

1 Identification

· **Product identifier**

· **Product Name:** Semi-volatile Organics Mix

· **Part Name:** 76-BIG-MIX

· **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** For Laboratory Use Only

· **Uses advised against** Not for Human or Animal Use

· **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**



GHS06 Skull and crossbones

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.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Dermal 4

H312 Harmful in contact with skin.

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**



GHS06



GHS07



GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

dichloromethane
bis(2-chloroethyl) ether
pentachlorophenol
nitrobenzene
benzo[a]pyrene
aniline
4-Bromodiphenyl ether

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4-chloroaniline

DNOC

Hazard statements

H302+H312 Harmful if swallowed or in contact with skin.

H331 Toxic if inhaled.

H315 Causes skin 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.

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.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 1
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *1
Fire = 1
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

· PBT:	
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
87-68-3	hexachlorobuta-1,3-diene
120-12-7	anthracene
120-82-1	1,2,4-trichlorobenzene
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
87-68-3	hexachlorobuta-1,3-diene
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

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3 Composition/information on ingredients

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

· **Dangerous components:**

75-09-2	dichloromethane	92.5%
50-32-8	benzo[a]pyrene	0.1%
51-28-5	2,4-dinitrophenol	0.1%
53-70-3	dibenz[a,h]anthracene	0.1%
56-55-3	benz[a]anthracene	0.1%
58-90-2	2,3,4,6-tetrachlorophenol	0.1%
59-50-7	chlorocresol	0.1%
62-53-3	aniline	0.1%
62-75-9	dimethylnitrosoamine	0.1%
67-72-1	hexachloroethane	0.1%
77-47-4	hexachlorocyclopentadiene	0.1%
78-59-1	3,5,5-trimethylcyclohex-2-enone	0.1%
84-74-2	dibutyl phthalate	0.1%
85-01-8	phenanthrene, pure	0.1%
85-68-7	BBP	0.1%
86-73-7	fluorene	0.1%
86-74-8	carbazole	0.1%
87-68-3	hexachlorobuta-1,3-diene	0.1%
87-86-5	pentachlorophenol	0.1%
88-06-2	2,4,6-trichlorophenol	0.1%
88-74-4	o-nitroaniline	0.1%
88-75-5	2-nitrophenol	0.1%
91-20-3	naphthalene	0.1%
95-48-7	o-cresol	0.1%
95-57-8	2-chlorophenol	0.1%
95-95-4	2,4,5-trichlorophenol	0.1%
98-95-3	nitrobenzene	0.1%
99-09-2	m-nitroaniline	0.1%
99-65-0	1,3-dinitrobenzene	0.1%
100-01-6	p-nitroaniline	0.1%
100-25-4	1,4-dinitrobenzene	0.1%
101-55-3	4-Bromodiphenyl ether	0.1%
103-33-3	azobenzene	0.1%
105-67-9	2,4-xylenol	0.1%
106-46-7	1,4-dichlorobenzene	0.1%
106-47-8	4-chloroaniline	0.1%
108-60-1	bis(2-chloro-1-methylethyl) ether	0.1%
108-95-2	phenol	0.1%
110-86-1	PYRIDINE	0.1%
111-44-4	bis(2-chloroethyl) ether	0.1%
111-91-1	bis(2-chloroethoxy)methane	0.1%
117-81-7	bis(2-ethylhexyl) phthalate	0.1%
117-84-0	Di-n-octyl Phthalate	0.1%
118-74-1	hexachlorobenzene	0.1%
120-12-7	anthracene	0.1%
120-82-1	1,2,4-trichlorobenzene	0.1%
120-83-2	2,4-dichlorophenol	0.1%
121-14-2	2,4-dinitrotoluene	0.1%
122-39-4	diphenylamine	0.1%
129-00-0	pyrene	0.1%
131-11-3	dimethyl phthalate	0.1%

