



# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended

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

### 1.1. Product identifier

Trade name or designation of the mixture RACING 4T 5W-40

Registration number -

Synonyms None.

Product code RP\_2000J

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

Identified uses Motorcycle engine oil.

Uses advised against All other uses.

### 1.3. Details of the supplier of the safety data sheet

Company name REPSOL LUBRICANTES Y ESPECIALIDADES, S.A.

Address Méndez Álvaro, 44 28045 - MADRID, Spain

Telephone +34 917538000 /+34 917538100

Fax +34 902303145

Email address FDSRLESA@repsol.com

### 1.4. Emergency telephone number

Carechem 24 0800 000 7801 (Toll-free)

Carechem 24 +49 89 220 61012 / +44 1235 239670

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word None.

Hazard statements The mixture does not meet the criteria for classification.

#### Precautionary statements

Prevention Not assigned.

Response Not assigned.

Storage Not assigned.

Disposal Not assigned.

Supplemental information on the label EUH210 - Safety data sheet available on request.

### 2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Please refer to Sections 5, 6 and 7 of this SDS for information on other hazards, different from classification hazards but which may contribute to the overall hazards of the product.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Distillates (petroleum), hydrotreated heavy paraffinic	40 - 45	64742-54-7 265-157-1	01-2119484627-25-XXXX	649-467-00-8	
Classification: Asp. Tox. 1;H304					L

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Distillates (petroleum), hydrotreated light paraffinic	2 - 6	64742-55-8 265-158-7	01-2119487077-29-XXXX	649-468-00-3	
<b>Classification:</b> Asp. Tox. 1;H304					L
Mineral oil*	1,4 - 3,6	- -	-	-	
<b>Classification:</b> Asp. Tox. 1;H304					
Bis(nonylphenyl)amine	0,5 - 1,5	36878-20-3 253-249-4	01-2119488911-28-XXXX	-	
<b>Classification:</b> Aquatic Chronic 4;H413					

<b>Composition comments</b>	<p>IP346 method DMSO extract for base oil substances: &lt;3.0%.</p> <p>*The mineral oil contained may be described by one or more of the following:  CAS 64742-54-7, Registration No. 01-2119484627-25, Distillates (petroleum), hydrotreated heavy paraffinic; - CAS 64742-65-0, Registration No. 01-2119471299-27, Distillates (petroleum), solvent dewaxed heavy paraffinic; - CAS 64742-55-8, Registration No. 01-2119487077-29, Distillates (petroleum), hydrotreated light naphthenic; - CAS 64742-56-9, Registration No. 01-2119480132-48, Distillates (petroleum), solvent-dewaxed light paraffinic.</p> <p>All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.</p> <p>The full text for all H-statements is displayed in section 16.</p>
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## SECTION 4: First aid measures

<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>4.1. Description of first aid measures</b>	
<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush with plenty of water for up to 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Exposure may cause temporary irritation, redness, or discomfort.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Treat symptomatically.

## SECTION 5: Firefighting measures

<b>General fire hazards</b>	Will burn if involved in a fire.
<b>5.1. Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	During fire, gases hazardous to health may be formed such as: Carbon monoxide, carbon dioxide, oxides of sulphur, zinc and phosphorus.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	Avoid breathing mist/vapours. Follow standard emergency procedure. Wear appropriate personal protective equipment (See Section 8).

**For emergency responders** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Avoid breathing mist/vapours. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Ensure safe systems of work or equivalent arrangements are in place to manage risks. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Observe good industrial hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities** Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

Storage class (TRGS 510): 10 (Combustible liquids that cannot be assigned to any of the above storage classes)

**7.3. Specific end use(s)** Motorcycle engine oil.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Product	Type	Value	Form
Oil mist, mineral	TWA	5 mg/m3	Respirable fraction.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

#### Derived no effect levels (DNELs)

##### General Population

Components	Value	Assessment factor	Notes
Bis(nonylphenyl)amine (CAS 36878-20-3)			
Long-term, Systemic, Dermal	2,5 mg/kg bw/day	400	Repeated dose toxicity
Long-term, Systemic, Oral	0,25 mg/kg bw/day	400	Repeated dose toxicity
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)			
Short-term, Local, Inhalation	1,19 mg/m3	75	Repeated dose toxicity
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)			
Long-term, Local, Inhalation	1,19 mg/m3	75	Repeated dose toxicity

##### Workers

Components	Value	Assessment factor	Notes
Bis(nonylphenyl)amine (CAS 36878-20-3)			
Long-term, Systemic, Dermal	5 mg/kg bw/day	200	Repeated dose toxicity
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)			
Short-term, Local, Inhalation	5,58 mg/m3	45	Repeated dose toxicity
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)			
Long-term, Local, Inhalation	5,58 mg/m3	45	Repeated dose toxicity
Long-term, Systemic, Dermal	1 mg/kg bw/day		
Short-term, Local, Inhalation	5,6 mg/m3		

