

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

1 Identification

· Product identifier

· **Product Name:** Base/Neutrals Mix 1

· **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

H350 May cause cancer.

Toxic to Reproduction 1B

H360 May damage fertility or the unborn child.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

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



GHS07



GHS08

· 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.

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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.

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



· Other hazards

· Results of PBT and vPvB assessment

· PBT:	
87-68-3	hexachlorobuta-1,3-diene
120-82-1	1,2,4-trichlorobenzene
· vPvB:	
87-68-3	hexachlorobuta-1,3-diene

3 Composition/information on ingredients

· Chemical characterization: Mixtures

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

· Dangerous components:

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%

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131-11-3	dimethyl phthalate	0.2%
606-20-2	2,6-dinitrotoluene	0.2%
621-64-7	nitrosodipropylamine	0.2%
7005-72-3	4-Chlorophenyl-phenyl ether	0.2%

Chemical identification of the substance/preparation

84-66-2	diethyl phthalate	0.2%
91-58-7	2-Chloronaphthalene	0.2%
95-50-1	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 vomiting

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-I:

75-09-2	dichloromethane	200 ppm
62-75-9	dimethylnitrosoamine	0.082 mg/m ³
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

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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
110-86-1	PYRIDINE	3 ppm
111-44-4	bis(2-chloroethyl) ether	10 ppm
111-91-1	bis(2-chloroethoxy)methane	0.04 ppm
117-81-7	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 ³
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:		
75-09-2	dichloromethane	560 ppm
62-75-9	dimethylnitrosoamine	0.9 mg/m ³
67-72-1	hexachloroethane	36 ppm
77-47-4	hexachlorocyclopentadiene	0.55 ppm
78-59-1	3,5,5-trimethylcyclohex-2-enone	33 ppm
84-66-2	diethyl phthalate	300 mg/m ³
84-74-2	dibutyl phthalate	1,600 mg/m ³
85-68-7	BBP	77 mg/m ³
86-30-6	nitrosodiphenylamine	60 mg/m ³
86-74-8	carbazole	7.2 mg/m ³
87-68-3	hexachlorobuta-1,3-diene	3 ppm
91-58-7	2-Chloronaphthalene	69 mg/m ³
95-50-1	1,2-dichlorobenzene	170 ppm
98-95-3	nitrobenzene	20 ppm
101-55-3	4-Bromodiphenyl ether	3.6 mg/m ³
106-46-7	1,4-dichlorobenzene	170 ppm
108-60-1	bis(2-chloro-1-methylethyl) ether	1.6 ppm
110-86-1	PYRIDINE	19 ppm
111-44-4	bis(2-chloroethyl) ether	25 ppm
111-91-1	bis(2-chloroethoxy)methane	0.44 ppm
117-81-7	bis(2-ethylhexyl) phthalate	1,000 mg/m ³
117-84-0	Di-n-octyl Phthalate	450 mg/m ³
118-74-1	hexachlorobenzene	14 mg/m ³
120-82-1	1,2,4-trichlorobenzene	5 ppm
121-14-2	2,4-dinitrotoluene	12 mg/m ³
131-11-3	dimethyl phthalate	1,600 mg/m ³
541-73-1	1,3-dichlorobenzene	66 ppm
606-20-2	2,6-dinitrotoluene	47 mg/m ³
621-64-7	nitrosodipropylamine	62 mg/m ³
7005-72-3	4-Chlorophenyl-phenyl ether	35 mg/m ³

· PAC-3:		
75-09-2	dichloromethane	6,900 ppm
62-75-9	dimethylnitrosoamine	10 mg/m ³
67-72-1	hexachloroethane	300 ppm
77-47-4	hexachlorocyclopentadiene	1 ppm
78-59-1	3,5,5-trimethylcyclohex-2-enone	200 ppm
84-66-2	diethyl phthalate	1,800 mg/m ³
84-74-2	dibutyl phthalate	9300* mg/m ³

