Safety Data Sheet

26 Mix phenolic and fatty acid methyl ester in methanol

Version：V2.0.0.1
Report No.：BWQ0389-2016-MSDS-EP
Creation Date：2026/01/07
Revision Date：-

***Prepared in accordance with EU REACH Regulation (REACH 1907/2006 with amendment 2020/878)**

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

1.1 Product identifier

Product Name	26 Mix phenolic and fatty acid methyl ester in methanol
Cat No.	BWQ0389-2016
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
REACH Registration Number	-
UFI	No information available

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

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

1.3 Details of the supplier of the Safety Data Sheet

Name of the company	Weiyel Inc
Address of the company	Hedian Light Industrial Park, Chengguan Town, Shangcheng County, Xinyang City, Henan Province, China
Post code	465350
Telephone number	010-58103678
Fax number	010-84840368
E-mail address	info@weiyel.com

1.4 Emergency telephone number

Emergency telephone number	010-58103678
Opening hours	24h

2 Hazards identification

2.1 CLP classification according to Regulation (EC) No. 1272/2008 with amendment 2023/707

Flammable liquids	Category 2
Acute Toxicity - Oral	Category 3
Acute Toxicity - Dermal	Category 3
Acute Toxicity - Inhalation	Category 3
Specific target organ toxicity - single exposure	Category 1

2.2 Label elements

Hazard pictograms	
Signal word	**Danger**

Hazard statements

H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H370	Causes damage to organs

Precautionary statements

◆ Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe gas/mist/vapour/spray.
P264	Wash hands and other parts of the body (if related) thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

◆ Response

P311	Call a POISON CENTER/ doctor.
P321	Specific treatment (see related instructions on the label).
P330	Rinse mouth.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/ doctor.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	Small fire: dry chemical, CO_2 or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].

◆ Storage

P405	Store locked up.

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.

◆ Disposal

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

2.3 Other hazards

◆ Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Methanol	Not PBT/vPvB
Phenol	Not PBT/vPvB
o-cresol	Insufficient information, temporarily unable to evaluate
p-cresol	Not PBT/vPvB
2,6-xylenol	Not PBT/vPvB
2-ethylphenol	Insufficient information, temporarily unable to evaluate
4-ethylphenol	Not PBT/vPvB
2,3-xylenol	Not PBT/vPvB
Mequinol	Not PBT/vPvB
4-tert-butylphenol	Not PBT/vPvB
Eugenol	Not PBT/vPvB
Biphenyl-2-ol	Not PBT/vPvB
4-(1,1,3,3-tetramethylbutyl)phenol	Not PBT/vPvB
1-naphthol	Not PBT/vPvB
p-octylphenol	Insufficient information, temporarily unable to evaluate
p-nonylphenol	Insufficient information, temporarily unable to evaluate
4-(α,α-dimethylbenzyl)phe nol	Not PBT/vPvB
Methyl laurate	Not PBT/vPvB
Methyl myristate	Insufficient information, temporarily unable to evaluate
Methyl palmitate	Not PBT/vPvB
Methyl heptadecanoate	Insufficient information, temporarily unable to evaluate
Methyl oleate	Insufficient information, temporarily unable to evaluate
Methyl elaidate	Insufficient information, temporarily unable to evaluate
Methyl stearate	Insufficient information, temporarily unable to evaluate
Methyl linoleate	Insufficient information, temporarily unable to evaluate
Methyl icosanoate	Insufficient information, temporarily unable to evaluate
Methyl docosanoate	Insufficient information, temporarily unable to evaluate

◆ Results of endocrine disrupting properties assessment

Component	Results of endocrine disrupting properties assessment [according to (EU) No 2017/2100 or (EU) No 2018/605]
Methanol	Insufficient information, temporarily unable to evaluate
Phenol	Insufficient information, temporarily unable to evaluate
o-cresol	Insufficient information, temporarily unable to evaluate
p-cresol	not ED
2,6-xylenol	Insufficient information, temporarily unable to evaluate
2-ethylphenol	Insufficient information, temporarily unable to evaluate
4-ethylphenol	Insufficient information, temporarily unable to evaluate
2,3-xylenol	Insufficient information, temporarily unable to evaluate
Mequinol	Insufficient information, temporarily unable to evaluate
4-tert-butylphenol	Insufficient information, temporarily unable to evaluate
Eugenol	Insufficient information, temporarily unable to evaluate
Biphenyl-2-ol	Insufficient information, temporarily unable to evaluate
4-(1,1,3,3-tetramethylbutyl)phenol	Insufficient information, temporarily unable to evaluate
1-naphthol	Insufficient information, temporarily unable to evaluate
p-octylphenol	Insufficient information, temporarily unable to evaluate
p-nonylphenol	Insufficient information, temporarily unable to evaluate
4-(α,α-dimethylbenzyl)phenol	Insufficient information, temporarily unable to evaluate
Methyl laurate	Insufficient information, temporarily unable to evaluate
Methyl myristate	Insufficient information, temporarily unable to evaluate
Methyl palmitate	Insufficient information, temporarily unable to evaluate
Methyl heptadecanoate	Insufficient information, temporarily unable to evaluate
Methyl oleate	Insufficient information, temporarily unable to evaluate
Methyl elaidate	Insufficient information, temporarily unable to evaluate
Methyl stearate	Insufficient information, temporarily unable to evaluate
Methyl linoleate	Insufficient information, temporarily unable to evaluate
Methyl icosanoate	Insufficient information, temporarily unable to evaluate
Methyl docosanoate	Insufficient information, temporarily unable to evaluate

◆ Other

	Not applicable.

