	SAFETY DATA SHEET	Page : 1 / 13
		Revision nr : 1.0
		Issue date : 04/10/2017
	Coolant	Supersedes :
		YMD650490094/YMD650490084

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

1.1. Product identifier

Product form : Mixture
Trade name/designation : Coolant

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

1.2.1. Relevant identified uses

Intended for general public
Use of the substance/mixture : Antifreeze
Coolant

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

JX Nippon Oil & Energy Europe Limited
2F Bury House, 31 Bury Street, London, EC3A 5AR, UK
T +44 20 7186 0400
info@jxeurope.com

1.4. Emergency telephone number

Emergency number : +44 20-7186-400
Only available during office hours.

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, 24/7, healthcare professionals only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302

STOT RE 2 H373

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :




GHS07

GHS08

Signal word : Warning

Hazard statements (CLP) : H302 - Harmful if swallowed.

	SAFETY DATA SHEET	Page : 2 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure.

Precautionary statements (CLP) :

- P102 - Keep out of reach of children.
- P260 - Do not breathe dust, fume, gas, mist, spray, vapours.
- P264 - Wash hands thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician.
- P330 - Rinse mouth.

2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index) 603-027-00-1 (REACH-no) 01-2119456816-28-XXXX	80 - 98	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Sodium molybdate dihydrate	(CAS-No.) 10102-40-6 (EC-No.) 231-551-7 (EC Index) - (REACH-no) 01-2119489495-21-XXXX	0,1 - 1	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance. Treat symptomatically. Concerning personal protective equipment to use, see section 8.

Inhalation : Remove person to fresh air and keep comfortable for breathing. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of doubt or persistent symptoms, consult always a physician.


Ingestion : Rinse mouth thoroughly with water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. . Get medical advice/attention.

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

Inhalation : The following symptoms may occur: Convulsions, Dizziness, Nausea. Inhalation of vapours in high concentration may cause irritation of respiratory system. Coughing, sneezes.

Skin contact : The following symptoms may occur: Oedema, Dry skin, Causes skin irritation.

Eyes contact : The following symptoms may occur: May cause slight temporary irritation.

	<h1>SAFETY DATA SHEET</h1>	Page : 3 / 13
		Revision nr : 1.0
	<h2>Coolant</h2>	Issue date : 04/10/2017
		Supersedes :

Ingestion : Harmful if swallowed. The following symptoms may occur: Vomiting, Abdominal pain, nausea, Cramps, Irritation, This product may cause adverse reproductive effects. Blindness. Liver and kidney injuries may occur. Toxic: danger of serious damage to health by prolonged exposure if swallowed.

Chronic symptoms : May cause damage to organs (kidneys) through prolonged or repeated exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Put victim at rest, cover with a blanket and keep warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO₂), powder, alcohol-resistant foam, water spray.
 Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Not flammable. Heating causes rise in pressure with risk of bursting.
 Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Smoke.

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment. Move undamaged containers from immediate hazard area if it can be done safely.
 Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
 Other information : Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Wear recommended personal protective equipment. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Concerning personal protective equipment to use, see section 8.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions


Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters. In case of large spillages: Advise local authorities if considered necessary.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Dam up the liquid spill.
 Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Recover large spills by pumping (use an explosion proof or hand pump). This material and its container must be disposed of in a safe way, and as per local legislation. Never return spills in original containers for re-use. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

	SAFETY DATA SHEET	Page : 4 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Do not taste or swallow. Concerning personal protective equipment to use, see section 8.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Store in original container. Keep container tightly closed. Bund storage facilities to prevent soil and water pollution in the event of spillage. Do not store near or with any of the incompatible materials listed in section 10.

Incompatible materials : Strong acids, strong oxidants. Nitrates. Chlorates. Peroxides.

Packaging materials : Keep only in the original container.


7.3. Specific end use(s)

Antifreeze. Coolant.


SECTION 8: Exposure controls/personal protection

8.1. Control parameters


Ethylene glycol (107-21-1)		
EU	IOELV TWA (mg/m ³)	52 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m ³)	104 mg/m ³
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Possibility of significant uptake through the skin
Austria	MAK (mg/m ³)	26 mg/m ³
Austria	MAK (ppm)	10 ppm
Austria	MAK Short time value (mg/m ³)	52 mg/m ³
Austria	MAK Short time value (ppm)	20 ppm
Bulgaria	OEL TWA (mg/m ³)	52 mg/m ³
Bulgaria	OEL TWA (ppm)	20 ppm
Bulgaria	OEL STEL (mg/m ³)	104 mg/m ³
Bulgaria	OEL STEL (ppm)	40 ppm
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	52 mg/m ³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	20 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	104 mg/m ³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	40 ppm
Cyprus	OEL TWA (mg/m ³)	52 mg/m ³
Cyprus	OEL TWA (ppm)	20 ppm
Cyprus	OEL STEL (mg/m ³)	104 mg/m ³
Cyprus	OEL STEL (ppm)	40 ppm
Czech Republic	Expoziční limity (PEL) (mg/m ³)	50 mg/m ³