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		(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 this 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
62-75-9 dimethylnitrosoamine	
PEL	see 29 CFR 1910.1003
REL	See Pocket Guide App. A
TLV	Skin; L, A3

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67-72-1 hexachloroethane	
PEL	Long-term value: 10 mg/m ³ , 1 ppm Skin
REL	Long-term value: 10 mg/m ³ , 1 ppm Skin; See Pocket Guide Apps. A and C
TLV	Long-term value: 1 ppm Skin, A3
77-47-4 hexachlorocyclopentadiene	
REL	Long-term value: 0.1 mg/m ³ , 0.01 ppm
TLV	Long-term value: 0.01 ppm A4
78-59-1 3,5,5-trimethylcyclohex-2-enone	
PEL	Long-term value: 140 mg/m ³ , 25 ppm
REL	Long-term value: 23 mg/m ³ , 4 ppm
TLV	Ceiling limit value: 5 ppm A3
84-74-2 dibutyl 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
87-68-3 hexachlorobuta-1,3-diene	
REL	Long-term value: 0.24 mg/m ³ , 0.02 ppm Skin; See Pocket Guide App. A
TLV	Long-term value: 0.02 ppm Skin, A3
98-95-3 nitrobenzene	
PEL	Long-term value: 5 mg/m ³ , 1 ppm Skin
REL	Long-term value: 5 mg/m ³ , 1 ppm Skin
TLV	Long-term value: 1 ppm Skin; BEIm, A3
106-46-7 1,4-dichlorobenzene	
PEL	Long-term value: 450 mg/m ³ , 75 ppm
REL	See Pocket Guide App. A
TLV	Long-term value: 10 ppm A3
110-86-1 PYRIDINE	
PEL	Long-term value: 15 mg/m ³ , 5 ppm
REL	Long-term value: 15 mg/m ³ , 5 ppm
TLV	Long-term value: 1 ppm A3
111-44-4 bis(2-chloroethyl) ether	
PEL	Ceiling limit value: 90 mg/m ³ , 15 ppm Skin
REL	Short-term value: 60 mg/m ³ , 10 ppm Long-term value: 30 mg/m ³ , 5 ppm Skin; See Pocket Guide App. A
TLV	Short-term value: 10 ppm Long-term value: 5 ppm Skin, A4
117-81-7 bis(2-ethylhexyl) phthalate	
PEL	Long-term value: 5 mg/m ³
REL	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ See Pocket Guide App. A
TLV	Long-term value: 0.1 mg/m ³ Skin, A3
118-74-1 hexachlorobenzene	
TLV	Long-term value: 0.002 mg/m ³ Skin, A3

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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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US —

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· 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/water):	Not applicable.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	94.8 %
VOC content:	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 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
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

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67-72-1	hexachloroethane	2B
78-59-1	3,5,5-trimethylcyclohex-2-enone	2B
85-68-7	BBP	3
86-30-6	nitrosodiphenylamine	3
86-74-8	carbazole	2B
87-68-3	hexachlorobuta-1,3-diene	3
95-50-1	1,2-dichlorobenzene	3
98-95-3	nitrobenzene	2B
103-33-3	azobenzene	3
106-46-7	1,4-dichlorobenzene	2B
108-60-1	bis(2-chloro-1-methylethyl) ether	3
110-86-1	PYRIDINE	2B
111-44-4	bis(2-chloroethyl) ether	3
117-81-7	bis(2-ethylhexyl) phthalate	2B
118-74-1	hexachlorobenzene	2B
121-14-2	2,4-dinitrotoluene	2B
541-73-1	1,3-dichlorobenzene	3
606-20-2	2,6-dinitrotoluene	2B
621-64-7	nitrosodipropylamine	2B
· NTP (National 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-Ca (Occupational Safety & Health Administration)		
75-09-2	dichloromethane	
62-75-9	dimethylnitrosoamine	

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:		
87-68-3	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.