3 Composition/information on ingredients

3.1 Substance

	Not applicable

3.2 Mixture

Component	Weight % content(or	Classification according to Regulation (EC) No. 1272/2008 with amendment	Specific Conc. Limits, M-factors

	range)	2023/707 [CLP]	
Methanol CAS : 67-56-1 EC : 200-659-6 Index No. : 603-001-00-X	99.74	Flammable liquids, Category 2, H225; Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Acute Toxicity - Inhalation, Category 3, H331; Specific target organ toxicity - single exposure, Category 1, H370	H370:C ≥ 10%|H371:3% ≤ C < 10%
Phenol CAS : 108-95-2 EC : 203-632-7 Index No. : 604-001-00-2	0.01	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Skin corrosion/irritation, Category 1B, H314; Acute Toxicity - Inhalation, Category 3, H331; Germ cell mutagenicity, Category 2, H341; Specific target organ toxicity - repeated exposure, Category 2, H373	H314B:C ≥ 3%|H315:1% ≤ C < 3%|H319:1% ≤ C < 3%
o-cresol CAS : 95-48-7 EC : 202-423-8 Index No. : 604-004-00-9	0.01	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Skin corrosion/irritation, Category 1B, H314	-
p-cresol CAS : 106-44-5 EC : 203-398-6 Index No. : 604-004-00-9	0.01	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Skin corrosion/irritation, Category 1B, H314	-
2,6-xylenol CAS : 576-26-1 EC : 209-400-1 Index No. : 604-006-00-X	0.01	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Skin corrosion/irritation, Category 1B, H314; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 2, H411	-
2-ethylphenol CAS : 90-00-6 EC : 201-958-4 Index No. : -	0.01	Acute Toxicity - Oral, Category 4, H302; Acute Toxicity - Dermal, Category 4, H312; Acute Toxicity - Inhalation, Category 4, H332	-
4-ethylphenol CAS : 123-07-9 EC : 204-598-6 Index No. : -	0.01	Serious eye damage/irritation, Category 1, H318	-
2,3-xylenol CAS : 526-75-0 EC : 208-395-3 Index No. : 604-006-00-X	0.01	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Skin corrosion/irritation, Category 1B, H314; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 2, H411	-
Mequinol CAS : 150-76-5 EC : 205-769-8 Index No. : 604-044-00-7	0.01	Acute Toxicity - Oral, Category 4, H302; Sensitization - skin, Category 1, H317; Serious eye damage/irritation, Category 2, H319	-
4-tert-butylphenol CAS : 98-54-4 EC : 202-679-0 Index No. : 604-090-00-8	0.01	Skin Corrosion/Irritation, Category 2, H315; Serious eye damage/irritation, Category 1, H318; Reproductive toxicity, Category 2, H361; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M(Chronic)=1
Eugenol CAS : 97-53-0 EC : 202-589-1 Index No. : -	0.01	Sensitization - skin, Category 1B, H317; Serious eye damage/irritation, Category 2, H319	-
Biphenyl-2-ol CAS : 90-43-7 EC : 201-993-5 Index No. : 604-020-00-6	0.01	Skin corrosion/irritation, Category 1, H314; Sensitization - skin, Category 1B, H317; Serious eye damage/irritation, Category 1, H318; Carcinogenicity, Category 2, H351; Hazardous to the aquatic environment -	M=1;M(Chronic)=1

		short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	
4-(1,1,3,3-tetramethylbutyl)phenol CAS : 140-66-9 EC : 205-426-2 Index No. : 604-075-00-6	0.01	Skin Corrosion/Irritation, Category 2, H315; Serious eye damage/irritation, Category 1, H318; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=10
1-naphthol CAS : 90-15-3 EC : 201-969-4 Index No. : 604-029-00-5	0.01	Acute Toxicity - Oral, Category 4, H302; Acute Toxicity - Dermal, Category 4, H312; Skin Corrosion/Irritation, Category 2, H315; Serious eye damage/irritation, Category 1, H318; Specific target organ toxicity - single exposure; respiratory tract irritation, Category 3, H335	-
p-octylphenol CAS : 1806-26-4 EC : 217-302-5 Index No. : -	0.01	Skin corrosion/irritation, Category 1C, H314; Serious eye damage/irritation, Category 1, H318	-
p-nonylphenol CAS : 104-40-5 EC : 203-199-4 Index No. : -	0.01	Acute Toxicity - Oral, Category 4, H302; Skin corrosion/irritation, Category 1B, H314; Serious eye damage/irritation, Category 1, H318; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
4-(α , α -dimethylbenzyl)phenol CAS : 599-64-4 EC : 209-968-0 Index No. : -	0.01	Skin Corrosion/Irritation, Category 2, H315; Serious eye damage/irritation, Category 2, H319; Specific target organ toxicity - single exposure; respiratory tract irritation, Category 3, H335	-
Methyl laurate CAS : 111-82-0 EC : 203-911-3 Index No. : -	0.01	Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 2, H411	-
Methyl myristate CAS : 124-10-7 EC : 204-680-1 Index No. : -	0.01	Not Classified	-
Methyl palmitate CAS : 112-39-0 EC : 203-966-3 Index No. : -	0.01	Skin Corrosion/Irritation, Category 2, H315	-
Methyl heptadecanoate CAS : 1731-92-6 EC : 217-055-3 Index No. : -	0.01	Not Classified	-
Methyl oleate CAS : 112-62-9 EC : 203-992-5 Index No. : -	0.01	Not Classified	-
Methyl elaidate CAS : 1937-62-8 EC : 217-712-4 Index No. : -	0.01	Not Classified	-
Methyl stearate CAS : 112-61-8	0.01	Not Classified	-

EC : 203-990-4 Index No. : -			
Methyl linoleate CAS : 112-63-0 EC : 203-993-0 Index No. : -	0.01	Not Classified	-
Methyl icosanoate CAS : 1120-28-1 EC : 214-304-8 Index No. : -	0.01	Not Classified	-
Methyl docosanoate CAS : 929-77-1 EC : 213-207-8 Index No. : -	0.01	Not Classified	-

4 First-aid measures

4.1 Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Skin contact	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Ingestion	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.
Inhalation	Fresh air, rest. Refer for medical attention.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

4.2 Most important symptoms/effects, acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

4.3 Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Small fire: dry chemical, CO_2 or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable extinguishing media	Use of water spray when fighting fire may be inefficient.

5.2 Specific hazards arising from the substance or mixture

1	Will form explosive mixtures with air.
2	Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/ or vapour concentration.
3	Vapours may travel to source of ignition and flash back.
4	Liquid and vapour are flammable.

5	Development of hazardous combustion gases or vapor possible in the event of fire.
6	May expansion or decompose explosively when heated or involved in fire.

