occupational Safety and Health) 2 benzene	
56-55-3 91-20-3 205-99-2 218-01-9 NIOSH-0 71-43-2 75-09-2	Ca (National Institute for Occupational Safety and Health)	

Product Name: PAH Analyte Mix

· Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling:
- benzene
- dichloromethane acenaphthylene
- benzo[a]pyrene
- · Hazard statements
- H225 Highly flammable liquid and vapor.
- H310 Fatal in contact with skin.
- H331 Toxic if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H340 May cause genetic defects.
- H350 May cause cancer.
- H360 May damage fertility or the unborn child.
- H336 May cause drowsiness or dizziness.
- H372 Causes damage to the central nervous system and the hematopoietic system through prolonged or repeated exposure.
- H304 May be fatal if swallowed and enters airways.

Precautionary stat	ements
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

- · Contact:
- Spex CertiPrep, LLC.
- 1-732-549-7144

· Date of preparation / last revision 08/10/2023

· Abbreviations and acronyms:

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification (USA) VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

Safety Data Sheet acc. to OSHA HCS

Printing date 08/10/2023

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S

Product Name: PAH Analyte Mix

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Planmable Liquids 2: Flammable liquids – Category 2 Acute Toxicity - Dermal 2: Acute toxicity – Category 2 Acute Toxicity - Inhalation 3: Acute toxicity – Category 3 Skin Irritation 2: Skin corrosion/irritation – Category 2 Eye Irritation 2: Skin corrosion/irritation – Category 1 Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B Carcinogenicity 1B: Carcinogenicity – Category 1B Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 1 Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1 Aspiration Hazard 1: Aspiration hazard – Category 1 Reviewed on 08/10/2023

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US —



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1 Identification

· Product identifier

- · Product Name: Phenols Mix
- Part Name: ECS-A-006
- · Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

· Application of the substance / the mixture Certified Reference Material

• Details of the supplier of the safety data sheet

Manufacturer/Supplier: Spex CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA 732-549-7144 USMet-CRMSales@antylia.com

 Information department: product safety department
 Emergency telephone number: Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.



Acute Toxicity - Oral 4H302 Harmful if swallowed.Acute Toxicity - Inhalation 4H332 Harmful if inhaled.Skin Irritation 2H315 Causes skin irritation.Sensitization - Skin 1H317 May cause an allergic skin reaction.Specific Target Organ Toxicity - Single Exposure 3H336 May cause drowsiness or dizziness.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Warning

- Hazard-determining components of labeling: dichloromethane pentachlorophenol
- 2,4-dinitrophenol

DNOC

· Hazard statements

- H302+H332 Harmful if swallowed or if inhaled.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H336 May cause drowsiness or dizziness.
- Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
- P330 Rinse mouth.

Reviewed on 08/10/2023

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/attention. P321

Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363

Wash contaminated clothing before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)



· Other hazards

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:	
75-09-2 dichloromethane	97.89
51-28-5 2,4-dinitrophenol	0.2%
59-50-7 chlorocresol	0.2%
87-86-5 pentachlorophenol	0.2%
88-06-2 2,4,6-trichlorophenol	0.2%
88-75-5 2-nitrophenol	0.2%
95-57-8 2-chlorophenol	0.2%
105-67-9 2,4-xylenol	0.2%
108-95-2 phenol	0.2%
120-83-2 2,4-dichlorophenol	0.2%
534-52-1 DNOC	0.2%
· Chemical identification of the substance/preparation	
100-02-7 4-nitrophenol	0.29

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
- Supply fresh air and to be sure call for a doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:
- Immediately call a doctor.
- Do not give anything to eat or drink Do not induce vomitting
- · Information for Doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

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5 Fire-fighting measures

- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to section 13.
- Ensure adequate ventilation. · Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals DAC 1

