Safety Data Sheet

16 Mix PAHs in methanol

Version：V2.0.0.1
Report No.：BWQ8663-2016-MSDS-EP
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*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	16 Mix PAHs in methanol
Cat No.	BWQ8663-2016
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
Carcinogenicity	Category 1B
Specific target organ toxicity -	Category 1

single exposure	

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
H350	May cause cancer
H370	Causes damage to organs

Precautionary statements

- Prevention

P201	Obtain special instructionsbefore use.
P202	Do not handle until allsafety precautions havebeen read and understood.
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+P313	IF exposed or concerned: Get medical advice/attention.
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
Naphthalene	Not PBT/vPvB
Acenaphthylene	Insufficient information, temporarily unable to evaluate
Fluorene	Insufficient information, temporarily unable to evaluate
Acenaphthene	Insufficient information, temporarily unable to evaluate
Phenanthrene	Insufficient information, temporarily unable to evaluate
Anthracene	Insufficient information, temporarily unable to evaluate
Fluoranthene	PBT/vPvB
Pyrene	PBT/vPvB
Chrysene	Insufficient information, temporarily unable to evaluate
Benz[a]anthracene	Insufficient information, temporarily unable to evaluate
Benzo[e]acephenanthrylene	Insufficient information, temporarily unable to evaluate
Benzo[k]fluoranthene	Insufficient information, temporarily unable to evaluate
Benzo[def]chrysene	Insufficient information, temporarily unable to evaluate
Dibenz[a,h]anthracene	Insufficient information, temporarily unable to evaluate
Benzo[ghi]perylene	Insufficient information, temporarily unable to evaluate
Indeno[1,2,3-cd]pyrene	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
Naphthalene	Insufficient information, temporarily unable to evaluate
Acenaphthylene	Insufficient information, temporarily unable to evaluate
Fluorene	Insufficient information, temporarily unable to evaluate
Acenaphthene	Insufficient information, temporarily unable to evaluate

Phenanthrene	Insufficient information, temporarily unable to evaluate
Anthracene	Insufficient information, temporarily unable to evaluate
Fluoranthene	Insufficient information, temporarily unable to evaluate
Pyrene	Insufficient information, temporarily unable to evaluate
Chrysene	Insufficient information, temporarily unable to evaluate
Benz[a]anthracene	Insufficient information, temporarily unable to evaluate
Benzo[e]acephenanthrylene	Insufficient information, temporarily unable to evaluate
Benzo[k]fluoranthene	Insufficient information, temporarily unable to evaluate
Benzo[def]chrysene	Insufficient information, temporarily unable to evaluate
Dibenz[a,h]anthracene	Insufficient information, temporarily unable to evaluate
Benzo[ghi]perylene	Insufficient information, temporarily unable to evaluate
Indeno[1,2,3-cd]pyrene	Insufficient information, temporarily unable to evaluate

◆ Other

	Not applicable.

3 Composition/information on ingredients

3.1 Substance/mixture

	Mixture

Component	Weight % content(or range)	Classification according to Regulation (EC) No. 1272/2008 with amendment 2023/707 [CLP]	Specific Conc. Limits, M-factors
Methanol CAS : 67-56-1 EC : 200-659-6 Index No. : 603-001-00-X	99.792	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%
Naphthalene CAS : 91-20-3 EC : 202-049-5 Index No. : 601-052-00-2	0.013	Acute Toxicity - Oral, Category 4, H302; Carcinogenicity, Category 2, H351; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Acenaphthylene CAS : 208-96-8 EC : 205-917-1 Index No. : -	0.013	Acute Toxicity - Dermal, Category 1, H310; Acute Toxicity - Inhalation, Category 1, H330	-
Fluorene CAS : 86-73-7 EC : 201-695-5 Index No. : -	0.013	Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Acenaphthene CAS : 83-32-9 EC : 201-469-6 Index No. : -	0.013	Specific target organ toxicity - repeated exposure, Category 2, H373; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1,	-