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- **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 · DOT · ADR · IMDG, IATA	Dichloromethane 1593 DICHLOROMETHANE DICHLOROMETHANE
· Transport hazard class(es) · DOT	
	
· Class · Label	6.1 Toxic substances 6.1
· ADR, IMDG, IATA	
	
· Class · Label	6.1 Toxic substances 6.1
· Packing group · DOT, ADR, IMDG, IATA	III
· 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

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
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
77-47-4	hexachlorocyclopentadiene
84-74-2	dibutyl phthalate
86-30-6	nitrosodiphenylamine

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87-68-3	hexachlorobuta-1,3-diene
95-50-1	1,2-dichlorobenzene
98-95-3	nitrobenzene
106-46-7	1,4-dichlorobenzene
108-60-1	bis(2-chloro-1-methylethyl) ether
110-86-1	PYRIDINE
111-44-4	bis(2-chloroethyl) ether
111-91-1	bis(2-chloroethoxy)methane
117-81-7	bis(2-ethylhexyl) phthalate
118-74-1	hexachlorobenzene
120-82-1	1,2,4-trichlorobenzene
121-14-2	2,4-dinitrotoluene
131-11-3	dimethyl phthalate
541-73-1	1,3-dichlorobenzene
606-20-2	2,6-dinitrotoluene
621-64-7	nitrosodipropylamine

· 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
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
77-47-4	hexachlorocyclopentadiene
78-59-1	3,5,5-trimethylcyclohex-2-enone
84-74-2	dibutyl phthalate
87-68-3	hexachlorobuta-1,3-diene
98-95-3	nitrobenzene
106-46-7	1,4-dichlorobenzene
111-44-4	bis(2-chloroethyl) ether
117-81-7	bis(2-ethylhexyl) phthalate
118-74-1	hexachlorobenzene
120-82-1	1,2,4-trichlorobenzene
121-14-2	2,4-dinitrotoluene
131-11-3	dimethyl phthalate

· Proposition 65

· Chemicals known to cause cancer:

75-09-2	dichloromethane
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
86-30-6	nitrosodiphenylamine
86-74-8	carbazole
87-68-3	hexachlorobuta-1,3-diene
98-95-3	nitrobenzene
103-33-3	azobenzene
106-46-7	1,4-dichlorobenzene
108-60-1	bis(2-chloro-1-methylethyl) ether
110-86-1	PYRIDINE
111-44-4	bis(2-chloroethyl) ether
117-81-7	bis(2-ethylhexyl) phthalate
118-74-1	hexachlorobenzene
121-14-2	2,4-dinitrotoluene
606-20-2	2,6-dinitrotoluene
621-64-7	nitrosodipropylamine

· Chemicals known to cause reproductive toxicity for females:

84-74-2	dibutyl phthalate
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· Chemicals known to cause reproductive toxicity for males:	
84-74-2	dibutyl phthalate
98-95-3	nitrobenzene
117-81-7	bis(2-ethylhexyl) phthalate
121-14-2	2,4-dinitrotoluene
606-20-2	2,6-dinitrotoluene

· Chemicals known to cause developmental toxicity:	
84-74-2	dibutyl phthalate
85-68-7	BBP
117-81-7	bis(2-ethylhexyl) phthalate
118-74-1	hexachlorobenzene

· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
75-09-2	dichloromethane	L
62-75-9	dimethylnitrosoamine	B2
67-72-1	hexachloroethane	L
77-47-4	hexachlorocyclopentadiene	E, NL
78-59-1	3,5,5-trimethylcyclohex-2-enone	C
84-66-2	diethyl phthalate	D
84-74-2	dibutyl phthalate	D
85-68-7	BBP	C
86-30-6	nitrosodiphenylamine	B2
87-68-3	hexachlorobuta-1,3-diene	C
95-50-1	1,2-dichlorobenzene	D
98-95-3	nitrobenzene	L
101-55-3	4-Bromodiphenyl ether	D
103-33-3	azobenzene	B2
111-44-4	bis(2-chloroethyl) ether	B2
111-91-1	bis(2-chloroethoxy)methane	D
117-81-7	bis(2-ethylhexyl) phthalate	B2
118-74-1	hexachlorobenzene	B2
120-82-1	1,2,4-trichlorobenzene	D
131-11-3	dimethyl phthalate	D
541-73-1	1,3-dichlorobenzene	D
621-64-7	nitrosodipropylamine	B2