• PAC-1:		
75-09-2	dichloromethane	200 ppm
51-28-5	2,4-dinitrophenol	0.61 mg/m ³
59-50-7	chlorocresol	5.5 mg/m ³
87-86-5	pentachlorophenol	$1 mg/m^3$
88-06-2	2,4,6-trichlorophenol	2.5 mg/m ³
88-75-5	2-nitrophenol	2.1 mg/m ³
95-57-8	2-chlorophenol	2.3 mg/m ³
100-02-7	4-nitrophenol	0.69 mg/m ³
105-67-9	2,4-xylenol	6.9 mg/m ³
108-95-2	phenol	15 ppm
120-83-2	2,4-dichlorophenol	0.2 ppm
534-52-1	DNOC	0.6 mg/m ³
· PAC-2:		
75-09-2	dichloromethane	560 ppm
51-28-5	2,4-dinitrophenol	6.8 mg/m ³
59-50-7	chlorocresol	60 mg/m ³
87-86-5	pentachlorophenol	15 mg/m ³
88-06-2	2,4,6-trichlorophenol	27 mg/m ³
88-75-5	2-nitrophenol	23 mg/m ³
95-57-8	2-chlorophenol	25 mg/m ³
100-02-7	4-nitrophenol	7.6 mg/m ³
105-67-9	2,4-xylenol	76 mg/m ³
108-95-2	phenol	23 ppm
120-83-2	2,4-dichlorophenol	2 ppm
534-52-1	DNOC	0.83 mg/m ³
· PAC-3:		
75-09-2	dichloromethane	6,900 ppm
51-28-5	2,4-dinitrophenol	16 mg/m ³
59-50-7	chlorocresol	360 mg/m ³
87-86-5	pentachlorophenol	150 mg/m ³
88-06-2	2,4,6-trichlorophenol	160 mg/m ³
88-75-5	2-nitrophenol	140 mg/m ³
95-57-8	2-chlorophenol	150 mg/m ³
100-02-7	4-nitrophenol	46 mg/m ³
105-67-9	2,4-xylenol	460 mg/m ³
108-95-2	phenol	200 ppm
120-83-2	2,4-dichlorophenol	20 ppm
	(Cor	itd. on page 4)

[·] Extinguishing media

Product Name: Phenols Mix

534-52-1 DNOC

7 Handling and storage

- · Handling:
- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

	time, the other constituents have no known exposure limits.
75-09-	2 dichloromethane
PEL	Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052
REL	See Pocket Guide App. A
TLV	Long-term value: 50 ppm BEI, A3
87-86-	5 pentachlorophenol
PEL	Long-term value: 0.5 mg/m ³ Skin
REL	Long-term value: 0.5 mg/m ³ Skin
TLV	Short-term value: 1* mg/m ³ Long-term value: 0.5* mg/m ³ Skin; BEI;*inh. fraction+vapor, A3
105-67	y-9 2,4-xylenol
TLV	Long-term value: 1* ppm *inh. fraction+vapor; DSEN, A3
108-95	-2 phenol
PEL	Long-term value: 19 mg/m³, 5 ppm Skin
REL	Long-term value: 19 mg/m³, 5 ppm Ceiling limit value: 60* mg/m³, 15.6* ppm *15-min; Skin
TLV	Long-term value: 5 ppm Skin; BEI, A4
120-83	-2 2,4-dichlorophenol
WEEL	Long-term value: 1 ppm Skin; Q
534-52	-1 DNOC
PEL	Long-term value: 0.2 mg/m ³ Skin
REL	Long-term value: 0.2 mg/m ³ Skin
TLV	Long-term value: 0.2* mg/m³ *inhalable fraction + vapor; Skin
	(Contd. on page 5)

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	(Contd. of page 4)
· Ingredients with biological limit values:	
75-09-2 dichloromethane	
BEI 0.3 mg/L	
Medium: urine	
Time: end of shift	
Parameter: Dichloromethane (semi-quantitative)	
87-86-5 pentachlorophenol	
BEI -	
Medium: urine	
Time: prior to last shift of workweek	
Parameter: Pentachlorophenol with hydrolysis (nonquantitative)	
108-95-2 phenol	
BEI 250 mg/g creatinine	
Medium: urine	
Time: end of shift	
Parameter: Phenol with hydrolysis (background, nonspecific)	
• Additional information: The lists that were valid during the creation were used as basis.	
· Exposure controls	
· Personal protective equipment:	
General protective and hygienic measures:	
Keep away from foodstuffs, beverages and feed.	
Immediately remove all soiled and contaminated clothing.	
Wash hands before breaks and at the end of work	

