



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date 06-Jul-2022

Revision Date 06-Jul-2022

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) AOB, COB
Product Name DOMINATOR® Octane Boost
Synonyms None
Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Fuel additive
Uses advised against Avoid formation of mists

1.3. Details of the supplier of the safety data sheet

Supplier
AMSOIL INC.
One AMSOIL Center
Superior, WI 54880, USA
T: +1 715-392-7101

For further information, please contact

E-mail address compliance@amsoil.com

1.4. Emergency telephone number

Emergency telephone CHEMTREC International: +1 703-741-5970

Emergency telephone - §45 - (EC)1272/2008
Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 3 - (H301)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Dusts/Mists)	Category 1 - (H330)
Carcinogenicity	Category 2 - (H351)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains Fuels, diesel, no. 2, Manganese, Tricarbonyl methylcyclopentadienyl

**Signal word**

Danger

Hazard statements

H301 - Toxic if swallowed

H312 - Harmful in contact with skin

H330 - Fatal if inhaled

H351 - Suspected of causing cancer

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

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

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

P310 - Immediately call a POISON CENTER or doctor

P391 - Collect spillage

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

P320 - Specific treatment is urgent (see supplemental first aid instructions on this label)

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Toxic to aquatic life.

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Hydrogenated base oil 68476-34-6	94-96	No data available	270-676-1	Carc. 2 (H351)	-	-	-
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	2-4	No data available	235-166-5	Acute Tox. 1 (H330)parAcute Tox. 2 (H310) Acute Tox. 3 (H301) Aquatic Acute (H400)	-	-	-

				Aquatic Chronic 1 (H410)			
Hydrogenated base oil 64742-94-5	1-2.5	No data available	265-198-5	Asp. Tox. 1 (H304)	-	-	-
Naphthalene 91-20-3	0.07-0.7	No data available	202-049-5	Acute Tox. 4 (H302) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	-	-
Hydrogenated base oil 64742-47-8	0.3-0.4	No data available	265-149-8	Asp. Tox. 1 (H304)	-	-	-
2-Ethylhexan-1-ol 104-76-7	0.2-0.3	No data available	203-234-3	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) [C]	-	-	-
Benzene, 1,2,4-trimethyl- 95-63-6	0.03-0.2	No data available	202-436-9	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)	-	-	-
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1	0.01-0.04	No data available	235-142-4	Acute Tox. 2 (H300)	-	-	-
Benzene, 1,3,5-trimethyl- 108-67-8	0.005-0.015	No data available	203-604-4	STOT SE 3 (H335) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)	STOT SE 3 :: C>=25%	-	-

[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
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Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Hydrogenated base oil 68476-34-6	No data available	2002	No data available	No data available	No data available
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	58	140	No data available	No data available	No data available
Hydrogenated base oil 64742-94-5	5005	2002	0.5906	No data available	No data available
Naphthalene 91-20-3	1110	1120	0.4004	No data available	No data available
Hydrogenated base oil 64742-47-8	5005	2002	No data available	No data available	No data available
2-Ethylhexan-1-ol 104-76-7	3730	1980	No data available	1.4822	No data available
Benzene, 1,2,4-trimethyl- 95-63-6	3280	3163.16	18	No data available	No data available
Tricarbonyl(η -cyclopentadienyl)manganese 12079-65-1	22	No data available	No data available	No data available	No data available
Benzene, 1,3,5-trimethyl- 108-67-8	No data available	No data available	24	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.
Inhalation	If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen.
Eye contact	Get medical attention if irritation develops and persists. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse thoroughly with plenty of water, also under the eyelids.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapor or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Coughing and/ or wheezing. Difficulty in breathing. May cause temporary eye irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam.
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Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
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5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating gases and vapors. Containers can burst or explode when heated, due to excessive pressure build-up.
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Hazardous combustion products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
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5.3. Advice for firefighters

Specific/special fire-fighting measures	Fires need to be assessed to determine appropriate protocols and safety measures for firefighting, including establishing safe zones, extinguishing media to be used, firefighter protection, and actions to control or extinguish the fire.
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Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Do not breathe vapor or mist. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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Other information	Refer to protective measures listed in Sections 7 and 8.
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For emergency responders	Use personal protection recommended in Section 8.
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6.2. Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
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Methods for cleaning up	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Clean contaminated surface thoroughly. After cleaning, flush away traces with water.
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Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections For additional information see: Section 8: Exposure controls/personal protection; Section 12: Ecological information; Section 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with used product. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Do not reuse empty containers. Store locked up. Keep away from Incompatible materials. Store in accordance with local regulations.