· TLV (Threshold Limit Value)		
75-09-2	dichloromethane	A3
62-75-9	dimethylnitrosoamine	A3
67-72-1	hexachloroethane	A3
77-47-4	hexachlorocyclopentadiene	A4
78-59-1	3,5,5-trimethylcyclohex-2-enone	A3
84-66-2	diethyl phthalate	A4
87-68-3	hexachlorobuta-1,3-diene	A3
95-50-1	1,2-dichlorobenzene	A4
98-95-3	nitrobenzene	A3
106-46-7	1,4-dichlorobenzene	A3
111-44-4	bis(2-chloroethyl) ether	A4
117-81-7	bis(2-ethylhexyl) phthalate	A3
118-74-1	hexachlorobenzene	A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)	
75-09-2	dichloromethane
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
87-68-3	hexachlorobuta-1,3-diene
106-46-7	1,4-dichlorobenzene
111-44-4	bis(2-chloroethyl) ether

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

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

· **Hazard pictograms**



GHS07

GHS08

· **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.

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.

· **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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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

— US —

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.

· **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.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

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



GHS07



GHS08

· 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.

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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.

· **Dangerous 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%
100-01-6	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%

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 vomiting

· **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.

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:

75-09-2	dichloromethane	200 ppm
62-53-3	aniline	8.0 ppm
65-85-0	Benzoic acid	13 mg/m ³
88-74-4	o-nitroaniline	6.2 mg/m ³
91-57-6	2-methylnaphthalene	9 mg/m ³
95-95-4	2,4,5-trichlorophenol	2.5 mg/m ³
99-09-2	m-nitroaniline	1.6 mg/m ³
100-01-6	p-nitroaniline	9 mg/m ³
100-51-6	Benzyl alcohol	30 ppm
106-47-8	4-chloroaniline	6.1 mg/m ³
132-64-9	dibenzofuran	30 mg/m ³

· PAC-2:

75-09-2	dichloromethane	560 ppm
62-53-3	aniline	12 ppm
65-85-0	Benzoic acid	140 mg/m ³
88-74-4	o-nitroaniline	68 mg/m ³
91-57-6	2-methylnaphthalene	54 mg/m ³
95-95-4	2,4,5-trichlorophenol	27 mg/m ³
99-09-2	m-nitroaniline	18 mg/m ³
100-01-6	p-nitroaniline	71 mg/m ³
100-51-6	Benzyl alcohol	52 ppm
106-47-8	4-chloroaniline	68 mg/m ³
132-64-9	dibenzofuran	330 mg/m ³

· PAC-3:

75-09-2	dichloromethane	6,900 ppm
62-53-3	aniline	20 ppm
65-85-0	Benzoic acid	830 mg/m ³
88-74-4	o-nitroaniline	410 mg/m ³
91-57-6	2-methylnaphthalene	320 mg/m ³
95-95-4	2,4,5-trichlorophenol	160 mg/m ³
99-09-2	m-nitroaniline	110 mg/m ³
100-01-6	p-nitroaniline	300 mg/m ³
100-51-6	Benzyl alcohol	740 ppm
106-47-8	4-chloroaniline	100 mg/m ³
132-64-9	dibenzofuran	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.