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

9 Physical and chemical properti	es
• Information on basic physical and • General Information • Appearance:	chemical properties
Form:	Liquid
Color:	According to product specification
· Odor:	Characteristic
· Odour Threshold:	Not applicable.
· pH-value:	Not applicable.
• Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. 40 °C (104 °F)
· Flash point:	> 100 °C (> 212 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto igniting:	605 °C (1,121 °F)
· Decomposition temperature:	Not applicable.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
	(Contd. on page

(Contd. on page 6)

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	(Contd. of pag
· Explosion limits:	
Lower:	13 Vol %
Upper:	22 Vol %
· Vapor pressure at 20 °C (68 °F):	453 hPa (339.8 mm Hg)
· Density	Not applicable.
· Relative density	Not applicable.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	er): Not applicable.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	98.0 %
VOC content:	0.20 %
Solids content:	2.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

75-09-2 dichloromethane

Oral LD50 1,600 mg/kg (rat)

Inhalative LC50/4 h 88 mg/l (rat)

· Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: No irritating effect.

• Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)			
75-09-2 dichloromethane	2A		
87-86-5 pentachlorophenol	1		
88-06-2 2,4,6-trichlorophenol	2B		
95-57-8 2-chlorophenol	28		
108-95-2 phenol	3		
120-83-2 2,4-dichlorophenol	2B		
· NTP (National Toxicology Program)			
75-09-2 dichloromethane	R		
87-86-5 pentachlorophenol	R		
88-06-2 2,4,6-trichlorophenol	R		
	(Contd. on page 7)		

-US —

Product Name: Phenols Mix

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· OSHA-Ca (Occupational Safety & Health Administration)

75-09-2 dichloromethane

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information · UN-Number · DOT, ADR, IMDG, IATA UN1593 · UN proper shipping name $\cdot DOT$ Dichloromethane 1593 DICHLOROMETHANE $\cdot ADR$ · IMDG, IATA DICHLOROMETHANE · Transport hazard class(es) $\cdot DOT$ · Class 6.1 Toxic substances · Label 6.1 · ADR, IMDG, IATA · Class 6.1 Toxic substances · Label 6.1 · Packing group · DOT, ADR, IMDG, IATA Ш · Environmental hazards: Not applicable. · Special precautions for user Warning: Toxic substances · Hazard identification number (Kemler code): 60 · EMS Number: F-A, S-B· Segregation groups (SGG1) Acids · Stowage Category B · Stowage Code SW2 Clear of living quarters.

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Product Name: Phenols Mix

(Contd. of page 7
3/78 and the IBC Code Not applicable.
Code: El
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
UN 1593 DICHLOROMETHANE, 6.1, III

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara · Section 313 (Specific toxic chemical listings): 75-09-2 dichloromethane 51-28-5 2,4-dinitrophenol 87-86-5 pentachlorophenol 88-06-2 2,4,6-trichlorophenol 88-75-5 2-nitrophenol 95-57-8 2-chlorophenol 100-02-7 4-nitrophenol 105-67-9 2,4-xylenol 108-95-2 phenol 120-83-2 2,4-dichlorophenol 534-52-1 DNOC • TSCA (Toxic Substances Control Act): This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal. All components have the value ACTIVE. Hazardous Air Pollutants 75-09-2 dichloromethane 51-28-5 2,4-dinitrophenol 87-86-5 pentachlorophenol 88-06-2 2,4,6-trichlorophenol 100-02-7 4-nitrophenol 108-95-2 phenol 534-52-1 DNOC Proposition 65 · Chemicals known to cause cancer: 75-09-2 dichloromethane 87-86-5 pentachlorophenol 88-06-2 2,4,6-trichlorophenol · Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. · Chemicals known to cause developmental toxicity: None of the ingredients is listed. · Carcinogenic categories · EPA (Environmental Protection Agency) 75-09-2 dichloromethane L 87-86-5 pentachlorophenol L 88-06-2 2,4,6-trichlorophenol *B2*

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108-95-2 phenol	(Contd. of page 8) [D, I]
• TLV (Threshold Limit Value)	
75-09-2 dichloromethane	A3
87-86-5 pentachlorophenol	A3
108-95-2 phenol	A4
• NIOSH-Ca (National Institute for Occupational Safety and Health)	
75-09-2 dichloromethane	

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).



- · Signal word Warning
- Hazard-determining components of labeling:

dichloromethane pentachlorophenol

2,4-dinitrophenol

DNOC

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H336 May cause drowsiness or dizziness.

Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse. P363

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: product safety department
- · Contact:
- Spex CertiPrep, LLC.
- 1-732-549-7144
- · Date of preparation / last revision 08/10/2023

· Abbreviations and acronyms:

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

- DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health TLV: Threshold Limit Value

Safety Data Sheet acc. to OSHA HCS

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PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Acute Toxicity - Oral 4: Acute toxicity - Category 4 Skin Irritation 2: Skin corrosion/irritation - Category 2 Sensitization - Skin 1: Skin sensitisation - Category 1 Carcinogenicity 2: Carcinogenicity - Category 2 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3

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us —



Safety Data Sheet acc. to OSHA HCS Page 1/8

Reviewed on 08/10/2023

1 Identification

· Product identifier

- · Product Name: Benzidines Mix
- Part Name: ECS-A-007
- · Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

· Application of the substance / the mixture Certified Reference Material

• Details of the supplier of the safety data sheet

Manufacturer/Supplier: Spex CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA 732-549-7144 USMet-CRMSales@antylia.com

 Information department: product safety department
 Emergency telephone number: Emergency Phone Number (24 hours)
 CHEMTREC (800-424-9300)
 Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

GHS08 Health hazard

Carcinogenicity 1A

H350 May cause cancer.



Acute Toxicity - Oral 4H302 Harmful if swallowed.Skin Irritation 2H315 Causes skin irritation.Sensitization - Skin 1H317 May cause an allergic skin reaction.Specific Target Organ Toxicity - Single Exposure 3H336 May cause drowsiness or dizziness.

· Label elements

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling:
- dichloromethane
- *3,3'-dichlorobenzidine benzidine*
- · Hazard statements
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H350 May cause cancer.
- H336 May cause drowsiness or dizziness.

· Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.



Product Name: Benzidines Mix

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P321 Specific treatment (see on this label). P362+P364 Take off contaminated clothing and wash it before reuse. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. P363 P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 1Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH *1 Health = *1FIRE 1 Fire = 1Reactivity = 0REACTIVITY 0

- \cdot Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description:	Mixture of the substances l	listed below with nonhazardous additions.	

· Dangerous components:		
75-09-2	dichloromethane	99.6%
91-94-1	3,3'-dichlorobenzidine	0.2%
92-87-5	benzidine	0.2%
	·	

4 First-aid measures

- · Description of first aid measures
- · General information:
- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- · After inhalation:
- Supply fresh air and to be sure call for a doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:
- Immediately call a doctor.
- Do not give anything to eat or drink Do not induce vomitting
- · Information for Doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- \cdot Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13.

Product Name: Benzidines Mix

roduct Nume. Denziaines Mix	
Ensure adequate ventilation.	(Contd. of page 2)
· Reference to other sections	
See Section 7 for information on safe handling.	
See Section 8 for information on personal protection equipment.	
See Section 13 for disposal information.	
· Protective Action Criteria for Chemicals	
• PAC-1:	
75-09-2 dichloromethane	200 ppm
91-94-1 3,3'-dichlorobenzidine	2.1 ppm
92-87-5 benzidine	$0.93 mg/m^3$
DAC 2.	

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· PAC-2:			
75-09-2	dichloromethane	560 ppm	
91-94-1	3,3'-dichlorobenzidine	23 ppm	
92-87-5	benzidine	10 mg/m ³	
- PAC-3:			
75-09-2	dichloromethane	6,900 ppm	
91-94-1	3,3'-dichlorobenzidine	140 ppm	
92-87-5	benzidine	61 mg/m ³	

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires: Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

· Control parameters

· Control parameters			
· Com	· Components with limit values that require monitoring at the workplace:		
75-0	9-2 dichloromethane		
PEL	Short-term value: 125 ppm		
	Long-term value: 25 ppm see 29 CFR 1910.1052		
REL	See Pocket Guide App. A		
TLV	Long-term value: 50 ppm BEI, A3		
91-9	4-1 3,3'-dichlorobenzidine		
PEL	see 29 CFR 1910.1003		
REL	and its salts; See Pocket Guide App.A		
TLV	Skin; L, A3		
92-8	7-5 benzidine		
PEL	see 29 CFR 1910.1003		
REL	See Pocket Guide Apps. A and C		
TLV	Skin; L, A1		
· Ingr	edients with biological limit values:		
75-0	9-2 dichloromethane		
	0.3 mg/L		
	Medium: urine		
	Time: end of shift		
	Parameter: Dichloromethane (semi-quantitative)		
• Addi	tional information: The lists that were valid during the creation were used as basis.		
	(Contd. on page 4)		