		H410	
Phenanthrene CAS : 85-01-8 EC : 201-581-5 Index No. : -	0.013	Acute Toxicity - Oral, Category 4, H302	-
Anthracene CAS : 120-12-7 EC : 204-371-1 Index No. : -	0.013	Skin Corrosion/Irritation, Category 2, H315; Germ cell mutagenicity, Category 2, H341; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Fluoranthene CAS : 206-44-0 EC : 205-912-4 Index No. : -	0.013	Acute Toxicity - Oral, Category 4, H302; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Pyrene CAS : 129-00-0 EC : 204-927-3 Index No. : -	0.013	Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Chrysene CAS : 218-01-9 EC : 205-923-4 Index No. : 601-048-00-0	0.013	Germ cell mutagenicity, Category 2, H341; Carcinogenicity, Category 1B, H350; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Benz[a]anthracene CAS : 56-55-3 EC : 200-280-6 Index No. : 601-033-00-9	0.013	Carcinogenicity, Category 1B, H350; 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=100
Benzo[e]acephenanthrylene CAS : 205-99-2 EC : 205-911-9 Index No. : 601-034-00-4	0.013	Carcinogenicity, Category 1B, H350; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Benzo[k]fluoranthene CAS : 207-08-9 EC : 205-916-6 Index No. : 601-036-00-5	0.013	Carcinogenicity, Category 1B, H350; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Benzo[def]chrysene CAS : 50-32-8 EC : 200-028-5 Index No. : 601-032-00-3	0.013	Sensitization - skin, Category 1, H317; Germ cell mutagenicity, Category 1B, H340; Carcinogenicity, Category 1B, H350; Reproductive toxicity, Category 1B, H360; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	H350B:C ≥ 0.01%
Dibenz[a,h]anthracene CAS : 53-70-3 EC : 200-181-8 Index No. : 601-041-00-2	0.013	Carcinogenicity, Category 1B, H350; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard,	H350B:C ≥ 0.01%;M=100

		Category 1, H410	
Benzo[ghi]perylene CAS : 191-24-2 EC : 205-883-8 Index No. : -	0.013	Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Indeno[1,2,3-cd]pyrene CAS : 193-39-5 EC : 205-893-2 Index No. : -	0.013	Carcinogenicity, Category 2, H351	-

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
Naphthalene	Permissible exposure standards for	10	52	15	78

	workers in the workplace				
	France	10	50	-	-
	Germany (AGS)	0.4	2	1.6	8
	Italy	10	50	-	-
	Austria	10	50	-	-
	Belgium	10	53	15	80
Chrysene	USA - OSHA	-	0.2	-	-
Benzo[def]chrysene	Germany (AGS)	-	0.0007	-	0.0056
	Austria	-	0.002	-	0.008
	Finland	-	0.01	-	-
	Hungary	-	0.002	-	-
	Latvia	-	0.00015	-	-
	Netherlands	-	0.00055	-	-
Dibenz[a,h]anthracene	Poland	-	0.004	-	-

◆ Biological limit values

Component	Standard	Biological monitoring index	Biological limits value	Sampling time	Remark
Methanol	USA -ACGIH	Methanol(Urine)	15mg/L	End of shift	
Naphthalene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Acenaphthylene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Fluorene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Acenaphthene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine	Nonquantitative	End of shift at end of work week	

		)			
Phenanthrene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Anthracene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Fluoranthene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Pyrene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Chrysene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Benz[a]anthracene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Benzo[e]acephenanthrylene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Benzo[k]fluoranthene	USA -ACGIH	1-Hydroxypyrene, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	

		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Benzo[def]chrysene	USA -ACGIH	1-Hydroxypyren e, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Dibenz[a,h]anthracene	USA -ACGIH	1-Hydroxypyren e, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Benzo[ghi]perylene	USA -ACGIH	1-Hydroxypyren e, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	
Indeno[1,2,3-cd]pyrene	USA -ACGIH	1-Hydroxypyren e, with hydrolysis (1-HP)(Urine)	2.5µg/L	End of shift at end of work week	
		3-Hydroxybenzo (a)pyrene, with hydrolysis(Urine)	Nonquantitative	End of shift at end of work week	

◆ 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
Naphthalene	Inhalation	No data available	No data available	25 mg/m3	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
Acenaphthylene	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