	SAFETY DATA SHEET	Page : 5 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

Ethylene glycol (107-21-1)		
Denmark	Grænseværdie (langvarig) (mg/m ³)	26 mg/m ³ 10 mg/m ³ (atomized)
Denmark	Grænseværdie (langvarig) (ppm)	10 ppm
Estonia	OEL TWA (mg/m ³)	52 mg/m ³ (total concentration of aerosol and vapor)
Estonia	OEL TWA (ppm)	20 ppm (total concentration of aerosol and vapor)
Estonia	OEL STEL (mg/m ³)	104 mg/m ³ (total concentration of aerosol and vapor)
Estonia	OEL STEL (ppm)	40 ppm (total concentration of aerosol and vapor)
Finland	HTP-arvo (8h) (mg/m ³)	50 mg/m ³
Finland	HTP-arvo (8h) (ppm)	20 ppm
Finland	HTP-arvo (15 min)	100 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	40 ppm
France	VME (mg/m ³)	52 mg/m ³ (indicative limit-vapor)
France	VME (ppm)	20 ppm (indicative limit-vapor)
France	VLE (mg/m ³)	104 mg/m ³ (indicative limit-vapor)
France	VLE (ppm)	40 ppm (indicative limit-vapor)
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	26 mg/m ³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 900 Occupational exposure limit value (ppm)	10 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Gibraltar	8h mg/m ³	52 mg/m ³
Gibraltar	8h ppm	20 ppm
Gibraltar	Short-term mg/m ³	104 mg/m ³
Gibraltar	Short-term ppm	40 ppm
Greece	OEL TWA (mg/m ³)	125 mg/m ³ (vapor)
Greece	OEL TWA (ppm)	50 ppm (vapor)
Greece	OEL STEL (mg/m ³)	125 mg/m ³ (vapor)
Greece	OEL STEL (ppm)	50 ppm (vapor)
Hungary	AK-érték	52 mg/m ³
Hungary	CK-érték	104 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³ (particulate) 52 mg/m ³ (vapour)
Ireland	OEL (8 hours ref) (ppm)	20 ppm (vapour)
Ireland	OEL (15 min ref) (mg/m ³)	104 mg/m ³ (vapour)
Ireland	OEL (15 min ref) (ppm)	40 ppm (particulate)
Italy	OEL TWA (mg/m ³)	52 mg/m ³
Italy	OEL TWA (ppm)	20 ppm
Italy	OEL STEL (mg/m ³)	104 mg/m ³
Italy	OEL STEL (ppm)	40 ppm
Latvia	OEL TWA (mg/m ³)	52 mg/m ³
Latvia	OEL TWA (ppm)	20 ppm