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Printing date 08/10/2023

Product Name: Benzidines Mix

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- · Respiratory protection:
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- Protection of hands:



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- · Material of gloves
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. • Eye protection:
- Safety glasses



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and of	chemical properties
· General Information	
· Appearance: Form:	Liquid
Color:	According to product specification
· Odor:	Characteristic
· Odour Threshold:	Not applicable.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	40 °C (104 °F)
· Flash point:	> 100 °C (> 212 °F)
· Flammability (solid, gaseous):	Not applicable.
• Auto igniting:	605 °C (1,121 °F)
• Decomposition temperature:	Not applicable.
· Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	13 Vol %
Upper:	22 Vol %
· Vapor pressure at 20 °C (68 °F):	453 hPa (339.8 mm Hg)
· Density	Not applicable.
· Relative density	Not applicable.
· Vapor density	Not applicable.
• Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wat	er). Not applicable

(Contd. on page 5)

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Product Name: Benzidines Mix

	(Contd.	of page 4
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	<i>99.6</i> %	
VOC content:	0.00~%	
Solids content:	0.4 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:				
75-09-2 die	chloromet	hane		
Oral	LD50	1,600 mg/kg (rat)		
Inhalative	LC50/4 h	88 mg/l (rat)		
· Primary in				
	• on the skin: Irritant to skin and mucous membranes.			
• on the eye: No irritating effect.				
• Sensitization: Sensitization possible through skin contact.				
· Additional toxicological information:				
*	The product shows the following dangers according to internally approved calculation methods for preparations:			
Harmful	Harmful			
Irritant	Irritant			

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
75-09-2 dichloromethane	2A
91-94-1 3,3'-dichlorobenzidine	28
92-87-5 benzidine	1
· NTP (National Toxicology Program)	
75-09-2 dichloromethane	R
91-94-1 3,3'-dichlorobenzidine	R
92-87-5 benzidine	K
· OSHA-Ca (Occupational Safety & Health Administration)	
All ingredients are listed.	

12 Ecological information

• Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 3 (Self-assessment): extremely hazardous for water
- Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- Danger to drinking water if even extremely small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.



Product Name: Benzidines Mix

• **vPvB:** Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

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15 Regulatory information
· Safety, health and environmental regulation

· Sect	tion 313 (Specific toxic chemical listings):
All i	ingredients are listed.
This	CA (Toxic Substances Control Act): s chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for sumer paint or coating removal.
All a	components have the value ACTIVE.
· Haz	ardous Air Pollutants
All i	ingredients are listed.
· Prop	position 65
· Che	micals known to cause cancer:
All i	ingredients are listed.
· Che	micals known to cause reproductive toxicity for females:
Non	ne of the ingredients is listed.
· Che	micals known to cause reproductive toxicity for males:
Non	ne of the ingredients is listed.
· Che	micals known to cause developmental toxicity:
Non	ne of the ingredients is listed.

· EPA (Environmental Protection Agency)			
75-09-2 dichloromethane	L		
91-94-1 3,3'-dichlorobenzidine	B2		
92-87-5 benzidine	A		
· TLV (Threshold Limit Value)			
75-09-2 dichloromethane	A3		
91-94-1 3,3'-dichlorobenzidine	A3		
92-87-5 benzidine	A1		
· NIOSH-Ca (National Institute for Occupational Safety and Health)			
All ingredients are listed.			

All ingreatents are tiste

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling:
- dichloromethane 3,3'-dichlorobenzidine
- benzidine • Hazard statements
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H350 May cause cancer.
- H336 May cause drowsiness or dizziness.

Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Řinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.



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US —

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse. P363

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations. P501

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: product safety department

· Contact:

Spex CertiPrep, LLC. 1-732-549-7144 · Date of preparation / last revision 08/10/2023 · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

- DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit Acute Toxicity - Oral 4: Acute toxicity – Category 4

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