5.3 Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

1	Avoid breathing vapours and contacting with skin and eye.
2	Beware of vapours accumulating to form explosive concentrations.
3	Vapours can accumulate in low areas.
4	Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves.
5	Use personal protective equipment,do not breathe gas/mist/vapour/spray.
6	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
7	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

1	It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-static clothing.
2	In case of small amount of spillage, use clean non sparking tools to collect absorption materials.
3	In case of large amount of spillage, construct cofferdam or dig a hole to collect the spillage. Use foam cover to reduce evaporation. Water spray mist can reduce evaporation, but can not reduce the flammability of the leakage in the restricted space.
4	Collect absorbent material using a clean, non-sparking tool.
5	Cover with anti-solvent foam to reduce evaporation.
6	Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
7	Water spray reduces evaporation but does not reduce the flammability of spills in confined spaces.
8	Cut off the source of the leak as much as possible.
9	Keep leaks in a ventilated place.
10	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
11	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
12	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.
13	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

1	Personal Protective Equipment advice is contained in Section 8 of the SDS.

2	Disposal considerations advice is contained in Section 13 of the SDS.

7 Handling and storage

7.1 Precautions for safe handling

◆ Protective measures

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.

◆ Measures to prevent fire

1	Use only non-sparking tools.
2	To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.
3	Use explosion proof equipment.
4	Keep away from heat/sparks/open flames/ hot surfaces.

◆ Measures to prevent aerosol and dust generation

1	Not applicable.

◆ Advice on general occupational hygiene

1	Wash hands and face after using the substances.
2	Replace the contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

7.3 Specific end use(s)

1	In addition to use mentioned in the Section 1.2, unforeseen other specific end uses.

8 Exposure controls/personal protection

8.1 Control parameters

◆ Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Methanol	Japan - JSOH(2024–2025)	200	260	-	-
	Permissible exposure standards for workers in the workplace	200	262	250	327.5
	European Union	200	260	-	-
	France	200	260	-	-
	Germany (AGS)	100	130	200	260

	Germany (DFG)	100	130	200	260
Phenol	Japan - JSOH(2024–2025)	5	19	-	-
	Permissible exposure standards for workers in the workplace	5	19	10	28.5
	European Union	2	8	4	16
	France	2	7.8	4	15.6
	Germany (AGS)	2	8	4	16
	Italy	2	8	4	16
o-cresol	Permissible exposure standards for workers in the workplace	5	22	10	33
	France	5	22	-	-
	Germany (AGS)	1	4.5	1	4.5
	Germany (DFG)	1	4.5	1	4.5
	United Kingdom	5	22	-	-
	Austria	5	22	10	44
p-cresol	Permissible exposure standards for workers in the workplace	5	22	10	33
	Germany (AGS)	1	4.5	1	4.5
	Germany (DFG)	1	4.5	1	4.5
	United Kingdom	5	22	-	-
	Austria	5	22	10	44
	Belgium	2.3	10	-	-
2,6-xylenol	Latvia	-	2	-	-
	Romania	-	15	-	20
	USA - ACGIH	1(inhalable fraction and vapor)	-	-	-
2,3-xylenol	USA - ACGIH	1(inhalable fraction and vapor)	-	-	-
Mequinol	Permissible exposure standards for workers in the workplace	-	5	-	10
	France	-	5	-	-
	Austria	-	5	-	10
	Belgium	-	5	-	-

	Denmark	-	5	-	10
	Ireland	-	5	-	-
4-tert-butylphenol	Germany (AGS)	0.08	0.5	0.16	1
	Germany (DFG)	0.08	0.5	0.16	1
	Austria	0.08	0.5	0.4	2.5
	Denmark	0.08	0.5	0.16	1
	Switzerland	0.08	0.5	0.16	1
Biphenyl-2-ol	Germany (AGS)	-	5	-	5
	Germany (DFG)	-	5	-	5
4-(1,1,3,3-tetramethylbutyl)phenol	Germany (AGS)	0.5	4	0.5	4
	Germany (DFG)	0.5	4.3	0.5	4.3
	Switzerland	0.5	4.3	0.5	4.3
1-naphthol	Latvia	-	0.5	-	-
	Romania	-	10	-	15

◆ Biological limit values

Component	Standard	Biological monitoring index	Biological limits value	Sampling time	Remark
Methanol	USA -ACGIH	Methanol(Urine)	15mg/L	End of shift	
Phenol	SCOEL(EU)	phenol/urine	120mg/g creatinine	Not strictly regulated	
		Phenol with hydrolysis(Creatinine in urine)	250mg/g	End of shift	

◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300 and GBZ/T 160 series standard Determination of toxic substances in workplace air.

◆ Derived No effect level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Methanol	Inhalation	No data available	No data available	130 mg/m3	130 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Phenol	Inhalation	No data available	No data available	No data available	8 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
o-cresol	Inhalation	No data available	No data available	No data available	2.47 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

p-cresol	Inhalation	No data available	No data available	No data available	2.47 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
2,6-xylenol	Inhalation	No data available	No data available	2 mg/m3	2 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
2-ethylphenol	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
4-ethylphenol	Inhalation	No data available	No data available	No data available	8.167 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
2,3-xylenol	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Mequinol	Inhalation	No data available	No data available	No data available	3 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
4-tert-butylphenol	Inhalation	No data available	No data available	No data available	0.5 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Eugenol	Inhalation	No data available	No data available	No data available	21.2 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Biphenyl-2-ol	Inhalation	No data available	No data available	No data available	19.25 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
4-(1,1,3,3-tetramethylbutyl)phenol	Inhalation	No data available	No data available	No data available	0.8 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
1-naphthol	Inhalation	No data available	No data available	No data available	4.58 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
p-octylphenol	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
p-nonylphenol	Inhalation	No data available	No data available	No data available	No data available

	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
4-(α,α-dimethylbenzyl)phenol	Inhalation	No data available	No data available	No data available	0.59 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl laurate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl myristate	Inhalation	No data available	No data available	No data available	79.69 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl palmitate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl heptadecanoate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl oleate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl elaidate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl stearate	Inhalation	No data available	No data available	No data available	137.2 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl linoleate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl icosanoate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methyl docosanoate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

◆ Predicted No Effect Concentration (PNEC)