	SAFETY DATA SHEET	Page : 6 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

Ethylene glycol (107-21-1)		
Lithuania	IPRV (mg/m ³)	25 mg/m ³ (aerosol and vapor)
Lithuania	IPRV (ppm)	10 ppm (aerosol and vapor)
Lithuania	TPRV (mg/m ³)	50 mg/m ³ (aerosol and vapor)
Lithuania	TPRV (ppm)	20 ppm (aerosol and vapor)
Luxembourg	OEL TWA (mg/m ³)	52 mg/m ³
Luxembourg	OEL TWA (ppm)	20 ppm
Luxembourg	OEL STEL (mg/m ³)	104 mg/m ³
Luxembourg	OEL STEL (ppm)	40 ppm
Malta	OEL TWA (mg/m ³)	52 mg/m ³
Malta	OEL TWA (ppm)	20 ppm
Malta	OEL STEL (mg/m ³)	104 mg/m ³
Malta	OEL STEL (ppm)	40 ppm
Netherlands	Grenswaarde TGG 8H (mg/m ³)	52 mg/m ³ (fume) 10 mg/m ³ (droplets)
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	104 mg/m ³
Poland	NDS (mg/m ³)	15 mg/m ³
Poland	NDSch (mg/m ³)	50 mg/m ³
Portugal	OEL TWA (mg/m ³)	52 mg/m ³ (indicative limit value)
Portugal	OEL TWA (ppm)	20 ppm (indicative limit value)
Portugal	OEL STEL (mg/m ³)	104 mg/m ³ (indicative limit value)
Portugal	OEL STEL (ppm)	40 ppm (indicative limit value)
Portugal	OEL - Ceilings (mg/m ³)	100 mg/m ³ (aerosol only)
Romania	OEL TWA (mg/m ³)	52 mg/m ³
Romania	OEL TWA (ppm)	20 ppm
Romania	OEL STEL (mg/m ³)	104 mg/m ³
Romania	OEL STEL (ppm)	40 ppm
Slovakia	NPHV (priemerná) (mg/m ³)	52 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Slovakia	NPHV (Hraničná) (mg/m ³)	104 mg/m ³
Slovenia	OEL TWA (mg/m ³)	52 mg/m ³
Slovenia	OEL TWA (ppm)	20 ppm
Slovenia	OEL STEL (mg/m ³)	104 mg/m ³
Slovenia	OEL STEL (ppm)	40 ppm
Spain	VLA-ED (mg/m ³)	52 mg/m ³ (indicative limit value)
Spain	VLA-ED (ppm)	20 ppm (indicative limit value)
Spain	VLA-EC (mg/m ³)	104 mg/m ³
Spain	VLA-EC (ppm)	40 ppm
Sweden	nivågränsvärde (NVG) (mg/m ³)	25 mg/m ³ (the limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
Sweden	nivågränsvärde (NVG) (ppm)	10 ppm (the limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor)
Sweden	kortidsvärde (KTV) (mg/m ³)	104 mg/m ³ (aerosol and vapor)
Sweden	kortidsvärde (KTV) (ppm)	40 ppm (aerosol and vapor)

	SAFETY DATA SHEET	Page : 7 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :


Ethylene glycol (107-21-1)		
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (particulates) 52 mg/m ³ (vapour)
United Kingdom	WEL TWA (ppm)	20 ppm (vapour)
United Kingdom	WEL STEL (mg/m ³)	104 mg/m ³ (vapour) 30 mg/m ³ (calculated-particulate)
United Kingdom	WEL STEL (ppm)	40 ppm (vapour)
Norway	Grenseverdier (AN) (mg/m ³)	20 mg/m ³ (equal to the standard for nuisance dust-dust) 52 mg/m ³ (total sum of limit values for both vapor and dust)
Norway	Grenseverdier (AN) (ppm)	52 ppm (total sum of limit values for both vapor and dust-total dust and vapor)
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	104 mg/m ³ (value from the regulation-dust)
Norway	Grenseverdier (Korttidsverdi) (ppm)	40 ppm (value from the regulation)
Switzerland	MAK (mg/m ³)	26 mg/m ³
Switzerland	MAK (ppm)	10 ppm
Switzerland	KZGW (mg/m ³)	52 mg/m ³
Switzerland	KZGW (ppm)	20 ppm
Australia	TWA (mg/m ³)	10 mg/m ³ (particulate) 52 mg/m ³ (vapour)
Australia	TWA (ppm)	20 ppm (vapour)
Australia	STEL (mg/m ³)	104 mg/m ³ (vapour)
Australia	STEL (ppm)	40 ppm (vapour)
Canada (Quebec)	PLAFOND (mg/m ³)	127 mg/m ³ (mist and vapour)
Canada (Quebec)	PLAFOND (ppm)	50 ppm (mist and vapour)
USA - ACGIH	ACGIH TWA (ppm)	25 ppm (vapor fraction)
USA - ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
USA - ACGIH	ACGIH STEL (ppm)	50 ppm (vapor fraction)

Additional information : Personal air monitoring :. Room air monitoring. Recommended monitoring procedures

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion and exposure. Minimum room ventilation rate for handling/application (air changes per hour): 10. Assure complete dissipation of gas below its lower explosive limit. Safe handling: see section 7 .

Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

	SAFETY DATA SHEET	Page : 8 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

Hand protection	: Wear chemically resistant gloves (tested to EN374) . Suitable material: neoprene gloves, Viton ® / butyl-rubber, Nitrile rubber gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Protective index 6. Thickness of the glove material: >0.38 mm. Breakthrough time : 480 min.
Eye protection	: Use suitable eye protection. (EN166): full face mask (DIN EN 136)
Body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (EN 140). Full face mask (EN 136). Filter type: A (EN 141). The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)
Thermal hazard protection	: Not required for normal conditions of use. Use dedicated equipment.
Environmental exposure controls	: Avoid release to the environment. Comply with applicable Community environmental protection legislation.
Other information	: Do not eat, drink or smoke when using this product.


SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: liquid.
Colour	: dark blue.
Odour	: mild.
Odour threshold	: No data available
pH	: 8,3 20°C
Relative evaporation rate (butylacetate=1)	: No data available
Melting / freezing point	: -18 °C
Freezing point	: No data available
Initial boiling point and boiling range	: 173 - 185 °C
Flash point	: 122 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable,liquid
Vapour pressure	: No data available
Vapour density	: No data available
Relative density	: No data available
Density	: 1,119 kg/l 20°C
Solubility	: Miscible.
Partition coefficient n-octanol/water	: No data available
Kinematic viscosity	: No data available
Dynamic viscosity	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

9.2. Other information

No data available

	SAFETY DATA SHEET	Page : 9 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions. Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with : Incompatible materials. Safe handling: see section 7.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents. Nitrates. Peroxides. Chlorates. Safe handling: see section 7.

10.6. Hazardous decomposition products

at high temperatures. Ketones. Aldehydes. Reference to other sections: Safe handling: see section 7.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Coolant	
LD50/oral/rat	1725 mg/kg
Sodium molybdate dihydrate (10102-40-6)	
LD50/oral/rat	4233 mg/kg
Ethylene glycol (107-21-1)	
LD50/oral/rat	4700 mg/kg
LD50/dermal/rat	> 3500 mg/kg (mouse)
LC50/inhalation/4h/rat	> 2,5 mg/l/6h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met.)
pH: 8,3 20°C

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met.)
pH: 8,3 20°C

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met.)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met.)

Carcinogenicity - Description : Not classified (Based on available data, the classification criteria are not met.)

Ethylene glycol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1500 mg/kg bodyweight

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met.)


STOT-single exposure : Not classified (Based on available data, the classification criteria are not met.)

STOT-repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure.

Ethylene glycol (107-21-1)	
NOAEL (oral, rat, 90 days)	220 200 mg/kg bodyweight/day OECD Guideline 407
NOAEL (dermal, rat/rabbit, 90 days)	2220 mg/kg bodyweight/day OECD 410

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met.)

Other adverse effects : May cause damage to organs through prolonged or repeated exposure.

	SAFETY DATA SHEET	Page : 10 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

Other information : Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4.

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

Sodium molybdate dihydrate (10102-40-6)	
LC50 fish 1	> 10000 mg/l (Oncorhynchus mykiss)
Ethylene glycol (107-21-1)	
LC50 fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC (chronic)	15380 mg/l @ 7d Pimephales promelas

12.2. Persistence and degradability

Coolant	
Persistence and degradability	No data available.
Ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	90-100 % Experimental data

12.3. Bioaccumulative potential

Coolant	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	No data available.
Ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water	-1,93
Bioaccumulative potential	Does not bioaccumulate.

12.4. Mobility in soil

Coolant	
Mobility in soil	No data available

12.5. Results of PBT and vPvB assessment

Coolant	
Results of PBT assessment	No data available

12.6. Other adverse effects


Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations. Safe handling: see section 7.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
16 01 14*

	SAFETY DATA SHEET	Page : 11 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Special precautions for user : No data available

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Code: IBC : Not established.

SECTION 15: Regulatory information

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


15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Coolant -

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

	<h1>SAFETY DATA SHEET</h1>	Page : 12 / 13
		Revision nr : 1.0
	<h2>Coolant</h2>	Issue date : 04/10/2017
		Supersedes :

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment


A chemical safety assessment has been carried out for the substance or the mixture by the supplier

For the following substances of this mixture a chemical safety assessment has been carried out
Sodium molybdate dihydrate
Ethylene glycol

SECTION 16: Other information

Abbreviations and acronyms:

	ABM = Algemene beoordelingsmethodiek
	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
	ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
	CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
	IATA = International Air Transport Association
	IMDG = International Maritime Dangerous Goods Code
	LEL = Lower Explosive Limit/Lower Explosion Limit
	UEL = Upper Explosion Limit/Upper Explosive Limit
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	BTT = Breakthrough time (maximum wearing time)
	DMEL = Derived Minimal Effect level
	DNEL = Derived No Effect Level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	EWC = European waste catalogue
	LC50 = Median lethal concentration
	LD50 = Median lethal dose

	SAFETY DATA SHEET	Page : 13 / 13
		Revision nr : 1.0
	Coolant	Issue date : 04/10/2017
		Supersedes :

	LL50 = Median lethal level
	NA = Not applicable
	NOEC = No observed effect concentration
	NOEL: no-observed-effect level
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	TWA = time weighted average
	VOC = Volatile organic compounds
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet : ECHA (European Chemicals Agency). Name (SDS) yamalube coolant 936159 version 01. Manufacturer/Supplier Yamalube. Revision date 11- May-2017.

Training advice : Training staff on good practice.

Other information : Assessment/classification. Article 9. Calculation method.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity Category 4
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

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