7.3. Specific end use(s)

Specific use(s). The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³. Short-term exposure limit (15-minute): 10 mg/m³.

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Hydrogenated base oil 68476-34-6	-		TWA: 100 mg/m ³ D*		
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	-	TWA: 0.2 mg/m ³ STEL 0.4 mg/m ³ H*	TWA: 0.2 mg/m ³ D*	TWA: 0.1 mg/m ³	
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ H*	TWA: 10 ppm TWA: 53 mg/m ³ STEL: 15 ppm STEL: 80 mg/m ³ D*	STEL: 75.0 mg/m ³ TWA: 50.0 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³
2-Ethylhexan-1-ol 104-76-7	TWA: 5.4 mg/m ³ TWA: 1 ppm	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL 2 ppm STEL 10.8 mg/m ³	TWA: 1 ppm TWA: 5.4 mg/m ³	TWA: 5.4 mg/m ³ TWA: 1 ppm	TWA: 1 ppm TWA: 5.4 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL 30 ppm STEL 150 mg/m ³		TWA: 20 ppm TWA: 100.0 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³

Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1	-	TWA: 0.1 mg/m ³ STEL 0.3 mg/m ³ H*	TWA: 0.1 mg/m ³ D*	TWA: 0.1 mg/m ³	
Benzene, 1,3,5-trimethyl- 108-67-8	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL 30 ppm STEL 150 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100.0 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3		TWA: 1 mg/m ³ Ceiling: 2 mg/m ³	TWA: 0.1 ppm TWA: 0.2 mg/m ³ H*		TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³ iho*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³ Ceiling: 100 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 1 ppm TWA: 5 mg/m ³ STEL: 2 ppm STEL: 10 mg/m ³
2-Ethylhexan-1-ol 104-76-7	TWA: 5.4 mg/m ³ TWA: 1 ppm	Ceiling: 11 mg/m ³	TWA: 1 ppm TWA: 5.4 mg/m ³	TWA: 1 ppm TWA: 5.4 mg/m ³	TWA: 1 ppm TWA: 5.4 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 100 mg/m ³ Ceiling: 250 mg/m ³ D*	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1		TWA: 1 mg/m ³ Ceiling: 2 mg/m ³	TWA: 0.1 mg/m ³ H*		TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³ iho*
Benzene, 1,3,5-trimethyl- 108-67-8	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 100 mg/m ³ Ceiling: 250 mg/m ³ D*	TWA: 20 ppm TWA: 100 mg/m ³		TWA: 20 ppm TWA: 100 mg/m ³
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	TWA: 0.2 mg/m ³ *			TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³ *	
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 0.4 ppm TWA: 2 mg/m ³ H*	*	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³
Hydrogenated base oil 64742-47-8		TWA:	TWA: 5 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ Peak: 20 mg/m ³ Peak: 100 ppm Peak: 700 mg/m ³		
2-Ethylhexan-1-ol 104-76-7	TWA: 1 ppm TWA: 5.4 mg/m ³	TWA: 10 ppm TWA: 54 mg/m ³	TWA: 10 ppm TWA: 54 mg/m ³ Peak: 10 ppm Peak: 54 mg/m ³	TWA: 1 ppm TWA: 5.4 mg/m ³	TWA: 5.4 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ Peak: 40 ppm Peak: 200 mg/m ³	TWA: 25 ppm TWA: 125 mg/m ³	TWA: 100 mg/m ³
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1	TWA: 0.1 mg/m ³ *			TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³ *	
Benzene, 1,3,5-trimethyl- 108-67-8	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ Peak: 40 ppm Peak: 200 mg/m ³	TWA: 25 ppm TWA: 125 mg/m ³	TWA: 100 mg/m ³
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Hydrogenated base oil 68476-34-6			TWA: 100 mg/m ³ cute*		
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³ Sk*		TWA: 0.2 mg/m ³ cute*	TWA: 0.1 mg/m ³	
Naphthalene	TWA: 10 ppm		TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm

91-20-3	TWA: 50 mg/m ³ STEL: 30 ppm STEL: 150 mg/m ³		TWA: 52 mg/m ³ cute*	TWA: 50 mg/m ³	TWA: 50 mg/m ³
2-Ethylhexan-1-ol 104-76-7	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 3 ppm STEL: 16.2 mg/m ³	TWA: 5.4 mg/m ³ TWA: 1 ppm		TWA: 5.4 mg/m ³ TWA: 1 ppm	TWA: 5.4 mg/m ³ TWA: 1 ppm
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 60 ppm STEL: 300 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³		TWA: 20 ppm TWA: 100 mg/m ³	
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1	TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³ Sk*		TWA: 0.1 mg/m ³ cute*		TWA: 0.1 mg/m ³
Benzene, 1,3,5-trimethyl- 108-67-8	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 60 ppm STEL: 300 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³		TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 30 ppm STEL: 150 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3				TWA: 0.1 ppm TWA: 0.2 mg/m ³ STEL: 0.3 ppm STEL: 0.6 mg/m ³ H*	
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 50 mg/m ³ STEL: 80 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 20 ppm STEL: 75 mg/m ³	STEL: 50 mg/m ³ TWA: 20 mg/m ³ skóra*
2-Ethylhexan-1-ol 104-76-7	TWA: 5.4 mg/m ³ TWA: 1 ppm	TWA: 1 ppm TWA: 5.4 mg/m ³	TWA: 5.4 mg/m ³	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 10 ppm STEL: 54 mg/m ³	STEL: 10.8 mg/m ³ TWA: 5.4 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 100 mg/m ³ STEL: 200 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 150 mg/m ³ STEL: 30 ppm	STEL: 170 mg/m ³ TWA: 100 mg/m ³ skóra*
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1				TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³ H*	
Benzene, 1,3,5-trimethyl- 108-67-8	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	STEL: 200 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 150 mg/m ³ STEL: 30 ppm	STEL: 170 mg/m ³ TWA: 100 mg/m ³ skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Hydrogenated base oil 68476-34-6	TWA: 100 mg/m ³ Cutânea*				
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	TWA: 0.2 mg/m ³ Cutânea*	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³			TWA: 0.2 mg/m ³ vía dérmica*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm Cutânea*	TWA: 10 ppm TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ K* Ceiling: 80 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 10 ppm STEL: 50 mg/m ³ K*	TWA: 10 ppm TWA: 53 mg/m ³ STEL: 15 ppm STEL: 80 mg/m ³ vía dérmica*
2-Ethylhexan-1-ol 104-76-7	TWA: 5.4 mg/m ³ TWA: 1 ppm	TWA: 1 ppm TWA: 5.4 mg/m ³		TWA: 5.4 mg/m ³ TWA: 1 ppm STEL: 1 ppm STEL: 5.4 mg/m ³	TWA: 1 ppm TWA: 1.54 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 40 ppm	TWA: 20 ppm TWA: 100 mg/m ³