75-09-2 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/m ³ , 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)

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62-53-3 aniline	
BEI	0.5 mg/L Medium: urine Time: end of shift Parameter: Aniline (with hydrolysis)
100-01-6 p-nitroaniline	
BEI	1.5 % of hemoglobin Medium: blood Time: during or end of shift Parameter: Methemoglobin (background, nonspecific, semi-quantitative)

· **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)
· 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.

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· 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/water):	Not applicable.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	98.0 %
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 (International Agency for Research on Cancer)		
75-09-2	dichloromethane	2A
62-53-3	aniline	2A
95-95-4	2,4,5-trichlorophenol	2B
106-47-8	4-chloroaniline	2B

· NTP (National Toxicology Program)		
75-09-2	dichloromethane	R

· OSHA-Ca (Occupational Safety & Health Administration)		
75-09-2	dichloromethane	

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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

- **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 · DOT · ADR · IMDG, IATA	Dichloromethane 1593 DICHLOROMETHANE DICHLOROMETHANE
· Transport hazard class(es) · DOT	
	
· Class · Label	6.1 Toxic substances 6.1
· ADR, IMDG, IATA	
	
· Class · Label	6.1 Toxic substances 6.1
· Packing group · DOT, ADR, IMDG, IATA	III
· 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 Code	Not applicable.

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Product Name: 8270 Add-ons Mix

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· 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
· Excepted quantities (EQ)	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

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
62-53-3	aniline
95-48-7	o-cresol
95-95-4	2,4,5-trichlorophenol
100-01-6	p-nitroaniline
106-44-5	p-cresol
106-47-8	4-chloroaniline
132-64-9	dibenzofuran

- **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
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

- **Proposition 65**

· Chemicals known to cause cancer:	
75-09-2	dichloromethane
62-53-3	aniline
106-47-8	4-chloroaniline

- **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
62-53-3	aniline	B2
65-85-0	Benzoic acid	D
91-57-6	2-methylnaphthalene	I
95-48-7	o-cresol	C
106-44-5	p-cresol	C
132-64-9	dibenzofuran	D

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· 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
vPvB: very Persistent and very Bioaccumulative

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NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEL: 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

— US —

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.



GHS06 Skull and crossbones

Acute Toxicity - Dermal 2

H310 Fatal in contact with skin.

Acute Toxicity - Inhalation 3

H331 Toxic if inhaled.



GHS08 Health hazard

Germ Cell Mutagenicity 1B

H340 May cause genetic defects.

Carcinogenicity 1B

H350 May cause cancer.

Toxic to Reproduction 1B

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.

Aspiration Hazard 1

H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

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



GHS02



GHS06



GHS07



GHS08

Product Name: PAH Analyte Mix

(Contd. of page 1)

· **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 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.
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.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

· PBT:	
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
120-12-7	anthracene
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene
· vPvB:	
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene

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206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

71-43-2	benzene	48.4%
75-09-2	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%
205-99-2	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 identification of the substance/preparation**

83-32-9	acenaphthene	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.
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 vomiting
- **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