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191-24-2	Benzo(g,h,i)perylene	0.1%
193-39-5	indeno[1,2,3-cd]pyrene	0.1%
205-99-2	benz[e]acephenanthrylene	0.1%
206-44-0	fluoranthene	0.1%
207-08-9	benzo[k]fluoranthene	0.1%
208-96-8	acenaphthylene	0.1%
218-01-9	chrysene	0.1%
528-29-0	1,2-dinitrobenzene	0.1%
534-52-1	DNOC	0.1%
606-20-2	2,6-dinitrotoluene	0.1%
621-64-7	nitrosodipropylamine	0.1%
935-95-5	2,3,5,6-Tetrachlorophenol	0.1%
7005-72-3	4-Chlorophenyl-phenyl ether	0.1%

· **Chemical identification of the substance/preparation**

83-32-9	acenaphthene	0.1%
84-66-2	diethyl phthalate	0.1%
90-12-0	1-methylnaphthalene	0.1%
91-57-6	2-methylnaphthalene	0.1%
91-58-7	2-Chloronaphthalene	0.1%
95-50-1	1,2-dichlorobenzene	0.1%
100-02-7	4-nitrophenol	0.1%
100-51-6	Benzyl alcohol	0.1%
103-23-1	Di-(2-ethylhexyl) adipate	0.1%
132-64-9	dibenzofuran	0.1%
541-73-1	1,3-dichlorobenzene	0.1%
106-44-5	p-cresol	0.05%
108-39-4	3-Methylphenol	0.05%

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. Then consult a doctor.

· **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.

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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
50-32-8	benzo[a]pyrene	0.6 mg/m ³
51-28-5	2,4-dinitrophenol	0.61 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
59-50-7	chlorocresol	5.5 mg/m ³
62-53-3	aniline	8.0 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
83-32-9	acenaphthene	3.6 mg/m ³
84-66-2	diethyl phthalate	15 mg/m ³
84-74-2	dibutyl phthalate	15 mg/m ³
85-01-8	phenanthrene, pure	5.4 mg/m ³
85-68-7	BBP	15 mg/m ³
86-73-7	fluorene	6.6 mg/m ³
86-74-8	carbazole	0.66 mg/m ³
87-68-3	hexachlorobuta-1,3-diene	1 ppm
87-86-5	pentachlorophenol	1 mg/m ³
88-06-2	2,4,6-trichlorophenol	2.5 mg/m ³
88-74-4	o-nitroaniline	6.2 mg/m ³
88-75-5	2-nitrophenol	2.1 mg/m ³
90-12-0	1-methylnaphthalene	20 mg/m ³
91-20-3	naphthalene	15 ppm
91-57-6	2-methylnaphthalene	9 mg/m ³
91-58-7	2-Chloronaphthalene	6.2 mg/m ³
95-50-1	1,2-dichlorobenzene	50 ppm
95-57-8	2-chlorophenol	2.3 mg/m ³
95-95-4	2,4,5-trichlorophenol	2.5 mg/m ³

PAC-2:		
75-09-2	dichloromethane	560 ppm
50-32-8	benzo[a]pyrene	120 mg/m ³
51-28-5	2,4-dinitrophenol	6.8 mg/m ³
53-70-3	dibenz[a,h]anthracene	1 mg/m ³
56-55-3	benz[a]anthracene	120 mg/m ³
59-50-7	chlorocresol	60 mg/m ³
62-53-3	aniline	12 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
83-32-9	acenaphthene	40 mg/m ³
84-66-2	diethyl phthalate	300 mg/m ³
84-74-2	dibutyl phthalate	1,600 mg/m ³
85-01-8	phenanthrene, pure	59 mg/m ³
85-68-7	BBP	77 mg/m ³
86-73-7	fluorene	72 mg/m ³
86-74-8	carbazole	7.2 mg/m ³
87-68-3	hexachlorobuta-1,3-diene	3 ppm
87-86-5	pentachlorophenol	15 mg/m ³