				STEL: 200 mg/m ³	
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1	TWA: 0.1 mg/m ³ Cutânea*	TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³			TWA: 0.1 mg/m ³ via dérmica*
Benzene, 1,3,5-trimethyl- 108-67-8	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ Ceiling: 200 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³ STEL: 40 ppm STEL: 200 mg/m ³	TWA: 20 ppm TWA: 100 mg/m ³
Chemical name	Sweden		Switzerland		United Kingdom
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3			TWA: 0.1 ppm TWA: 0.2 mg/m ³ H*		
Naphthalene 91-20-3	NGV: 10 ppm NGV: 50 mg/m ³ Vägledande KGV: 15 ppm Vägledande KGV: 80 mg/m ³		TWA: 10 ppm TWA: 50 mg/m ³ H*		
Hydrogenated base oil 64742-47-8			TWA: 50 ppm TWA: 350 mg/m ³ TWA: 5 mg/m ³ STEL: 100 ppm STEL: 700 mg/m ³		
2-Ethylhexan-1-ol 104-76-7	NGV: 1 ppm NGV: 5.4 mg/m ³		TWA: 1 ppm TWA: 5.4 mg/m ³		TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 3 ppm STEL: 16.2 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	NGV: 20 ppm NGV: 100 mg/m ³ Bindande KGV: 35 ppm Bindande KGV: 170 mg/m ³				
Tricarbonyl(η-cyclopentadienyl) manganese 12079-65-1			TWA: 0.1 mg/m ³ H*		
Benzene, 1,3,5-trimethyl- 108-67-8	NGV: 20 ppm NGV: 100 mg/m ³ Bindande KGV: 35 ppm Bindande KGV: 170 mg/m ³				

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	-	20 µg/L (blood - whole blood not provided) (-)	-	-	-
Tricarbonyl(η-cyclopentadienyl)manganese 12079-65-1	-	20 µg/L (blood - whole blood not provided) (-)	-	-	-
Benzene, 1,3,5-trimethyl- 108-67-8	-	-	-	400 mg/g Creatinine - urine (Dimethylbenzoic acid (sum of all isomers)) - at the end of the work shift; at chronic exposure in the middle of the working week	-
Chemical name	Denmark	Finland	France	Germany	Germany
Naphthalene 91-20-3	-	-	-	35 µg/L - BAR (end of exposure or end	-

				of shift) urine 35 µg/L - BAR (for long-term exposures: at the end of the shift after several shifts) urine 4000 µg/L - (end of exposure or end of shift) - urine 13500 µg/L - (end of exposure or end of shift) - urine 23300 µg/L - (end of exposure or end of shift) - urine 34200 µg/L - (end of exposure or end of shift) - urine 30 µg/L - (end of exposure or end of shift) - urine 60 µg/L - (end of exposure or end of shift) - urine 175 µg/L - (end of exposure or end of shift) - urine 280 µg/L - (end of exposure or end of shift) - urine 390 µg/L - (end of exposure or end of shift) - urine 220 µg/L - (end of exposure or end of shift) - urine 500 µg/L - (end of exposure or end of shift) - urine 1500 µg/L - (end of exposure or end of shift) - urine 2300 µg/L - (end of exposure or end of shift) - urine 3300 µg/L - (end of exposure or end of shift) - urine	
Benzene, 1,2,4-trimethyl- 95-63-6	-	-	600 mg/g creatinine - urine (Total Dimethylbenzoic acids (after hydrolysis) in urine) - end of shift after several shifts	400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) end of shift) 400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) for long-term	400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) end of shift) 400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) for long-term

				exposures: at the end of the shift after several shifts) 400 mg/g Creatinine - BAT (end of exposure or end of shift) urine 400 mg/g Creatinine - BAT (for long-term exposures: at the end of the shift after several shifts) urine	exposures: at the end of the shift after several shifts)
Benzene, 1,3,5-trimethyl-108-67-8	-	-	600 mg/g creatinine - urine (Total Dimethylbenzoic acids (after hydrolysis)) - end of shift after several shifts	400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) end of shift) 400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 400 mg/g Creatinine - BAT (end of exposure or end of shift) urine 400 mg/g Creatinine - BAT (for long-term exposures: at the end of the shift after several shifts) urine	400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) end of shift) 400 mg/g Creatinine (urine - Dimethylbenzoic acid (sum of all isomers after hydrolysis) for long-term exposures: at the end of the shift after several shifts)
Chemical name	Hungary	Ireland		Italy	Italy REL
Naphthalene 91-20-3	-	-		-	- () - end of shift
Chemical name	Slovenia	Spain		Switzerland	United Kingdom
Benzene, 1,2,4-trimethyl-95-63-6	400 mg/g Creatinine - urine (Dimethylbenzoic acid (all isomers after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	-		-	-
Benzene, 1,3,5-trimethyl-108-67-8	400 mg/g Creatinine - urine (Dimethylbenzoic acid (all isomers after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	-		-	-