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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:		
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/m ³
56-55-3	benz[a]anthracene	0.6 mg/m ³
83-32-9	acenaphthene	3.6 mg/m ³
85-01-8	phenanthrene, pure	5.4 mg/m ³
86-73-7	fluorene	6.6 mg/m ³
91-20-3	naphthalene	15 ppm
120-12-7	anthracene	48 mg/m ³
129-00-0	pyrene	0.15 mg/m ³
191-24-2	Benzo(g,h,i)perylene	30 mg/m ³
193-39-5	indeno[1,2,3-cd]pyrene	1.2 mg/m ³
205-99-2	benz[e]acephenanthrylene	0.12 mg/m ³
206-44-0	fluoranthene	8.2 mg/m ³
208-96-8	acenaphthylene	10 mg/m ³
218-01-9	chrysene	0.6 mg/m ³
PAC-2:		
71-43-2	benzene	800 ppm
75-09-2	dichloromethane	560 ppm
50-32-8	benzo[a]pyrene	120 mg/m ³
53-70-3	dibenz[a,h]anthracene	1 mg/m ³
56-55-3	benz[a]anthracene	120 mg/m ³
83-32-9	acenaphthene	40 mg/m ³
85-01-8	phenanthrene, pure	59 mg/m ³
86-73-7	fluorene	72 mg/m ³
91-20-3	naphthalene	83 ppm
120-12-7	anthracene	530 mg/m ³
129-00-0	pyrene	1.7 mg/m ³
191-24-2	Benzo(g,h,i)perylene	330 mg/m ³
193-39-5	indeno[1,2,3-cd]pyrene	13 mg/m ³
205-99-2	benz[e]acephenanthrylene	1.3 mg/m ³
206-44-0	fluoranthene	90 mg/m ³
208-96-8	acenaphthylene	110 mg/m ³
218-01-9	chrysene	12 mg/m ³
PAC-3:		
71-43-2	benzene	4000* ppm
75-09-2	dichloromethane	6,900 ppm
50-32-8	benzo[a]pyrene	700 mg/m ³
53-70-3	dibenz[a,h]anthracene	2.9 mg/m ³
56-55-3	benz[a]anthracene	700 mg/m ³
83-32-9	acenaphthene	240 mg/m ³
85-01-8	phenanthrene, pure	360 mg/m ³
86-73-7	fluorene	430 mg/m ³
91-20-3	naphthalene	500 ppm
120-12-7	anthracene	3,200 mg/m ³
129-00-0	pyrene	110 mg/m ³
191-24-2	Benzo(g,h,i)perylene	2,000 mg/m ³

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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:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **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	
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
75-09-2 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
50-32-8 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
56-55-3 benz[a]anthracene	
TLV	L; BEI-P, A2
91-20-3 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

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TLV	Long-term value: 10 ppm Skin; BEI, A3
205-99-2 benz[e]acephenanthrylene	
TLV	L; BEIp, A2
218-01-9 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
Ingredients with biological limit values:	
71-43-2 benzene	
BEI	25 µg/g creatinine Medium: urine Time: end of shift Parameter: S-Phenylmercapturic acid (background)
	500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)
75-09-2 dichloromethane	
BEI	0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)
50-32-8 benzo[a]pyrene	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
56-55-3 benz[a]anthracene	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
91-20-3 naphthalene	
BEI	- Medium: - Time: end of shift Parameter: 1-Naphthol with hydrolysis + 2-Naphthol with hydrolysis (Nq,Ns)
205-99-2 benz[e]acephenanthrylene	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
218-01-9 chrysene	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

· **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.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **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.

(Contd. on page 7)

Product Name: PAH Analyte Mix

(Contd. of page 6)

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 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: < 0 °C (< 32 °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.
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Partition coefficient (n-octanol/water): Not applicable.

Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

Solvent content:

Organic solvents:	96.8 %
VOC content:	48.40 %

Solids content:	2.6 %
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· **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:**

71-43-2 benzene

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	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:** 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 (International Agency for Research on Cancer)**

71-43-2	benzene	I
75-09-2	dichloromethane	2A
50-32-8	benzo[a]pyrene	I
53-70-3	dibenz[a,h]anthracene	2A
56-55-3	benz[a]anthracene	2B
83-32-9	acenaphthene	3
85-01-8	phenanthrene, pure	3
86-73-7	fluorene	3
91-20-3	naphthalene	2B
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	2B
205-99-2	benz[e]acephenanthrylene	2B
206-44-0	fluoranthene	3
207-08-9	benzo[k]fluoranthene	2B
218-01-9	chrysene	2B

· **NTP (National 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

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56-55-3	benz[a]anthracene	R
85-01-8	phenanthrene, pure	R
86-73-7	fluorene	R
91-20-3	naphthalene	R
120-12-7	anthracene	R
129-00-0	pyrene	R
193-39-5	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-Ca (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:**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
120-12-7	anthracene
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· **vPvB:**