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88-06-2	2,4,6-trichlorophenol	27 mg/m ³
88-74-4	o-nitroaniline	68 mg/m ³
88-75-5	2-nitrophenol	23 mg/m ³
90-12-0	1-methylnaphthalene	61 mg/m ³
91-20-3	naphthalene	83 ppm
91-57-6	2-methylnaphthalene	54 mg/m ³
91-58-7	2-Chloronaphthalene	69 mg/m ³
95-50-1	1,2-dichlorobenzene	170 ppm
95-57-8	2-chlorophenol	25 mg/m ³
95-95-4	2,4,5-trichlorophenol	27 mg/m ³
· PAC-3:		
75-09-2	dichloromethane	6,900 ppm
50-32-8	benzo[a]pyrene	700 mg/m ³
51-28-5	2,4-dinitrophenol	16 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
59-50-7	chlorocresol	360 mg/m ³
62-53-3	aniline	20 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
83-32-9	acenaphthene	240 mg/m ³
84-66-2	diethyl phthalate	1,800 mg/m ³
84-74-2	dibutyl phthalate	9300* mg/m ³
85-01-8	phenanthrene, pure	360 mg/m ³
85-68-7	BBP	460 mg/m ³
86-73-7	fluorene	430 mg/m ³
86-74-8	carbazole	43 mg/m ³
87-68-3	hexachlorobuta-1,3-diene	10 ppm
87-86-5	pentachlorophenol	150 mg/m ³
88-06-2	2,4,6-trichlorophenol	160 mg/m ³
88-74-4	o-nitroaniline	410 mg/m ³
88-75-5	2-nitrophenol	140 mg/m ³
90-12-0	1-methylnaphthalene	360 mg/m ³
91-20-3	naphthalene	500 ppm
91-57-6	2-methylnaphthalene	320 mg/m ³
91-58-7	2-Chloronaphthalene	410 mg/m ³
95-50-1	1,2-dichlorobenzene	1,000 ppm
95-57-8	2-chlorophenol	150 mg/m ³
95-95-4	2,4,5-trichlorophenol	160 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.

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

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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
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
TLV	Long-term value: 10 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
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
99-65-0 1,3-dinitrobenzene	
PEL	Long-term value: 1 mg/m ³ Skin
REL	Long-term value: 1 mg/m ³ Skin
TLV	Long-term value: 0.15* ppm *inh. fraction + vapor; Skin; BEI-M
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
100-25-4 1,4-dinitrobenzene	
PEL	Long-term value: 1 mg/m ³ Skin
REL	Long-term value: 1 mg/m ³ Skin
TLV	Long-term value: 0.15* ppm *inh. fraction + vapor; Skin; BEI-M
105-67-9 2,4-xylenol	
TLV	Long-term value: 1* ppm *inh. fraction+vapor; DSEN, 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
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

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TLV	Long-term value: 5 ppm Skin; BEI, A4
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
120-82-1 1,2,4-trichlorobenzene	
REL	Ceiling limit value: 40 mg/m ³ , 5 ppm
TLV	Ceiling limit value: 5 ppm
120-83-2 2,4-dichlorophenol	
WEEL	Long-term value: 1 ppm Skin; Q
122-39-4 diphenylamine	
REL	Long-term value: 10 mg/m ³
TLV	Long-term value: 10 mg/m ³ A4
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
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:	
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)

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56-55-3 benz[a]anthracene	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)
62-53-3 aniline	
BEI	0.5 mg/L Medium: urine Time: end of shift Parameter: Aniline (with hydrolysis)
87-86-5 pentachlorophenol	
BEI	- Medium: urine Time: prior to last shift of workweek Parameter: Pentachlorophenol with hydrolysis (nonquantitative)
91-20-3 naphthalene	
BEI	- Medium: - Time: end of shift Parameter: 1-Naphthol with hydrolysis + 2-Naphthol with hydrolysis (Nq,Ns)
98-95-3 nitrobenzene	
BEI	5 % of hemoglobin Medium: blood Time: during or end of shift Parameter: Methemoglobin (background, nonspecific,)
99-65-0 1,3-dinitrobenzene	
BEI	1.5 % of hemoglobin Medium: blood Time: during or end of shift Parameter: Methemoglobin (background, nonspecific, semi-quantitative)
100-01-6 p-nitroaniline	
BEI	1.5 % of hemoglobin Medium: blood Time: during or end of shift Parameter: Methemoglobin (background, nonspecific, semi-quantitative)
100-25-4 1,4-dinitrobenzene	
BEI	1.5 % of hemoglobin Medium: blood Time: during or end of shift Parameter: Methemoglobin (background, nonspecific, semi-quantitative)
108-95-2 phenol	
BEI	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)
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)
528-29-0 1,2-dinitrobenzene	
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.

(Contd. on page 11)

Product Name: Semi-volatile Organics Mix

(Contd. of page 10)

- **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 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.
- **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.

(Contd. on page 12)

Product Name: Semi-volatile Organics Mix

(Contd. of page 11)

· Partition coefficient (n-octanol/water): Not applicable.	
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	93.3 %
VOC content:	0.75 %
· Solids content: 4.4 %	
· 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:
Toxic
Harmful
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)		
75-09-2	dichloromethane	2A
50-32-8	benzo[a]pyrene	1
53-70-3	dibenz[a,h]anthracene	2A
56-55-3	benz[a]anthracene	2B
58-90-2	2,3,4,6-tetrachlorophenol	2B
62-53-3	aniline	2A
62-75-9	dimethylnitrosoamine	2A
67-72-1	hexachloroethane	2B
78-59-1	3,5,5-trimethylcyclohex-2-enone	2B
83-32-9	acenaphthene	3
85-01-8	phenanthrene, pure	3
85-68-7	BBP	3
86-73-7	fluorene	3
86-74-8	carbazole	2B
87-68-3	hexachlorobuta-1,3-diene	3
87-86-5	pentachlorophenol	1
88-06-2	2,4,6-trichlorophenol	2B
91-20-3	naphthalene	2B

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95-50-1	1,2-dichlorobenzene	3
95-57-8	2-chlorophenol	2B
95-95-4	2,4,5-trichlorophenol	2B
98-95-3	nitrobenzene	2B
103-23-1	Di-(2-ethylhexyl) adipate	3
103-33-3	azobenzene	3
106-46-7	1,4-dichlorobenzene	2B
106-47-8	4-chloroaniline	2B
108-60-1	bis(2-chloro-1-methylethyl) ether	3
108-95-2	phenol	3
110-86-1	PYRIDINE	2B
111-44-4	bis(2-chloroethyl) ether	3

· **NTP (National Toxicology Program)**

75-09-2	dichloromethane	R
50-32-8	benzo[a]pyrene	R
53-70-3	dibenz[a,h]anthracene	R
56-55-3	benz[a]anthracene	R
62-75-9	dimethylnitrosoamine	R
67-72-1	hexachloroethane	R
85-01-8	phenanthrene, pure	R
86-73-7	fluorene	R
87-86-5	pentachlorophenol	R
88-06-2	2,4,6-trichlorophenol	R
91-20-3	naphthalene	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
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
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:		
50-32-8	benzo[a]pyrene	
56-55-3	benz[a]anthracene	
87-68-3	hexachlorobuta-1,3-diene	
120-12-7	anthracene	

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120-82-1	1,2,4-trichlorobenzene
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
87-68-3	hexachlorobuta-1,3-diene
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.

14 Transport information

<ul style="list-style-type: none"> - UN-Number - DOT, ADR, IMDG, IATA 	<p>UN1593</p>
<ul style="list-style-type: none"> - UN proper shipping name - DOT - ADR - IMDG, IATA 	<p>Dichloromethane 1593 DICHLOROMETHANE, ENVIRONMENTALLY HAZARDOUS DICHLOROMETHANE</p>
<ul style="list-style-type: none"> - Transport hazard class(es) - DOT 	
	
<ul style="list-style-type: none"> - Class - Label 	<p>6.1 Toxic substances 6.1</p>
<ul style="list-style-type: none"> - ADR 	
 	
<ul style="list-style-type: none"> - Class - Label 	<p>6.1 Toxic substances 6.1</p>
<ul style="list-style-type: none"> - IMDG, IATA 	
	
<ul style="list-style-type: none"> - Class - Label 	<p>6.1 Toxic substances 6.1</p>
<ul style="list-style-type: none"> - Packing group - DOT, ADR, IMDG, IATA 	<p>III</p>

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Product Name: Semi-volatile Organics Mix

(Contd. of page 14)

· Environmental hazards:	
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Toxic substances
· Hazard identification number (Kemler code):	60
· EMS Number:	F-A,S-B
· Segregation groups	(SGG1) Acids
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· 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, ENVIRONMENTALLY HAZARDOUS

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
50-32-8	benzo[a]pyrene
51-28-5	2,4-dinitrophenol
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
58-90-2	2,3,4,6-tetrachlorophenol
62-53-3	aniline
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
77-47-4	hexachlorocyclopentadiene
84-74-2	dibutyl phthalate
85-01-8	phenanthrene, pure
87-68-3	hexachlorobuta-1,3-diene
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
88-75-5	2-nitrophenol
91-20-3	naphthalene
95-48-7	o-cresol
95-50-1	1,2-dichlorobenzene
95-57-8	2-chlorophenol
95-95-4	2,4,5-trichlorophenol
98-95-3	nitrobenzene
99-65-0	1,3-dinitrobenzene
100-01-6	p-nitroaniline
100-02-7	4-nitrophenol
100-25-4	1,4-dinitrobenzene
103-23-1	Di-(2-ethylhexyl) adipate
105-67-9	2,4-xylenol
106-46-7	1,4-dichlorobenzene
106-47-8	4-chloroaniline

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Product Name: Semi-volatile Organics Mix

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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.

75-09-2	dichloromethane	ACTIVE
50-32-8	benzo[a]pyrene	ACTIVE
51-28-5	2,4-dinitrophenol	ACTIVE
53-70-3	dibenz[a,h]anthracene	ACTIVE
56-55-3	benz[a]anthracene	ACTIVE
58-90-2	2,3,4,6-tetrachlorophenol	ACTIVE
59-50-7	chlorocresol	ACTIVE
62-53-3	aniline	ACTIVE
62-75-9	dimethylnitrosoamine	ACTIVE
67-72-1	hexachloroethane	ACTIVE
77-47-4	hexachlorocyclopentadiene	ACTIVE
78-59-1	3,5,5-trimethylcyclohex-2-enone	ACTIVE
83-32-9	acenaphthene	ACTIVE
84-66-2	diethyl phthalate	ACTIVE
84-74-2	dibutyl phthalate	ACTIVE
85-01-8	phenanthrene, pure	ACTIVE
85-68-7	BBP	ACTIVE
86-73-7	fluorene	ACTIVE
86-74-8	carbazole	ACTIVE
87-68-3	hexachlorobuta-1,3-diene	ACTIVE
87-86-5	pentachlorophenol	ACTIVE
88-06-2	2,4,6-trichlorophenol	ACTIVE
88-74-4	o-nitroaniline	ACTIVE
88-75-5	2-nitrophenol	ACTIVE
90-12-0	1-methylnaphthalene	ACTIVE
91-20-3	naphthalene	ACTIVE
91-57-6	2-methylnaphthalene	ACTIVE
91-58-7	2-Chloronaphthalene	ACTIVE
95-48-7	o-cresol	ACTIVE
95-50-1	1,2-dichlorobenzene	ACTIVE

Hazardous Air Pollutants

75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
51-28-5	2,4-dinitrophenol
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
62-53-3	aniline
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
85-01-8	phenanthrene, pure
86-73-7	fluorene
87-68-3	hexachlorobuta-1,3-diene
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
91-20-3	naphthalene
95-48-7	o-cresol
95-95-4	2,4,5-trichlorophenol
98-95-3	nitrobenzene
100-02-7	4-nitrophenol
106-46-7	1,4-dichlorobenzene
108-95-2	phenol

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111-44-4	bis(2-chloroethyl) ether
117-81-7	bis(2-ethylhexyl) phthalate
118-74-1	hexachlorobenzene
120-12-7	anthracene
120-82-1	1,2,4-trichlorobenzene
121-14-2	2,4-dinitrotoluene
129-00-0	pyrene

· Proposition 65

· Chemicals known to cause cancer:

75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
53-70-3	dibenz[a,h]anthracene
56-55-3	benz[a]anthracene
62-53-3	aniline
62-75-9	dimethylnitrosoamine
67-72-1	hexachloroethane
86-74-8	carbazole
87-68-3	hexachlorobuta-1,3-diene
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
91-20-3	naphthalene
98-95-3	nitrobenzene
103-33-3	azobenzene
106-46-7	1,4-dichlorobenzene
106-47-8	4-chloroaniline
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
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
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
99-65-0	1,3-dinitrobenzene
100-25-4	1,4-dinitrobenzene
117-81-7	bis(2-ethylhexyl) phthalate
121-14-2	2,4-dinitrotoluene
528-29-0	1,2-dinitrobenzene
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
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Product Name: Semi-volatile Organics Mix

(Contd. of page 17)

50-32-8	benzo[a]pyrene	CaH
53-70-3	dibenz[a,h]anthracene	B2
56-55-3	benz[a]anthracene	B2
62-53-3	aniline	B2
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
85-01-8	phenanthrene, pure	D
85-68-7	BBP	C
86-73-7	fluorene	D
87-68-3	hexachlorobuta-1,3-diene	C
87-86-5	pentachlorophenol	L
88-06-2	2,4,6-trichlorophenol	B2
91-20-3	naphthalene	C, CBD
91-57-6	2-methylnaphthalene	I
95-48-7	o-cresol	C
95-50-1	1,2-dichlorobenzene	D
98-95-3	nitrobenzene	L
99-65-0	1,3-dinitrobenzene	D
100-25-4	1,4-dinitrobenzene	D
101-55-3	4-Bromodiphenyl ether	D
103-23-1	Di-(2-ethylhexyl) adipate	C
103-33-3	azobenzene	B2
108-95-2	phenol	D, I
111-44-4	bis(2-chloroethyl) ether	B2
111-91-1	bis(2-chloroethoxy)methane	D

· TLV (Threshold Limit Value)

75-09-2	dichloromethane	A3
50-32-8	benzo[a]pyrene	A2
56-55-3	benz[a]anthracene	A2
62-53-3	aniline	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
87-86-5	pentachlorophenol	A3
90-12-0	1-methylnaphthalene	A4
91-20-3	naphthalene	A4
91-57-6	2-methylnaphthalene	A4
95-50-1	1,2-dichlorobenzene	A4
98-95-3	nitrobenzene	A3
100-01-6	p-nitroaniline	A4
106-46-7	1,4-dichlorobenzene	A3
108-95-2	phenol	A4
111-44-4	bis(2-chloroethyl) ether	A4
117-81-7	bis(2-ethylhexyl) phthalate	A3
118-74-1	hexachlorobenzene	A3
122-39-4	diphenylamine	A4
205-99-2	benz[e]acephenanthrylene	A2
218-01-9	chrysene	A3

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· NIOSH-Ca (National Institute for Occupational Safety and Health)	
75-09-2	dichloromethane
50-32-8	benzo[a]pyrene
62-53-3	aniline
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
117-81-7	bis(2-ethylhexyl) phthalate
218-01-9	chrysene

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

· **Hazard pictograms**



· **Signal word** Danger

· **Hazard-determining components of labeling:**

dichloromethane
bis(2-chloroethyl) ether
pentachlorophenol
nitrobenzene
benzo[a]pyrene
aniline
4-Bromodiphenyl ether
4-chloroaniline
DNOC

· **Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin.
H331 Toxic if inhaled.
H315 Causes skin 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.

· **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.

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Product Name: Semi-volatile Organics Mix

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· **Department issuing SDS:** product safety department

· **Contact:**

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

· **Date of preparation / last revision** 01/08/2024

· **Abbreviations and acronyms:**

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Acute Toxicity - Inhalation 3: Acute toxicity – Category 3

Skin Irritation 2: Skin corrosion/irritation – Category 2

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