Fluorene	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
Acenaphthene	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
Phenanthrene	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
Anthracene	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
Fluoranthene	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
Pyrene	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
Chrysene	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
Benz[a]anthracene	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
Benzo[e]acephenanthrylene	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
Benzo[k]fluoranthene	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
Benzo[def]chrysene	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
Dibenz[a,h]anthracene	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
Benzo[ghi]perylen	Inhalation	No data available	No data available	No data available	No data available

e	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
Indeno[1,2,3-cd]pyrene	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
Naphthalene	2.4 µg/L	2.4 µg/L	2.9 mg/L	67.2 µg/kg sediment dw	67.2 µg/kg sediment dw	No hazard identified	53.3 µg/kg soil dw	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	In colorless to light yellow transparent liquid
Colour	In colorless to light yellow transparent 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 halides may cause an active reaction.
10.4 Conditions to avoid	Incompatible materials, heat, flame and spark.
10.5 Incompatible materials	Oxidants, alkali metals, alkaline earth metals and aluminum. Halides, oxidants and halogen.
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

16 Mix PAHs 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)
Acenaphthylene	1760mg/kg(Mouse)	No information available	No information available
Naphthalene	490mg/kg(Rat)	> 20000mg/kg(Rabbit)	No information available
Fluoranthene	2000mg/kg(Rat)	3180mg/kg(Rabbit)	No information available
Methanol	5628mg/kg(Rat)	15800mg/kg(Rabbit)	83.867mg/L(Rat)
Phenanthrene	700mg/kg(Mouse)	No information available	No information available
Pyrene	2700mg/kg(Rat)	No information available	No information available

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Methanol	Not Listed	Not Listed
Naphthalene	Category 2B	Category R
Acenaphthylene	Not Listed	Category R
Fluorene	Category 3	Category R
Acenaphthene	Category 3	Category R
Phenanthrene	Category 3	Category R
Anthracene	Category 2B	Category R
Fluoranthene	Category 3	Category R
Pyrene	Category 3	Category R
Chrysene	Category 2B	Category R
Benz[a]anthracene	Category 2B	Category R
Benzo[e]acephenanthrylene	Category 2B	Category R
Benzo[k]fluoranthene	Category 2B	Category R
Benzo[def]chrysene	Category 1(Remark 1)	Category R

Dibenz[a,h]anthracene	Category 2A(Remark 2)	Category R
Benzo[ghi]perylene	Category 3	Category R
Indeno[1,2,3-cd]pyrene	Category 2B	Category R

Remark 1: Overall evaluation upgraded to Group 1 based on mechanistic and other relevant data; Remark 2: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Component	Endocrine disrupting properties
Methanol	No information available
Naphthalene	No information available
Acenaphthylene	No information available
Fluorene	No information available
Acenaphthene	No information available
Phenanthrene	No information available
Anthracene	No information available
Fluoranthene	No information available
Pyrene	No information available
Chrysene	No information available
Benz[a]anthracene	No information available
Benzo[e]acephenanthrylene	No information available
Benzo[k]fluoranthene	No information available
Benzo[def]chrysene	No information available
Dibenz[a,h]anthracene	No information available
Benzo[ghi]perylene	No information available
Indeno[1,2,3-cd]pyrene	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
Fluoranthene	LC_{50} : 0.033mg/L (96h)(Fish)	EC_{50} : 0.02mg/L (48h)(Crustaceans)	ErC_{50} : 54.5mg/L (96h)(Algae)
Anthracene	LC_{50} : >0.030mg/L (96h)(Fish)	EC_{50} : >0.031mg/L (48h)(Crustaceans)	ErC_{50} : >0.031mg/L (72h)(Algae)
Methanol	LC_{50} : 24000mg/L (96h)(Fish)	EC_{50} : 24500mg/L (48h)(Crustaceans)	No information available

Dibenz[a,h]anthracene	LC_{50} : >0.014mg/L (96h)(Fish)	EC_{50} : >0.016mg/L (48h)(Crustaceans)	ErC_{50} : >0.0013mg/L (72h)(Algae)
Pyrene	LC_{50} : > 0.15mg/L (96h)(Fish)	EC_{50} : 0.049mg/L (48h)(Crustaceans)	ErC_{50} : >2.7mg/L (72h)(Algae)
Benzo[ghi]perylene	No information available	EC_{50} : 0.000587mg/L (48h)(Crustaceans)	No information available
Acenaphthene	LC_{50} : >2.1mg/L (96h)(Fish)	EC_{50} : 1.3mg/L (48h)(Crustaceans)	ErC_{50} : 0.52mg/L (96h)(Algae)
Fluorene	LC_{50} : >1.2mg/L (96h)(Fish)	EC_{50} : 0.49mg/L (48h)(Crustaceans)	ErC_{50} : 0.76mg/L (72h)(Algae)
Naphthalene	LC_{50} : 0.9mg/L (96h)(Fish)	EC_{50} : 3.6mg/L (48h)(Crustaceans)	No information available
Benzo[def]chrysene	No information available	EC_{50} : 0.0013mg/L (48h)(Crustaceans)	No information available
Benz[a]anthracene	No information available	EC_{50} : 0.00122mg/L (48h)(Crustaceans)	No information available
Indeno[1,2,3-cd]pyrene	LC_{50} : >0.0037mg/L (96h)(Fish)	EC_{50} : 0.0013mg/L (48h)(Crustaceans)	ErC_{50} : 0.0002mg/L (72h)(Algae)
Phenanthrene	LC_{50} : 1.4mg/L (96h)(Fish)	EC_{50} : 1.1mg/L (48h)(Crustaceans)	ErC_{50} : 0.64mg/L (72h)(Algae)

Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Fluorene	No information available	No information available	NOEC : 0.074mg/L(Algae)
Acenaphthene	No information available	NOEC : 0.084mg/L(Crustaceans)	NOEC : 0.09mg/L(Algae)
Anthracene	No information available	NOEC : 0.016mg/L(Crustaceans)	NOEC : 0.031mg/L(Algae)
Indeno[1,2,3-cd]pyrene	No information available	NOEC : 0.0012mg/L(Crustaceans)	NOEC : 0.000053mg/L(Algae)
Phenanthrene	NOEC : 0.19mg/L(Fish)	NOEC : 0.031mg/L(Crustaceans)	NOEC : 0.092mg/L(Algae)
Dibenz[a,h]anthracene	No information available	NOEC : >0.016mg/L(Crustaceans)	NOEC : 0.00033mg/L(Algae)
Pyrene	No information available	NOEC : 0.020mg/L(Crustaceans)	NOEC : 1.4mg/L(Algae)

12.2 Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
Methanol	Low	Low
Naphthalene	High(Half-life = 258 days)	Low(Half-life = 1.23 days)
Fluorene	Media(Half-life = 120 days)	Low(Half-life = 2.84 days)
Acenaphthene	High(Half-life = 204 days)	Low(Half-life = 0.37 days)
Phenanthrene	High(Half-life = 400 days)	Low(Half-life = 0.84 days)
Anthracene	High(Half-life = 920 days)	Low(Half-life = 0.21 days)
Fluoranthene	High(Half-life = 880 days)	Low(Half-life = 0.84 days)
Pyrene	High(Half-life = 3800 days)	Low(Half-life = 0.33 days)

Benz[a]anthracene	High(Half-life = 1360 days)	Low(Half-life = 0.33 days)
Benzo[def]chrysene	High(Half-life = 1060 days)	Low(Half-life = 0.18 days)
Dibenz[a,h]anthracene	High(Half-life = 1880 days)	Low(Half-life = 0.18 days)

12.3 Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Methanol	Low	BCF=10
Naphthalene	High	BCF=18000
Fluorene	Medium	BCF=830
Acenaphthene	Low	BCF=387
Phenanthrene	Medium	Log Kow=4.46
Anthracene	High	BCF=10500
Fluoranthene	High	Log Kow=5.16
Pyrene	High	Log Kow=4.88
Benz[a]anthracene	High	Log Kow=5.61
Benzo[def]chrysene	High	Log Kow=6.04
Dibenz[a,h]anthracene	High	Log Kow=6.5

12.4 Mobility in soil

Component	log Koc	Remark
Methanol	0.000	
Naphthalene	2.58	20 ℃
Fluorene	4.053	
Acenaphthene	3.787	
Phenanthrene	4.319	
Anthracene	4.46	25 ℃
Fluoranthene	4.850	
Pyrene	4.841	
Benz[a]anthracene	5.364	
Benzo[def]chrysene	5.896	
Dibenz[a,h]anthracene	6.419	

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
Naphthalene	Not PBT/vPvB
Acenaphthylene	Insufficient information, temporarily unable to evaluate
Fluorene	Insufficient information, temporarily unable to evaluate