Component	A	B	C	D	E	F	G	H
Methanol	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No potential for bioaccumulation
Phenol	7.7 µg/L	770 ng/L	2.1 mg/L	91.5 µg/kg sediment dw	9.15 µg/kg sediment dw	No hazard identified	136 µg/kg soil dw	No potential for bioaccumulation
o-cresol	100 µg/L	10 µg/L	1.28 mg/L	580 µg/kg sediment dw	58 µg/kg sediment dw	No hazard identified	57.2 µg/kg soil dw	No potential for bioaccumulation
p-cresol	100 µg/L	10 µg/L	1.65 mg/L	850 µg/kg sediment dw	85 µg/kg sediment dw	No hazard identified	111 µg/kg soil dw	No potential for bioaccumulation
2,6-xylenol	10.8 µg/L	1.08 µg/L	No data available	216 µg/kg sediment dw	21.6 µg/kg sediment dw	No data available	37.1 µg/kg soil dw	No potential for bioaccumulation
4-ethylphenol	9 µg/L	900 ng/L	4.4 mg/L	71.7 µg/kg sediment dw	7.17 µg/kg sediment dw	No hazard identified	12 µg/kg soil dw	No potential for bioaccumulation
Mequinol	13.6 µg/L	1.36 µg/L	10 mg/L	125 µg/kg sediment dw	12.5 µg/kg sediment dw	No hazard identified	17 µg/kg soil dw	No potential for bioaccumulation
4-tert-butylphenol	10 µg/L	1 µg/L	1.5 mg/L	270 µg/kg sediment dw	27 µg/kg sediment dw	No hazard identified	250 µg/kg soil dw	46.67 mg/kg food
Eugenol	201.5 µg/L	20.15 µg/L	No hazard identified	14.488 mg/kg sediment dw	1.449 mg/kg sediment dw	No hazard identified	15.5 µg/kg soil dw	No potential for bioaccumulation
Biphenyl-2-ol	900 ng/L	90 ng/L	560 µg/L	128.4 µg/kg sediment dw	12.84 µg/kg sediment dw	No hazard identified	2.5 mg/kg soil dw	1.87 mg/kg food
4-(1,1,3,3-tetramethylbutyl)phenol	632 ng/L	632 ng/L	100 µg/L	4.62 mg/kg sediment dw	1.23 mg/kg sediment dw	No hazard identified	2.3 mg/kg soil dw	2.36 mg/kg food
1-naphthol	330 ng/L	33 ng/L	1.2 mg/L	16.6 µg/kg sediment dw	1.66 µg/kg sediment dw	No hazard identified	3.11 µg/kg soil dw	No potential for bioaccumulation
4-(α,α-dimethylbenzyl)phenol	14.2 µg/L	1.42 µg/L	1.8 mg/L	3.584 mg/kg sediment	358.4 µg/kg sediment	No hazard identified	708 µg/kg soil dw	No potential for

				dw	dw			bioaccumulation
Methyl laurate	792 ng/L	79.2 ng/L	100 mg/L	10.55 µg/kg sediment dw	1.05 µg/kg sediment dw	No hazard identified	10 mg/kg soil dw	33.3 mg/kg food
Methyl palmitate	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No potential for bioaccumulation

Note 1:

A: Freshwater; B: Seawater; C: Sewage treatment plant; D: Sediment (freshwater); E: Sediment (seawater); F: Air; G: Soil; H: Secondary poisoning(Hazard for Predators).

Note 2:

The PNEC values of the remaining components not shown in the product are not available yet.

8.2 Exposure controls

8.2.1 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

8.2.2 Personal protection equipment

General requirement	
Eye protection	Must wear appropriate safety goggles.
Hand protection	Must wear anti static chemical protective gloves.
Respiratory protection	Must wear appropriate personal dust proof gas mask.
Skin and body protection	Must wear anti static chemical protective clothing and anti static shoes.

8.2.3 Environmental exposure controls

Environmental exposure controls	No information available

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	colorless liquid
Colour	colorless liquid
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	-98 (Methanol)
Initial boiling point and boiling range(°C)	65 (Methanol)
Flash point(Closed cup,°C)	9 (Methanol)

Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit : 50 (Methanol); Lower limit : 6 (Methanol)
Vapor pressure	12.9 kPa (20°C,Methanol)
Vapor density(Air = 1)	1.1 (Methanol)
Relative density(Water=1)	0.79 (20°C,Methanol)
Solubility	Miscible with water (Methanol)
n-octanol/water partition coefficient	-0.74 (Methanol)
Auto-ignition temperature(°C)	440 (Methanol)
Decomposition temperature(°C)	No information available
Kinematic viscosity	0.544 mPa (25°C,Methanol)
Explosive properties	No information available
Oxidizing properties	No information available
Particle characteristics	Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Information with regard to physical hazard classes	No information available

9.2.2 Other safety characteristics

Other safety characteristics	No information available

10 Stability and reactivity

Stability and reactivity

10.1 Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
10.2 Chemical stability	Stable under proper operation and storage conditions.
10.3 Possibility of hazardous reactions	In contact with oxidants causes severe reactions, and may cause a fire or explosion. In contact with mixtures of aluminium trichloride and nitro-compounds causes a severe explosion.
10.4 Conditions to avoid	Incompatible materials, heat, flame and spark.
10.5 Incompatible materials	Oxidants, alkali metals, alkaline earth metals and aluminum. Aluminium trichloride, strong oxidants, nitrate, nitrite and oxygen-halogen salts.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 with amendment 2023/707

26 Mix phenolic and fatty acid methyl ester in methanol	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met

Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Causes damage to organs(Category 1)
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met

Acute toxicity

Component	LD_{50}(oral)	LD_{50}(dermal)	LC_{50}(inhalation,4h)
1-naphthol	1870mg/kg(Rat)	880mg/kg(Rabbit)	No information available
Biphenyl-2-ol	2480mg/kg(Rat)	No information available	No information available
Mequinol	1600mg/kg(Rat)	No information available	No information available
4-(1,1,3,3-tetramethylbutyl)phenol	4600mg/kg(Rat)	1880mg/kg(Rabbit)	No information available
p-cresol	207mg/kg(Rat)	301mg/kg(Rabbit)	No information available
p-nonylphenol	1620mg/kg(Rat)	No information available	No information available
Phenol	317mg/kg(Rat)	630mg/kg(Rabbit)	No information available
Eugenol	1930mg/kg(Rat)	No information available	No information available
2,6-xylenol	296mg/kg(Rat)	1000mg/kg(Rabbit)	No information available
2-ethylphenol	600mg/kg(Mouse)	No information available	No information available
o-cresol	121mg/kg(Rat)	890mg/kg(Rabbit)	No information available
Methanol	5628mg/kg(Rat)	15800mg/kg(Rabbit)	83.867mg/L(Rat)
4-tert-butylphenol	2950mg/kg(Rat)	2290mg/kg(Rabbit)	No information available