**Predicted no effect concentrations (PNECs)**

Components	Value	Assessment factor	Notes
Bis(nonylphenyl)amine (CAS 36878-20-3)			
Freshwater	0,412 mg/l	10	
Marine water	0,041 mg/l	100	
Sediment (freshwater)	1 mg/kg	100	
Sediment (marine water)	0,1 mg/kg	1000	
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)			
Secondary poisoning	9,33 mg/kg		Oral
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)			
Secondary poisoning	9,33 mg/kg		Oral

**Exposure guidelines** Provide adequate ventilation.

**8.2. Exposure controls**

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**General information** The choice of the most appropriate personal protective equipment in each case depends, among other factors, on the nature of the work to be done and the conditions in which it is carried out. To do so, take the relevant risk analyses into account and consult the safety officer and/or equipment suppliers, if necessary, to make the right choice. In any case, the equipment must comply with the currently applicable CEN standards. Workers using this equipment must have received the required training in the use of the same.

**Eye/face protection** Wear safety glasses with side shields (or goggles). Eye protection should meet standard EN 166.

**Skin protection**

**- Hand protection** Wear appropriate chemical resistant gloves. Always wear chemical-resistant protective gloves that comply with EN 374 to handle this product. Observe good industrial hygiene practices and wash gloves with soap and water before removing them. Assess the working conditions and always consult your glove supplier for information on the most suitable type of glove for each task and the required material, thickness, and breakthrough time specifications. The use of type-B gloves in accordance with EN 374 is recommended as a minimum protection against intermittent or splash contact. Consult your supplier to find the most suitable option for the product in question. The requirements of EN 388 must be taken into account for applications involving mechanical hazards with the risk of abrasion or incision. The requirements outlined in EN 407 must be taken into consideration for tasks involving thermal hazards.

**- Other** Wear suitable protective clothing.

**Respiratory protection** In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P2) can be used. Respiratory protection should meet standard EN 14387. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Appropriate respirator selection should be made by a qualified professional.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.  
Product should not reach the environment through wastewater or sewage. Measures to take in case of accidental release can be found in Section 6 of this SDS.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	No data available (*)
<b>Odour</b>	No data available (*)
<b>Melting point/freezing point</b>	-42 °C (-43,6 °F)
<b>Boiling point or initial boiling point and boiling range</b>	Property has not been measured.

<b>Flammability</b>	Will burn if involved in a fire.
<b>Lower and upper explosion limit</b>	
<b>Explosive limit - lower ( %)</b>	Property has not been measured.
<b>Explosive limit – upper (%)</b>	Property has not been measured.
<b>Flash point</b>	> 200 °C (> 392 °F)
<b>Auto-ignition temperature</b>	Property has not been measured.
<b>Decomposition temperature</b>	Not applicable as the product is not unstable.
<b>pH</b>	Material is non soluble in water.
<b>Kinematic viscosity</b>	82 mm <sup>2</sup> /s (40 °C (104 °F))
<b>Solubility</b>	
<b>Solubility (water)</b>	< 0,1 % Insoluble (in water).
<b>Partition coefficient (n-octanol/water) (log value)</b>	Not applicable, product is a mixture.
<b>Vapour pressure</b>	Property has not been measured.
<b>Density and/or relative density</b>	
<b>Density</b>	0,853 g/cm <sup>3</sup>
<b>Relative density</b>	No data available (*)
<b>Vapour density</b>	Property has not been measured.
<b>Particle characteristics</b>	Not applicable, material is a liquid.
<b>9.2. Other information</b>	
<b>9.2.1. Information with regard to physical hazard classes</b>	No relevant additional information available.
<b>9.2.2. Other safety characteristics</b>	No relevant additional information available.
<b>Other safety characteristics</b>	(*) No data available at the time of writing or because it is not applicable due to the nature and danger of the product.

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Symptoms</b>	Exposure may cause temporary irritation, redness, or discomfort.

### 11.1. Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
RACING 4T 5W-40 (CAS Mixture)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
ATE		> 2000 mg/kg
<b>Oral</b>		
ATE		> 5000 mg/kg

Components	Species	Test Results
Bis(nonylphenyl)amine (CAS 36878-20-3)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
Aerosol		
LC50	Rat	> 5,53 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
Inhalation		
Aerosol		
LC50	Rat	> 5,53 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.	
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Based on available data, the classification criteria are not met.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Highly refined mineral oil (CAS -)	3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Mixture versus substance information	No information available.	
11.2. Information on other hazards		
Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	
Other information	Prolonged or repeated contact with used oil may cause serious skin diseases. Unless otherwise stated, the health effects of this product are assessed on the basis of the applicable calculation methods for classification.	

## SECTION 12: Ecological information

**12.1. Toxicity** Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

Components	Species	Test Results
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	NOEL Pseudokirchneriella subcapitata	> 100 mg/l, 72 hours

Components		Species	Test Results
Crustacea	EL50	Daphnia magna	> 1000 mg/l, 48 hours
Fish	LL50	Pimephales promelas	> 100 mg/l, 96 hours

**12.2. Persistence and degradability** No data is available on the degradability of this product.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient n-octanol/water (log Kow)** Not available.