50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
129-00-0	pyrene
191-24-2	Benzo(g,h,i)perylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· **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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14 Transport information

· UN-Number · DOT, ADR, IMDG, IATA	UN1992
· UN proper shipping name · DOT · ADR · IMDG · IATA	Flammable liquids, toxic, n.o.s. (Benzene) 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE), ENVIRONMENTALLY HAZARDOUS FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE, NAPHTHALENE, CRUDE), MARINE POLLUTANT FLAMMABLE LIQUID, TOXIC, N.O.S. (BENZENE)
· Transport hazard class(es) · DOT	
 	
· Class · Label	3 Flammable liquids 3, 6.1
· ADR	
  	
· Class · Label	3 Flammable liquids 3+6.1
· IMDG	
  	
· Class · Label	3 Flammable liquids 3/6.1
· IATA	
 	
· Class · Label	3 Flammable liquids 3 (6.1)
· Packing group · DOT, ADR, IMDG, IATA	II
· Environmental hazards: · Marine pollutant: · Special marking (ADR):	Product contains environmentally hazardous substances: benzo[a]pyrene Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category · Stowage Code	Warning: Flammable liquids 336 F-E,S-D B SW2 Clear of living quarters.
· 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

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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

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

· Section 313 (Specific toxic chemical listings):	
71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
91-20-3	naphthalene
120-12-7	anthracene
191-24-2	Benzo(g,h,i)perylene
193-39-5	indeno[1,2,3-cd]pyrene
205-99-2	benz[e]acephenanthrylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· 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.

71-43-2	benzene	ACTIVE
75-09-2	dichloromethane	ACTIVE
50-32-8	benzo[a]pyrene	ACTIVE
53-70-3	dibenz[a,h]anthracene	ACTIVE
56-55-3	benz[a]anthracene	ACTIVE
83-32-9	acenaphthene	ACTIVE
85-01-8	phenanthrene, pure	ACTIVE
86-73-7	fluorene	ACTIVE
91-20-3	naphthalene	ACTIVE
120-12-7	anthracene	ACTIVE
129-00-0	pyrene	ACTIVE
193-39-5	indeno[1,2,3-cd]pyrene	ACTIVE
206-44-0	fluoranthene	ACTIVE
208-96-8	acenaphthylene	ACTIVE
218-01-9	chrysene	ACTIVE

· Hazardous Air Pollutants

71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
85-01-8	phenanthrene, pure
86-73-7	fluorene
91-20-3	naphthalene
120-12-7	anthracene
129-00-0	pyrene
193-39-5	indeno[1,2,3-cd]pyrene

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205-99-2	benz[e]acephenanthrylene
206-44-0	fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· **Proposition 65**

· **Chemicals known to cause cancer:**

71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
91-20-3	naphthalene
193-39-5	indeno[1,2,3-cd]pyrene
205-99-2	benz[e]acephenanthrylene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

71-43-2	benzene
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· **Chemicals known to cause developmental toxicity:**

71-43-2	benzene
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

71-43-2	benzene	A, K/L
75-09-2	dichloromethane	L
50-32-8	benzo[a]pyrene	CaH
53-70-3	dibenz[a,h]anthracene	B2
56-55-3	benz[a]anthracene	B2
85-01-8	phenanthrene, pure	D
86-73-7	fluorene	D
91-20-3	naphthalene	C, CBD
120-12-7	anthracene	D
129-00-0	pyrene	D
191-24-2	Benzo(g,h,i)perylene	D
193-39-5	indeno[1,2,3-cd]pyrene	B2
205-99-2	benz[e]acephenanthrylene	B2
206-44-0	fluoranthene	D
207-08-9	benzo[k]fluoranthene	B2
208-96-8	acenaphthylene	D
218-01-9	chrysene	B2

· **TLV (Threshold Limit Value)**

71-43-2	benzene	A1
75-09-2	dichloromethane	A3
50-32-8	benzo[a]pyrene	A2
56-55-3	benz[a]anthracene	A2
91-20-3	naphthalene	A4
205-99-2	benz[e]acephenanthrylene	A2
218-01-9	chrysene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

71-43-2	benzene
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
218-01-9	chrysene

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

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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 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.
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.