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Methanol	Not Listed	Not Listed
Phenol	Category 3	Not Listed
o-cresol	Not Listed	Not Listed
p-cresol	Not Listed	Not Listed
2,6-xylenol	Not Listed	Not Listed
2-ethylphenol	Not Listed	Not Listed
4-ethylphenol	Not Listed	Not Listed
2,3-xylenol	Not Listed	Not Listed
Mequinol	Not Listed	Not Listed
4-tert-butylphenol	Not Listed	Not Listed
Eugenol	Category 3	Not Listed
Biphenyl-2-ol	Category 3	Not Listed
4-(1,1,3,3-tetramethylbutyl)phenol	Not Listed	Not Listed
1-naphthol	Not Listed	Not Listed

p-octylphenol	Not Listed	Not Listed
p-nonylphenol	Not Listed	Not Listed
4-(α,α-dimethylbenzyl)phenol	Not Listed	Not Listed
Methyl laurate	Not Listed	Not Listed
Methyl myristate	Not Listed	Not Listed
Methyl palmitate	Not Listed	Not Listed
Methyl heptadecanoate	Not Listed	Not Listed
Methyl oleate	Not Listed	Not Listed
Methyl elaidate	Not Listed	Not Listed
Methyl stearate	Not Listed	Not Listed
Methyl linoleate	Not Listed	Not Listed
Methyl icosanoate	Not Listed	Not Listed
Methyl docosanoate	Not Listed	Not Listed

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Component	Endocrine disrupting properties
Methanol	No information available
Phenol	No information available
o-cresol	No information available
p-cresol	Existing research data indicates that this substance is not a reproductive or developmental toxicant, nor does it possess potential endocrine-disrupting properties; therefore, it is not considered a human endocrine disruptor.
2,6-xylenol	No information available
2-ethylphenol	No information available
4-ethylphenol	No information available
2,3-xylenol	No information available
Mequinol	No information available
4-tert-butylphenol	No information available
Eugenol	No information available
Biphenyl-2-ol	No information available
4-(1,1,3,3-tetramethylbutyl)phenol	No information available
1-naphthol	No information available
p-octylphenol	No information available
p-nonylphenol	No information available
4-(α,α-dimethylbenzyl)phenol	No information available
Methyl laurate	No information available

Methyl myristate	No information available
Methyl palmitate	No information available
Methyl heptadecanoate	No information available
Methyl oleate	No information available
Methyl elaidate	No information available
Methyl stearate	No information available
Methyl linoleate	No information available
Methyl icosanoate	No information available
Methyl docosanoate	No information available

11.2.2 Other Information

Other Information	See Section 11.1

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Methyl laurate	LC_{50} : >0.52mg/L (96h)(Fish)	EC_{50} : 0.23mg/L (48h)(Crustaceans)	ErC_{50} : 0.32mg/L (72h)(Algae)
2,3-xylenol	LC_{50} : 13mg/L (96h)(Fish)	EC_{50} : 6.2mg/L (48h)(Crustaceans)	ErC_{50} : 2.726mg/L (72h)(Algae)
4-(1,1,3,3-tetramethylbutyl)phenol	LC_{50} : 0.36mg/L (96h)(Fish)	No information available	No information available
p-cresol	LC_{50} : 14mg/L (96h)(Fish)	EC_{50} : 7.0mg/L (48h)(Crustaceans)	ErC_{50} : 52mg/L (72h)(Algae)
4-(α,α-dimethylbenzyl)phenol	LC_{50} : 0.9mg/L (96h)(Fish)	EC_{50} : 0.9mg/L (48h)(Crustaceans)	ErC_{50} : 1.4mg/L (72h)(Algae)
2,6-xylenol	LC_{50} : 15mg/L (96h)(Fish)	EC_{50} : 11mg/L (48h)(Crustaceans)	ErC_{50} : 45mg/L (72h)(Algae)
Methyl myristate	No information available	EC_{50} : > 0.02mg/L (48h)(Crustaceans)	ErC_{50} : > 0.023mg/L (72h)(Algae)
Methyl stearate	No information available	EC_{50} : > 0.02mg/L (48h)(Crustaceans)	ErC_{50} : > 0.023mg/L (72h)(Algae)
Methanol	LC_{50} : 24000mg/L (96h)(Fish)	EC_{50} : 24500mg/L (48h)(Crustaceans)	No information available
1-naphthol	LC_{50} : 3mg/L (96h)(Fish)	EC_{50} : 2.51mg/L (48h)(Crustaceans)	ErC_{50} : > 2.18mg/L (72h)(Algae)
Mequinol	LC_{50} : 84.3mg/L (96h)(Fish)	No information available	No information available
Biphenyl-2-ol	LC_{50} : 5.24mg/L (96h)(Fish)	EC_{50} : 2.1mg/L (48h)(Crustaceans)	No information available
p-nonylphenol	LC_{50} : 0.19mg/L (96h)(Fish)	EC_{50} : 0.13~0.14mg/L (48h)(Crustaceans)	No information available
Phenol	LC_{50} : 20.5mg/L (96h)(Fish)	EC_{50} : 15mg/L (48h)(Crustaceans)	ErC_{50} : 84.5mg/L (96h)(Algae)

p-octylphenol	LC_{50} : 0.088mg/L (96h)(Fish)	EC_{50} : 0.42mg/L (48h)(Crustaceans)	ErC_{50} : 0.14mg/L (72h)(Algae)
4-ethylphenol	LC_{50} : 10.4mg/L (96h)(Fish)	EC_{50} : 9mg/L (48h)(Crustaceans)	ErC_{50} : > 22mg/L (72h)(Algae)
Eugenol	LC_{50} : 13mg/L (96h)(Fish)	No information available	No information available
o-cresol	LC_{50} : 6.2mg/L (96h)(Fish)	EC_{50} : 15.8mg/L (48h)(Crustaceans)	ErC_{50} : 100mg/L (96h)(Algae)
4-tert-butylphenol	LC_{50} : 6.02mg/L (96h)(Fish)	EC_{50} : 3.9mg/L (48h)(Crustaceans)	No information available

Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Methyl laurate	No information available	NOEC : 0.081mg/L(Crustaceans)	NOEC : 0.040mg/L(Algae)
p-cresol	No information available	NOEC : 0.52mg/L(Crustaceans)	NOEC : 9.5mg/L(Algae)
4-(α,α-dimethylbenzyl)phenol	No information available	No information available	NOEC : 0.33mg/L(Algae)
p-nonylphenol	NOEC : 0.0082mg/L(Fish)	No information available	No information available
Phenol	No information available	NOEC : 1.2mg/L(Crustaceans)	NOEC : 25mg/L(Algae)
p-octylphenol	No information available	NOEC : 0.11mg/L(Crustaceans)	NOEC : 0.021mg/L(Algae)
2,6-xylenol	No information available	NOEC : 0.54mg/L(Crustaceans)	NOEC : 2.0mg/L(Algae)

12.2 Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
Methanol	Low	Low
o-cresol	Low(Half-life = 14 days)	Low(Half-life = 0.67 days)
p-cresol	Low(Half-life = 28 days)	Low(Half-life = 0.63 days)
2,6-xylenol	Low	Low
2-ethylphenol	High	High
4-ethylphenol	High	High
2,3-xylenol	Low	Low
4-tert-butylphenol	High	High
Eugenol	High	High
Biphenyl-2-ol	Low(Half-life = 14 days)	Low(Half-life = 0.92 days)
4-(1,1,3,3-tetramethylbutyl)phenol	High	High
1-naphthol	High	High
p-nonylphenol	High	High
4-(α,α-dimethylbenzyl)phenol	High	High

Methyl laurate	Low	Low
Methyl myristate	Low	Low
Methyl palmitate	Low	Low
Methyl heptadecanoate	Low	Low
Methyl oleate	Low	Low
Methyl stearate	Low	Low
Methyl linoleate	Low	Low
Methyl icosanoate	Low	Low

12.3 Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Methanol	Low	BCF=10
o-cresol	Low	Log Kow=1.95
p-cresol	Low	Log Kow=1.94
2,6-xylenol	Low	BCF=37
2-ethylphenol	Low	Log Kow=2.47
4-ethylphenol	Low	Log Kow=2.58
2,3-xylenol	Low	Log Kow=2.48
4-tert-butylphenol	Low	BCF=240
Eugenol	Low	Log Kow=2.27
Biphenyl-2-ol	Low	Log Kow=3.09
4-(1,1,3,3-tetramethylbutyl)phenol	High	Log Kow=5.2756
1-naphthol	Low	Log Kow=2.85
p-nonylphenol	High	Log Kow=5.9889
4-(α,α-dimethylbenzyl)phe nol	Low	BCF=190
Methyl laurate	High	Log Kow=5.41
Methyl myristate	High	Log Kow=6.41
Methyl palmitate	Low	Log Kow=7.38
Methyl heptadecanoate	Low	Log Kow=7.7396
Methyl oleate	Low	Log Kow=7.45
Methyl stearate	Low	Log Kow=8.35
Methyl linoleate	High	Log Kow=6.82
Methyl icosanoate	Low	Log Kow=9.3

12.4 Mobility in soil

Component	log Koc	Remark
Methanol	0.000	

Phenol	1.92	20 ℃
o-cresol	1.342	20 ℃
p-cresol	1.69	20 ℃
2,6-xylenol	2.865	
2-ethylphenol	2.933	
4-ethylphenol	1.64	
2,3-xylenol	1.759	25 ℃, pH=6.6
Mequinol	1.75	20 ℃
4-tert-butylphenol	3.281	
Eugenol	3.051	
Biphenyl-2-ol	2.54	40℃
4-(1,1,3,3-tetramethylbutyl)phenol	≥4.36 - ≤5.69	22℃
1-naphthol	3.483	
p-nonylphenol	4.58	20 ℃
4-(α,α-dimethylbenzyl)phe nol	3.40	20 ℃
Methyl laurate	3.200	
Methyl myristate	3.732	
Methyl palmitate	4.264	
Methyl heptadecanoate	4.530	
Methyl oleate	4.795	
Methyl stearate	4.795	
Methyl linoleate	4.795	
Methyl icosanoate	5.327	

12.5 Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Methanol	Not PBT/vPvB
Phenol	Not PBT/vPvB
o-cresol	Insufficient information, temporarily unable to evaluate
p-cresol	Not PBT/vPvB
2,6-xylenol	Not PBT/vPvB
2-ethylphenol	Insufficient information, temporarily unable to evaluate
4-ethylphenol	Not PBT/vPvB
2,3-xylenol	Not PBT/vPvB
Mequinol	Not PBT/vPvB
4-tert-butylphenol	Not PBT/vPvB
Eugenol	Not PBT/vPvB

Biphenyl-2-ol	Not PBT/vPvB
4-(1,1,3,3-tetramethylbutyl)phenol	Not PBT/vPvB
1-naphthol	Not PBT/vPvB
p-octylphenol	Insufficient information, temporarily unable to evaluate
p-nonylphenol	Insufficient information, temporarily unable to evaluate
4-(α,α-dimethylbenzyl)phe nol	Not PBT/vPvB
Methyl laurate	Not PBT/vPvB
Methyl myristate	Insufficient information, temporarily unable to evaluate
Methyl palmitate	Not PBT/vPvB
Methyl heptadecanoate	Insufficient information, temporarily unable to evaluate
Methyl oleate	Insufficient information, temporarily unable to evaluate
Methyl elaidate	Insufficient information, temporarily unable to evaluate
Methyl stearate	Insufficient information, temporarily unable to evaluate
Methyl linoleate	Insufficient information, temporarily unable to evaluate
Methyl icosanoate	Insufficient information, temporarily unable to evaluate
Methyl docosanoate	Insufficient information, temporarily unable to evaluate

12.6 Endocrine disrupting properties

Component	Endocrine disrupting properties
Methanol	No information available
Phenol	No information available
o-cresol	No information available
p-cresol	Existing research data indicates that this substance is not a reproductive or developmental toxicant, nor does it possess potential endocrine-disrupting properties; therefore, it is not considered an environmental endocrine disruptor.
2,6-xylenol	No information available
2-ethylphenol	No information available
4-ethylphenol	No information available
2,3-xylenol	No information available
Mequinol	No information available
4-tert-butylphenol	No information available
Eugenol	No information available
Biphenyl-2-ol	No information available
4-(1,1,3,3-tetramethylbutyl)phenol	No information available
1-naphthol	No information available
p-octylphenol	No information available
p-nonylphenol	No information available

4-(α,α-dimethylbenzyl)phenol	No information available
Methyl laurate	No information available
Methyl myristate	No information available
Methyl palmitate	No information available
Methyl heptadecanoate	No information available
Methyl oleate	No information available
Methyl elaidate	No information available
Methyl stearate	No information available
Methyl linoleate	No information available
Methyl icosanoate	No information available
Methyl docosanoate	No information available