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting properties** The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12.7. Other adverse effects** Oil spills are generally hazardous to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**EU waste code** The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Disposal methods/information** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Special precautions** Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

**14.1. UN number** Not regulated as dangerous goods.

**14.2. UN proper shipping name** Not regulated as dangerous goods.

#### 14.3. Transport hazard class(es)

**Class** Not assigned.

**Subsidiary risk** -

**Hazard No. (ADR)** Not assigned.

**Tunnel restriction code** Not assigned.

**14.4. Packing group** Not assigned.

**14.5. Environmental hazards** No.

**14.6. Special precautions for user** Not assigned.

### RID

**14.1. UN number** Not regulated as dangerous goods.

**14.2. UN proper shipping name** Not regulated as dangerous goods.

#### 14.3. Transport hazard class(es)

**Class** Not assigned.

**Subsidiary risk** -

**14.4. Packing group** Not assigned.

**14.5. Environmental hazards** No.

**14.6. Special precautions for user** Not assigned.

### ADN

**14.1. UN number** Not regulated as dangerous goods.

**14.2. UN proper shipping name** Not regulated as dangerous goods.

#### 14.3. Transport hazard class(es)

**Class** Not assigned.

**Subsidiary risk** -

**14.4. Packing group** Not assigned.

**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Not assigned.

#### **IATA**

**14.1. UN number** Not regulated as dangerous goods.  
**14.2. UN proper shipping name** Not regulated as dangerous goods.  
**14.3. Transport hazard class(es)**  
**Class** Not assigned.  
**Subsidiary risk** -  
**14.4. Packing group** Not assigned.  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Not assigned.

#### **IMDG**

**14.1. UN number** Not regulated as dangerous goods.  
**14.2. UN proper shipping name** Not regulated as dangerous goods.  
**14.3. Transport hazard class(es)**  
**Class** Not assigned.  
**Subsidiary risk** -  
**14.4. Packing group** Not assigned.  
**14.5. Environmental hazards**  
**Marine pollutant** No.  
**EmS** Not assigned.  
**14.6. Special precautions for user** Not assigned.

**14.7. Maritime transport in bulk according to IMO instruments** Not applicable.

### **SECTION 15: Regulatory information**

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

##### **EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**  
Not listed.  
**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**  
Not listed.  
**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**  
Not listed.  
**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**  
Not listed.  
**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**  
Not listed.  
**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**  
Not listed.  
**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**  
Not listed.  
**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**  
Not listed.

##### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended**  
Not listed.

##### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**  
Not listed.  
**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**  
Not listed.



## Other EU regulations

### Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

## Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

## National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

## Water hazard class

### AwSV

WGK1

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

### List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).  
CAS: Chemical Abstract Service.  
CEN: European Committee for Standardization.  
EL50: Effective level, 50%.  
IATA: International Air Transport Association.  
IMDG: International Maritime Dangerous Goods.  
IMO: International Maritime Organization.  
LC50: Lethal Concentration, 50%.  
LD50: Lethal Dose, 50%.  
LL50: Lethal level, 50%.  
NOEL: No Observed Effect Level.  
PBT: Persistent, bioaccumulative and toxic.  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
STEL: Short term exposure limit.  
STP: Sewage Treatment Plant.  
TWA: Time Weighted Average.  
vPvB: Very persistent and very bioaccumulative.

### References

ECHA CHEM  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity

### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

### Full text of any H-statements not written out in full under Sections 2 to 15

H304 May be fatal if swallowed and enters airways.  
H413 May cause long lasting harmful effects to aquatic life.

### Training information

Follow training instructions when handling this material.

## Disclaimer

This Safety Data Sheet (SDS) refers exclusively to the substance/product specified in section 1 of this document.

The information provided in this SDS has been obtained according to the best information available on the basis of technical data that is considered reliable at the time of its preparation, and in accordance with the legal requirements in force concerning classification, packaging and labelling of dangerous substances, not involving the granting of any express or implied warranty or on the accuracy of the information contained therein or concerning its suitability for a particular use or specification.

The purchaser as the recipient of the substance/product specified in section 1 of this document to which this Safety Data Sheet (SDS) refers, is responsible for evaluating the information contained in the SDS, and for verifying that it is correct and appropriate for the intended use of the substance/product specified in section 1 of this document.

The purchaser, as the recipient of the substance/product specified in section 1 of this document referred to in this Safety Data Sheet (SDS) is also responsible for adequately managing the risks thereof in its place of work. Consequently, the purchaser is obliged, regarding its workers and representatives, as well as any other person who may handle, use or be exposed to the substance/product specified in section 1 of this document in their place of work to (i) facilitate access to the relevant information in this Safety Data Sheet (SDS), transmitting for this purpose the relevant indications included in the SDS, especially those relating to the risks of the product/substance specified in section 1 of this document for the safety and health of persons and for the environment. As well as (ii) ensuring that they receive and have adequate training in handling, using or being exposed to the product/substance specified in section 1 of this document in accordance with the guidance contained in the SDS.

Accordingly, no liability for damages to the recipient of the SDS arising out of the use of the information or the use of the substance/product specified in section 1 of this document shall be accepted.