Acenaphthene	Insufficient information, temporarily unable to evaluate
Phenanthrene	Insufficient information, temporarily unable to evaluate
Anthracene	Insufficient information, temporarily unable to evaluate
Fluoranthene	PBT/vPvB
Pyrene	PBT/vPvB
Chrysene	Insufficient information, temporarily unable to evaluate
Benz[a]anthracene	Insufficient information, temporarily unable to evaluate
Benzo[e]acephenanthrylene	Insufficient information, temporarily unable to evaluate
Benzo[k]fluoranthene	Insufficient information, temporarily unable to evaluate
Benzo[def]chrysene	Insufficient information, temporarily unable to evaluate
Dibenz[a,h]anthracene	Insufficient information, temporarily unable to evaluate
Benzo[ghi]perylene	Insufficient information, temporarily unable to evaluate
Indeno[1,2,3-cd]pyrene	Insufficient information, temporarily unable to evaluate

12.6 Endocrine disrupting properties

Component	Endocrine disrupting properties
Methanol	No information available
Naphthalene	No information available
Acenaphthylene	No information available
Fluorene	No information available
Acenaphthene	No information available
Phenanthrene	No information available
Anthracene	No information available
Fluoranthene	No information available
Pyrene	No information available
Chrysene	No information available
Benz[a]anthracene	No information available
Benzo[e]acephenanthrylene	No information available
Benzo[k]fluoranthene	No information available
Benzo[def]chrysene	No information available
Dibenz[a,h]anthracene	No information available
Benzo[ghi]perylene	No information available
Indeno[1,2,3-cd]pyrene	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

UN number	1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
Transport hazard class	3
Transport subsidiary hazard class	None
Packing group	Ⅱ
Marine pollutant (Yes or no)	No

IATA-DGR

UN number	1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
Transport hazard class	3
Transport subsidiary hazard class	None
Packing group	Ⅱ

UN-ADR

UN number	1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
Transport hazard class	3
Transport subsidiary hazard class	None
Packing group	Ⅱ

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	√	√	√	√	√	√	√	√	√	√	√	√	√
Naphthalene	√	√	√	√	√	√	√	√	√	√	√	√	√
Acenaphthylene	√	√	√	×	√	√	×	×	√	×	√	√	√
Fluorene	√	√	√	√	√	√	√	√	√	×	×	√	√
Acenaphthene	√	√	√	√	√	√	√	√	√	√	×	√	√
Phenanthrene	√	√	√	√	√	√	√	√	√	×	√	√	√
Anthracene	√	√	√	√	√	√	√	√	√	×	√	√	√
Fluoranthene	√	√	√	×	√	×	×	√	√	×	×	√	√
Pyrene	√	√	√	√	√	√	√	√	√	√	√	√	√
Chrysene	×	√	√	√	√	×	√	√	×	×	×	√	√
Benz[a]anthracene	√	√	√	×	√	×	×	×	×	×	×	√	√
Benzo[e]acephenanthrylene	×	√	×	×	√	×	×	×	×	×	×	√	√
Benzo[k]fluoranthene	×	√	×	×	√	×	×	×	×	×	√	√	√
Benzo[def]chrysene	√	√	√	√	√	√	√	×	×	√	√	√	√
Dibenz[a,h]anthracene	√	√	√	×	√	×	×	×	×	×	√	√	√
Benzo[ghi]perylene	×	√	×	×	√	×	×	×	×	×	√	√	√
Indeno[1,2,3-cd]pyrene	×	√	√	×	√	×	×	×	×	×	√	√	√

【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	×	×	×
Naphthalene	×	×	×
Acenaphthylene	×	×	×
Fluorene	×	×	×
Acenaphthene	×	×	×
Phenanthrene	×	×	×
Anthracene	×	×	×
Fluoranthene	×	×	×
Pyrene	×	×	×
Chrysene	×	×	×
Benz[a]anthracene	×	×	×
Benzo[e]acephenanthrylene	×	×	×
Benzo[k]fluoranthene	×	×	×
Benzo[def]chrysene	×	×	×
Dibenz[a,h]anthracene	×	×	×
Benzo[ghi]perylene	×	×	×
Indeno[1,2,3-cd]pyrene	×	×	×

【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	×	×	√	√	√	√	×	×	×
Naphthalene	×	×	√	√	√	√	√	×	×
Acenaphthylene	×	×	√	√	×	×	×	×	×
Fluorene	×	×	√	√	√	×	×	×	×
Acenaphthene	×	×	√	√	√	×	×	×	×
Phenanthrene	√	×	√	√	√	×	×	×	×
Anthracene	√	×	√	√	√	×	√	×	×
Fluoranthene	√	×	√	√	×	×	√	×	×
Pyrene	√	×	√	√	√	×	×	×	×
Chrysene	√	×	√	√	×	×	×	×	×