12.7 Other adverse effects

	No information available

13 Disposal considerations

13.1 Waste treatment methods

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

Label and Mark

Transporting Label	

IMDG-CODE

14.1 UN number	1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
14.3 Transport hazard class	3
14.4 Packing group	Ⅱ
14.5 Environmental hazards (Yes or no)	No

IATA-DGR

14.1 UN number	1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
14.3 Transport hazard class	3
14.4 Packing group	Ⅱ

14.5 Environmental hazards (Yes or no)	No

UN-ADR

14.1 UN number	1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
14.3 Transport hazard class	3
14.4 Packing group	Ⅱ
14.5 Environmental hazards (Yes or no)	No

Special precautions for user

	Shipment of the goods vehicle exhaust pipe must be equipped with fire retardant devices, prohibit using mechanical equipment and tools of which easy to produce sparks. Transit should be anti-exposure, anti-rain, anti-high temperature. Transportation used tank (tank) cars should be grounded chain, tank can be installed to reduce the partition hole static electricity shocks. Strictly prohibited shipping or transportation with oxidants, acids, food and food additives etc. When bulk transport, Prohibit the use of cement or wooden boats. Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

Maritime transport in bulk according to IMO instruments

◆Transport in bulk according to Annex II of MARPOL and the IBC code

	Not Available

◆Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

	Not Available

◆Transport in bulk in accordance with the IGC Code

	Not Available

15 Regulatory information

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

International chemical inventory

Component	A	B	C	D	E	F	G	H	I	J	K	L	M
Methanol	√	√	√	√	√	√	√	√	√	√	√	√	√
Phenol	√	√	√	√	√	√	√	√	√	√	√	√	√
o-cresol	√	√	√	√	√	√	√	√	√	√	√	√	√
p-cresol	√	√	√	√	√	√	√	√	√	√	√	√	√
2,6-xylenol	√	√	√	√	√	√	√	√	√	×	×	√	√
2-ethylphenol	√	√	√	×	√	√	√	√	√	√	√	√	√
4-ethylphenol	√	√	√	√	√	√	√	√	√	×	√	√	√
2,3-xylenol	√	√	√	×	√	√	√	√	√	√	√	√	√

Mequinol	√	√	√	√	√	√	√	√	√	√	√	√	√
4-tert-butylphenol	√	√	√	√	√	√	√	√	√	√	√	√	√
Eugenol	√	√	√	√	√	√	√	√	√	√	√	√	√
Biphenyl-2-ol	√	√	√	√	√	√	√	√	√	√	√	√	√
4-(1,1,3,3-tetramethylbutyl)phenol	√	√	√	√	√	√	√	√	√	√	√	√	√
1-naphthol	√	√	√	√	√	√	√	√	√	×	√	√	√
p-octylphenol	×	√	√	√	×	√	√	√	√	√	×	√	√
p-nonylphenol	√	√	√	√	√	√	√	√	√	√	√	√	√
4-(α,α-dimethylbenzyl)phe nol	√	√	√	×	×	√	√	√	√	×	×	√	√
Methyl laurate	√	√	√	√	√	√	√	√	√	√	√	√	√
Methyl myristate	√	√	√	√	√	√	√	√	√	√	×	√	√
Methyl palmitate	√	√	√	√	√	√	√	√	√	√	√	√	√
Methyl heptadecanoate	√	√	√	×	√	√	√	√	√	×	×	√	√
Methyl oleate	√	√	√	√	√	√	√	√	√	×	√	√	√
Methyl elaidate	×	√	√	√	√	√	√	×	×	×	×	√	√
Methyl stearate	√	√	√	√	√	√	√	√	√	√	√	√	√
Methyl linoleate	√	√	√	√	√	√	√	√	√	√	√	√	√
Methyl icosanoate	√	√	√	×	√	×	√	√	√	×	×	√	√
Methyl docosanoate	√	√	√	×	√	×	√	√	√	×	×	√	√

【A】 China Inventory of Existing Chemical Substances(IECSC)
【B】 European Inventory of Existing Commercial Chemical Substances(EC inventory)
【C】 United States Toxic Substances Control Act Inventory(TSCA)
【D】 Canadian Domestic Substances List(DSL)
【E】 New Zealand Inventory of Chemicals(NZIoC)
【F】 Philippines Inventory of Chemicals and Chemical Substances(PICCS)
【G】 Korea Existing Chemicals Inventory(KECL)
【H】 Australian. Inventory of Industrial Chemical (AIICS)
【I】 Japan Inventory of Existing & New Chemical Substances(ENCS)
【J】 Thailand Existing Chemicals Inventory(TECI)
【K】 Mexico National Inventory of Chemical Substances (INSQ)
【L】 Russia Inventory of Existing Substances (DRAFT)
【M】 Inventory of Existing Chemical Substances in Taiwan, China (TCSI)

List of Chemical Substances under International Conventions

Component	A	B	C
Methanol	×	×	×
Phenol	×	×	×
o-cresol	×	×	×
p-cresol	×	×	×
2,6-xylenol	×	×	×
2-ethylphenol	×	×	×
4-ethylphenol	×	×	×

2,3-xylenol	×	×	×
Mequinol	×	×	×
4-tert-butylphenol	×	×	×
Eugenol	×	×	×
Biphenyl-2-ol	×	×	×
4-(1,1,3,3-tetramethylbutyl)phenol	×	×	×
1-naphthol	×	×	×
p-octylphenol	×	×	×
p-nonylphenol	×	×	×
4-(α,α-dimethylbenzyl)phenol	×	×	×
Methyl laurate	×	×	×
Methyl myristate	×	×	×
Methyl palmitate	×	×	×
Methyl heptadecanoate	×	×	×
Methyl oleate	×	×	×
Methyl elaidate	×	×	×
Methyl stearate	×	×	×
Methyl linoleate	×	×	×
Methyl icosanoate	×	×	×
Methyl docosanoate	×	×	×

【A】 The Montreal Protocol on Substances that Deplete the Ozone Layer
【B】 Stockholm Convention on Persistent Organic Pollutants (POPs)
【C】 Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