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

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NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEL: Biological Exposure Limit
Flammable 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 2A: Serious eye damage/eye irritation – Category 2A
Sensitization - Skin 1: Skin sensitisation – Category 1
Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B
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
Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1
Aspiration Hazard 1: Aspiration hazard – Category 1

— US —

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.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

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



GHS07



GHS08

· 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.

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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	97.8%
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	0.2%
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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.

· **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 vomiting

· **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

- **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
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-xilenol	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-xilenol	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-xilenol	460 mg/m ³
108-95-2	phenol	200 ppm
120-83-2	2,4-dichlorophenol	20 ppm

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534-52-1 DNOC

5 mg/m³

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.

75-09-2 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

105-67-9 2,4-xylenol

TLV	Long-term value: 1* ppm *inh. fraction+vapor; DSEN, A3
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108-95-2 phenol

PEL	Long-term value: 19 mg/m ³ , 5 ppm Skin
REL	Long-term value: 19 mg/m ³ , 5 ppm Ceiling limit value: 60* mg/m ³ , 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
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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/m ³ *inhalable fraction + vapor; Skin

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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.

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 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.

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Product Name: Phenols Mix

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· 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/water):	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	2B
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

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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:**
- **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	
· DOT	
Dichloromethane	
· ADR	
1593 DICHLOROMETHANE	
· IMDG, IATA	
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	
III	
· 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	
(SGGI) Acids	
· Stowage Category	
B	
· Stowage Code	
SW2 Clear of living quarters.	

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· 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)	5L
· Excepted quantities (EQ)	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

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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Product Name: Phenols Mix

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108-95-2	phenol	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).

· **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.
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
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety and Health
TLV: Threshold Limit Value

(Contd. on page 10)

Product Name: Phenols Mix

(Contd. of page 9)

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

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.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

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



GHS07



GHS08

· 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.

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Product Name: **Benzidines Mix**

(Contd. of page 1)

- 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	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 vomiting
- **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.
- **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.

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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
91-94-1	3,3'-dichlorobenzidine	2.1 ppm
92-87-5	benzidine	0.93 mg/m ³
· 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**

· Components with limit values that require monitoring at the workplace:	
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
91-94-1 3,3'-dichlorobenzidine	
PEL	see 29 CFR 1910.1003
REL	and its salts; See Pocket Guide App.A
TLV	Skin; L, A3
92-87-5 benzidine	
PEL	see 29 CFR 1910.1003
REL	See Pocket Guide Apps. A and C
TLV	Skin; L, A1
· Ingredients with biological limit values:	
75-09-2 dichloromethane	
BEI	0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)

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

(Contd. on page 4)

Product Name: Benzidines Mix

(Contd. of page 3)

- **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)

· **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/water):** Not applicable.

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· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	99.6 %
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 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
91-94-1	3,3'-dichlorobenzidine	2B
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.

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Product Name: Benzidines Mix



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- **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 · DOT · ADR · IMDG, IATA	Dichloromethane 1593 DICHLOROMETHANE DICHLOROMETHANE
· Transport hazard class(es) · DOT	
	
· Class · Label	6.1 Toxic substances 6.1
· ADR, IMDG, IATA	
	
· Class · Label	6.1 Toxic substances 6.1
· Packing group · DOT, ADR, IMDG, IATA	III
· 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 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 313 (Specific toxic chemical listings):**

All ingredients are listed.

· **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**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

All ingredients are listed.

· **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
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.

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

· **Hazard pictograms**



GHS07 GHS08

· **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.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.

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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

REL: Recommended Exposure Limit

BEL: 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 1A: Carcinogenicity – Category 1A

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3