Benz[a]anthracene	√	×	√	√	×	×	×	×	×
Benzo[e]acephenanthrylene	×	×	√	√	×	×	√	×	√
Benzo[k]fluoranthene	√	×	√	√	×	×	√	×	√
Benzo[def]chrysene	√	×	√	√	×	×	√	×	√
Dibenz[a,h]anthracene	×	×	√	√	×	×	×	×	×
Benzo[ghi]perylene	√	×	√	√	×	×	√	×	×
Indeno[1,2,3-cd]pyrene	×	×	√	√	×	×	√	×	√

[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	
Naphthalene	WGK 3	
Anthracene	WGK 2	
Fluoranthene	WGK 2	
Benzo[e]acephenanthrylene	WGK 3	
Benzo[k]fluoranthene	WGK 3	
Benzo[def]chrysene	WGK 3	

【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	
Naphthalene	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	

Acenaphthylene	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.	
Fluorene	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.	
Acenaphthene	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.	
Phenanthrene	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.	
Anthracene	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.	
Fluoranthene	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.	
Pyrene	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.	
Chrysene	Chapter 5.2.7.1.1 Carcinogenic SubstancesThe substance must be assigned to the class (I, II or III) whose substances have the nearest potency. We can not accomplish this evaluation due to insufficiency of data.Carcinogenic substances not mentioned by name and for which no information on potency is available should be assigned to Class I as a precautionary measure.	

Benz[a]anthracene	Chapter 5.2.7.1.1 Carcinogenic SubstancesThe substance must be assigned to the class (I, II or III) whose substances have the nearest potency. We can not accomplish this evaluation due to insufficiency of data.Carcinogenic substances not mentioned by name and for which no information on potency is available should be assigned to Class I as a precautionary measure.	
Benzo[e]acephenanthrylene	Chapter 5.2.7.1.1 Carcinogenic SubstancesThe substance must be assigned to the class (I, II or III) whose substances have the nearest potency. We can not accomplish this evaluation due to insufficiency of data.Carcinogenic substances not mentioned by name and for which no information on potency is available should be assigned to Class I as a precautionary measure.	
Benzo[k]fluoranthene	Chapter 5.2.7.1.1 Carcinogenic SubstancesThe substance must be assigned to the class (I, II or III) whose substances have the nearest potency. We can not accomplish this evaluation due to insufficiency of data.Carcinogenic substances not mentioned by name and for which no information on potency is available should be assigned to Class I as a precautionary measure.	
Benzo[def]chrysene	Kapitel 5.2.7.1.1 Krebserzeugende Stoffe. Klasse I. Als Mindestanforderung dürfen die folgende Werte im Abgas insgesamt nicht überschritten werden:Mass flow:0,15 g/hr or Mass conc.:0,05 mg/m³	
Dibenz[a,h]anthracene	Chapter 5.2.7.1.1 Carcinogenic SubstancesThe substance must be assigned to the class (I, II or III) whose substances have the nearest potency. We can not accomplish this evaluation due to insufficiency of data.Carcinogenic substances not mentioned by name and for which no information on potency is available should be assigned to Class I as a precautionary measure.	
Benzo[ghi]perylene	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.	
Indeno[1,2,3-cd]pyrene	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	

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	
Naphthalene	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	
Acenaphthylene	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	
Fluorene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Acenaphthene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
Phenanthrene	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	
Anthracene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
Fluoranthene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Pyrene	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	
Chrysene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 410|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 551|TRGS 906|TRGS 560	

Benz[a]anthracene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 410|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 560|TRGS 551|TRGS 906	
Benzo[e]acephenanthrylene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 410|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 560|TRGS 551|TRGS 906	
Benzo[k]fluoranthene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 410|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 560|TRGS 551|TRGS 906	
Benzo[def]chrysene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 410|TRGS 500|TRGS 509|TRGS 510|TRGS 560|TRGS 551|TRGS 906	
Dibenz[a,h]anthracene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 410|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 560|TRGS 551|TRGS 906	
Benzo[ghi]perylene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Indeno[1,2,3-cd]pyrene	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 551|TRGS 906	

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	2025/12/11
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-	International Maritime Dangerous Goods CODE

		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.