European chemical inventory

Component	A	B	C	D	E	F	G	H	I
Methanol	×	×	√	√	√	√	×	×	×
Phenol	×	×	×	√	√	√	×	×	×
o-cresol	×	×	×	√	√	×	×	×	×
p-cresol	×	×	×	√	√	√	×	×	×
2,6-xylenol	×	×	×	√	√	×	×	×	×
2-ethylphenol	×	×	×	√	×	×	×	×	×
4-ethylphenol	×	×	×	√	√	×	×	×	×
2,3-xylenol	×	×	×	√	√	×	×	×	×
Mequinol	×	×	×	√	√	×	×	×	×
4-tert-butylphenol	√	×	×	√	√	√	×	×	×
Eugenol	×	×	×	√	√	×	×	×	×
Biphenyl-2-ol	×	×	×	√	√	×	×	×	×

4-(1,1,3,3-tetramethylbutyl)phenol	√	×	×	√	√	×	√	×	×
1-naphthol	×	×	×	√	√	×	×	×	×
p-octylphenol	×	×	×	√	×	×	√	×	×
p-nonylphenol	√	×	×	√	√	×	√	×	×
4-(α,α-dimethylbenzyl)phenol	×	×	×	√	√	×	×	×	×
Methyl laurate	×	×	×	√	√	×	×	×	×
Methyl myristate	×	×	×	√	√	×	×	×	×
Methyl palmitate	×	×	×	√	√	×	×	×	×
Methyl heptadecanoate	×	×	×	√	×	×	×	×	×
Methyl oleate	×	×	×	√	×	×	×	×	×
Methyl elaidate	×	×	×	√	×	×	×	×	×
Methyl stearate	×	×	×	√	√	×	×	×	×
Methyl linoleate	×	×	×	√	×	×	×	×	×
Methyl icosanoate	×	×	×	√	×	×	×	×	×
Methyl docosanoate	×	×	×	√	×	×	×	×	×

[A] Candidate list of Substances of Very High Concern for authorization under EU REACH regulation
[B] Substances requiring authorisation under EU REACH regulation
[C] Substances restricted under EU REACH
[D] Pre-registered substances under EU REACH
[E] Registered substances under EU REACH
[F] Substance Evaluation – CoRAP under EU REACH
[G] List of priority substances under EU water policy （Directive 2455/2001/EC）
[H] Substances subject to POPs Regulation
[I] Substances proposed as POPs

Note:
"√" Indicates that the substance included in the regulations.
"×" No data or not included in the regulations.

German water hazard class(WGK)

Component	WGK	Remark
Methanol	WGK 2	
Phenol	WGK 2	
o-cresol	WGK 2	
p-cresol	WGK 2	
2,6-xylenol	WGK 3	
4-ethylphenol	WGK 1	
2,3-xylenol	WGK 3	
Mequinol	WGK 2	
4-tert-butylphenol	WGK 3	
Eugenol	WGK 1	
Biphenyl-2-ol	WGK 2	

4-(1,1,3,3-tetramethylbutyl)phenol	WGK 3	
1-naphthol	WGK 1	
p-nonylphenol	WGK 3	
4-(α,α-dimethylbenzyl)phenol	WGK 2	
Methyl laurate	WGK 2	The assessment refers to the unadditivised substance. If additives are added, higher WGK are possible in accordance with the rules specified in Annex 1 No. 5 of the AwSV.
Methyl myristate	WGK 1	
Methyl palmitate	WGK 1	
Methyl oleate	WGK 1	
Methyl elaidate	WGK 1	
Methyl stearate	WGK 1	
Methyl linoleate	WGK 1	
Methyl icosanoate	WGK 1	
Methyl docosanoate	WGK 1	

【WGK 1】 slightly hazardous to water
【WGK 2】 obviously hazardous to water
【WGK 3】 highly hazardous to water
【nwg】 non-hazardous to water
【awg】 hazardous to water in general

German technical instructions on air quality control(TA LUFT)

Component	TA LUFT	Remark
Methanol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Phenol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
o-cresol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
p-cresol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
2,6-xylenol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
2-ethylphenol	Chapter 5.2.5 Organic Substances.The following values,	

	specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
4-ethylphenol	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m³.	
2,3-xylenol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Mequinol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
4-tert-butylphenol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Eugenol	Chapter 5.2.5 Organic Substances.The following values, specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
1-naphthol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
p-octylphenol	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust	

	gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m³.	
p-nonylphenol	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Methyl laurate	Chapter 5.2.5 Organic Substances.The following values, specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
Methyl myristate	Chapter 5.2.5 Organic Substances.The following values, specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
Methyl palmitate	Chapter 5.2.5 Organic Substances.The following values, specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
Methyl oleate	Chapter 5.2.5 Organic Substances.The following values, specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
Methyl stearate	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded	

	also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m³.	
Methyl linoleate	Chapter 5.2.5 Organic Substances.The following values, specified as overall carbon, are in all not allowed to be exceeded in exhaust gas:Mass flow:0,50 kg/hr or Mass conc.:50 mg/m³ At old units with an annual mass flow till 1,5 Mg/a, specified as total carbon, the emissions in exhaust gas are not allowed to exceed 1,5 kg/h.	
Methyl icosanoate	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m³.	

German technical rules for hazardous substances(TRGS)

Component	TRGS	Remark
Methanol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
Phenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
o-cresol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
p-cresol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
2,6-xylenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
2-ethylphenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS	

	500|TRGS 509|TRGS 510|TRGS 800	
4-ethylphenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
2,3-xylenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
Mequinol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
4-tert-butylphenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
Eugenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Biphenyl-2-ol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
4-(1,1,3,3-tetramethylbutyl)phenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
1-naphthol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
p-octylphenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
p-nonylphenol	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl laurate	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl myristate	TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl palmitate	TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl oleate	TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl stearate	TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl linoleate	TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Methyl icosanoate	TRGS 500|TRGS 509|TRGS	

	510|TRGS 800	

15.2 Chemical safety assessment

	No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16 Other information

Information on revision

Creation Date	2026/01/07
Revision Date	-
Reason for revision	-

Reference

[1] IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home.
[2] IARC, website: http://www.iarc.fr/.
[3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/.
[4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
[5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
[6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/.
[7] U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.
[8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC_{50}	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD_{50}	Lethal Dose 50%	NTP	National Toxicology Program
EC_{50}	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC_X	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P_{OW}	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

Disclaimer

This Safety Data Sheet (SDS) was prepared according to REACH Regulation The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.