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls	Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	
Eye/face protection	If there is a risk of contact: Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.
Hand protection	If there is a risk of contact: Wear suitable gloves. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.
Skin and body protection	If there is a risk of contact: Wear suitable protective clothing (EN ISO 6529). Long sleeved clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.
Environmental exposure controls	Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	Red
Odor	Petroleum
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point	> 60.6 °C	Pensky-Martens Closed Cup (PMCC) ASTM D 93
Autoignition temperature		No data available
Decomposition temperature		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity	2.36 cSt @ 40 °C	ASTM D445
Dynamic viscosity		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available

Vapor pressure		No data available
Relative density	0.8623	No data available
Bulk density		No data available
Liquid Density		No data available
Vapor density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components).

Eye contact Specific test data for the substance or mixture is not available.

Skin contact	May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Toxic if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Coughing and/ or wheezing. Difficulty in breathing. May cause temporary eye irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.
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Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	58.00 mg/kg
ATEmix (dermal)	1,306.80 mg/kg
ATEmix (inhalation-dust/mist)	0.005 mg/l

Unknown acute toxicity

96 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
96 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogenated base oil 68476-34-6	-	> 2000 mg/kg (Rabbit)	= 3.6 mg/L (Rat) 4 h = 5.4 mg/L (Rat) 4 h
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	= 58 mg/kg (Rat)	= 140 mg/kg (Rabbit)	= 0.076 mg/L (Rat) 4 h
Hydrogenated base oil 64742-94-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
Naphthalene 91-20-3	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 0.4 mg/L (Rat) 4 h
Hydrogenated base oil 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
2-Ethylhexan-1-ol 104-76-7	= 3730 mg/kg (Rat)	= 1980 mg/kg (Rabbit)	> 227 ppm (Rat) 6 h
Benzene, 1,2,4-trimethyl- 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Tricarbonyl(η-cyclopentadienyl)manga nese 12079-65-1	= 22 mg/kg (Rat)	-	-
Benzene, 1,3,5-trimethyl- 108-67-8	-	-	= 24 g/m ³ (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Hydrogenated base oil	Carc. 2
Naphthalene	Carc. 2

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	Due to the viscosity, this product does not present an aspiration hazard.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties	No information available.
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11.2.2. Other information

Other adverse effects	No information available.
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SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
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Unknown aquatic toxicity	Contains 0 % of components with unknown hazards to the aquatic environment.
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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrogenated base oil 68476-34-6	-	LC50: =35mg/L (96h, Pimephales promelas)	-	-
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	-	LC50: =0.21mg/L (96h, Cyprinus carpio)	-	-
Hydrogenated base oil 64742-94-5	-	LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41mg/L (96h, Pimephales promelas)	-	EC50: =0.95mg/L (48h, Daphnia magna)
Naphthalene 91-20-3	-	LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss)	-	EC50: 1.09 - 3.4mg/L (48h, Daphnia magna)
Hydrogenated base oil 64742-47-8	-	LC50: =45mg/L (96h, Pimephales promelas) LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss)	-	-
2-Ethylhexan-1-ol 104-76-7	EC50: =11.5mg/L (72h, Desmodesmus subspicatus)	LC50: 32 - 37mg/L (96h, Oncorhynchus mykiss) LC50: >7.5mg/L (96h,	-	EC50: =39mg/L (48h, Daphnia magna)

		Oncorhynchus mykiss) LC50: 27 - 29.5mg/L (96h, Pimephales promelas) LC50: =29.7mg/L (96h, Pimephales promelas) LC50: 10.0 - 33.0mg/L (96h, Lepomis macrochirus)		
Benzene, 1,2,4-trimethyl- 95-63-6	-	LC50: 7.19 - 8.28mg/L (96h, Pimephales promelas)	-	EC50: =6.14mg/L (48h, Daphnia magna)
Benzene, 1,3,5-trimethyl- 108-67-8	-	LC50: =3.48mg/L (96h, Pimephales promelas)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Manganese, Tricarbonyl methylcyclopentadienyl	3.4
Hydrogenated base oil	6.5
Naphthalene	3.4
2-Ethylhexan-1-ol	2.9
Benzene, 1,2,4-trimethyl-	3.63

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

Chemical name	PBT and vPvB assessment
Hydrogenated base oil 68476-34-6	The substance is not PBT / vPvB
Manganese, Tricarbonyl methylcyclopentadienyl 12108-13-3	The substance is not PBT / vPvB
Hydrogenated base oil 64742-94-5	The substance is not PBT / vPvB
Naphthalene 91-20-3	The substance is not PBT / vPvB
Hydrogenated base oil 64742-47-8	The substance is not PBT / vPvB
2-Ethylhexan-1-ol 104-76-7	The substance is not PBT / vPvB
Benzene, 1,2,4-trimethyl- 95-63-6	The substance is not PBT / vPvB PBT assessment does not apply
Benzene, 1,3,5-trimethyl- 108-67-8	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products	Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.
Contaminated packaging	Do not reuse empty containers.
Waste codes / waste designations according to EWC / AVV	According to the European Waste Catalog, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information**IMDG**

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Manganese, Tricarbonyl methylcyclopentadienyl , Hydrogenated base oil)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Manganese, Tricarbonyl methylcyclopentadienyl , Hydrogenated base oil), 9, III, Marine pollutant
14.5 Environmental hazards	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Manganese, Tricarbonyl methylcyclopentadienyl , Hydrogenated base oil)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Manganese, Tricarbonyl methylcyclopentadienyl , Hydrogenated base oil), 9, III
14.5 Environmental hazards	Yes
14.6 Special Precautions for Users	
Special Provisions	None
Classification code	M6

ADR

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Manganese, Tricarbonyl methylcyclopentadienyl , Hydrogenated base oil)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Manganese, Tricarbonyl methylcyclopentadienyl , Hydrogenated base oil), 9, III
14.5 Environmental hazards	Yes
14.6 Special Precautions for Users	

Special Provisions 274, 335, 601, 375
 Classification code M6
 Tunnel restriction code (-)

IATA

14.1 UN number or ID number UN3082
14.2 UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Manganese, Tricarbonyl methylcyclopentadienyl, Hydrogenated base oil)
14.3 Transport hazard class(es) 9
14.4 Packing group III
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Manganese, Tricarbonyl methylcyclopentadienyl, Hydrogenated base oil), 9, III
14.5 Environmental hazards Yes
14.6 Special Precautions for Users
Special Provisions A97, A158, A197
ERG Code 9L
Note: None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Hydrogenated base oil 64742-94-5	RG 84
Hydrogenated base oil 64742-47-8	RG 84
Benzene, 1,2,4-trimethyl- 95-63-6	RG 84
Benzene, 1,3,5-trimethyl- 108-67-8	RG 84

Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2)

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Manganese, Tricarbonyl methylcyclopentadienyl	-	-	Fertility Category 2 Development Category 2
Tricarbonyl(η-cyclopentadienyl)manganese	-	-	Fertility Category 2 Development Category 2

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
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Hydrogenated base oil - 68476-34-6	75.	
Naphthalene - 91-20-3	75.	
Benzene, 1,2,4-trimethyl- - 95-63-6	75.	

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

H1 - ACUTE TOXIC

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Hydrogenated base oil - 64742-94-5		25000

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Water Framework Directive (2000/60/EC)

Chemical name	EU - Water Framework Directive (2000/60/EC)
Naphthalene - 91-20-3	Priority substance

EU - Environmental Quality Standards (2008/105/EC)

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Naphthalene - 91-20-3	Priority substance

International Inventories

Contact supplier for inventory compliance status

15.2. Chemical safety assessment**Chemical Safety Report**

No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H226 - Flammable liquid and vapor

H300 - Fatal if swallowed

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H310 - Fatal in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H330 - Fatal if inhaled

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H351 - Suspected of causing cancer

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

Legend

ATE: Acute Toxicity Estimate

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
 Ceiling Maximum limit value * Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information

relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet