

# **SAFETY DATA SHEET**

Gulf MAX X, SAE 20W-50

01139/20W-50/5

**Issuing Date** 01-17-2018

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Version 2

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name Gulf MAX X, SAE 20W-50

**Product Code(s)** 01139/20W-50/5

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

Recommended Use Engine oil

**Uses advised against** Any other purpose.

1.3. Details of the supplier of the safety data sheet

**Supplier** 

1.4. Emergency telephone number

Poison Information Center telephone number

(IE) +353 (0)1 809 2166 (08:00 - 22:00), (IS) +354 543 2222

# **SECTION 2: HAZARDS IDENTIFICATION**

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label Elements

Signal word

None

#### Hazard statements

EUH210 - Safety data sheet available on request

#### 2.3. Other hazards

No information available

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substances / 3.2. Mixtures

This product is a mixture. Health hazard information is based on its ingredients

Chemical name	EC-No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	-	50% - 100%	**	-

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346. The highly refined base oil may be described by one or more of the following generic CAS identifiers: 64742-54-7, 64742-65-0, 64742-52-5, 64742-53-6, 64742-62-7, 64742-57-0, 64742-01-4, 64741-88-4, 64742-96-4, 64741-97-5, 64742-55-8, 64742-56-9, 64741-89-5, 8042-47-5. See Section 15 for additional information on base oils.

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

# **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first-aid measures

General advice If symptoms persist, call a physician.

**Inhalation** Move to fresh air.

Skin contact Wash off immediately with soap and plenty of water. Remove and wash contaminated

clothing before re-use.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while

insing.

Ingestion Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical

advice.

**Protection of First-aiders**Use personal protective equipment.

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

Main Symptoms None

4.3. Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

<sup>\*\*</sup> Substances for which there are Community workplace exposure limits

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment:, Use CO2, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

**SECTION 5: FIRE FIGHTING MEASURES** 

#### Extinguishing media which shall not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire

#### 5.2. Special hazards arising from the substance or mixture

#### **Special Hazard**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). In the event of fire and/or explosion do not breathe fumes. This material creates a fire hazard because it floats on water. Combustible material.

#### **Hazardous decomposition products**

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

#### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ensure adequate ventilation.

Advice for non-emergency

Material can create slippery conditions.

personnel

Advice for emergency responders For personal protection see section 8.

#### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

#### 6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dike to collect large liquid spills.

#### 6.4. Reference to other sections

See Section 8/12/13 for additional information

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

#### Incompatible materials

Oxidizing agent

#### 7.3. Specific end uses

**Recommended Use** 

Engine oil

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

#### **Exposure limits**

Chemical name	European Union	United Kingdom	France	Spain
Highly refined base oil				VLA-EC: 10 mg/m <sup>3</sup>
(Viscosity >20.5 cSt @40°C)				VLA-ED: 5 mg/m <sup>3</sup>

Spain Límites de Exposición Profesional Para Agentes Químicos en España (Ley 31/1995).

Chemical name	Germany	Italy	Portugal	Netherlands
Highly refined base oil		TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	
(Viscosity >20.5 cSt @40°C)			STEL: 10 mg/m <sup>3</sup>	

Italy Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (ISPESL), Allegato XXXVIII e Allegato XLIII - Valori Limite di Esposizione Professionale.

Portugal Valores-limite e índices biológicos de exposição profissional a agentes químicos. Quadro 1 - Valores Limite de Exposição (Norma Portuguesa NP 1796:2014).

Chemical name	Austria	Switzerland	Poland	Ireland
Highly refined base oil				STEL: 10 mg/m <sup>3</sup>
(Viscosity >20.5 cSt @40°C)				TWA: 5 mg/m <sup>3</sup>
				(Mist)

Ireland 2016 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001.

Chemical name	Finland	Denmark	Norway	Sweden
Highly refined base oil	TWA: 5mg/m³ (Öljysumu)	TWA: 1 mg/m³ (Olietåge)	TWA: 1 mg/m³ (Oljetåke)	TWA: 1 mg/m <sup>3</sup>
(Viscosity >20.5 cSt @40°C)				STEL: 3 mg/m <sup>3</sup>
				(Oljedimma)

Finland Förordningen om koncetrationer som befunnits skadliga, 268/2014 - HTP-arvot 2014.

Denmark Bekendtgørelse om grænseværdier for stoffer og materialer. Arbejdstilsynets bekendtgørelse nr. 507 Bilag 2 Afsnit A.
Norway Forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (Forskrift om tiltaks- og grenseverdier), FOR-2011-12-06-1358, FOR-2016-06-21-760, FOR-2016-12-22-1860.
Sweden Arbetsmiljöverkets föreskrifter om hygieniska gränsvärden och allmänna råd om tillämpningen av föreskrifterna.

Chemical name	Czech Republic	Hungary	Bulgaria	Romania
Highly refined base oil	TWA: 5 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
(Viscosity >20.5 cSt @40°C)	Ceiling: 10 mg/m <sup>3</sup>			STEL: 10 mg/m <sup>3</sup>

Czech Republic Narizeni vlady 93/2012, kterym se meni narizeni vlady c.361/2007 Sb., kterym se stanovi podminky ochrany zdravi pri praci, ve zneni narizeni vlady c.68/2010 Sb.

Bulgaria НАРЕДБА #13 om 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа.

Romania Valori Limit Obligatorii Nationale de expunere profesională ale agenților chimic - Anex Nr.1 Pubilicat în Monitorul Oficial, Partea I nr. 845.

Chemical name	Greece	Cyprus	Turkey	Malta
Highly refined base oil	TWA: 5 mg/m³			
(Viscosity >20.5 cSt @40°C)	_			

Greece Οριακές Τιμές Επαγγελματικής Έκθεσης - Προστασία της υγείας και της ασφάλειας των εργαζομένων που εκτίθενται σε ορισμένους

καρκινογόνους και μεταλλαξιογόνους παράγοντες 127/2000.

Chemical name	Belgium	Luxembourg	Iceland	Croatia
Highly refined base oil	TWA: 5 mg/m <sup>3</sup>			
(Viscosity >20.5 cSt @40°C)	STEL: 10 mg/m <sup>3</sup>			

Belgium Arrêté royal relatif à la protection de la santé et de la sécurité des travailleurs contre les risques liés à des agents chimiques sur le lieu de travail.

Chemical name	Russia	Estonia	Latvia	Lithuania
Highly refined base oil			TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
(Viscosity >20.5 cSt @40°C)			_	STEL: 3 mg/m <sup>3</sup>

Latvia Ministru Kabineta noteikumi Nr. 325 - Darba aizsardzības prasības, saskaroties ar ķīmiskajām vielām darba vietās. Lithuania Del Lietuvos higienos normos HN 23:2011 "Cheminiu medžiagu profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai".

Chemical name	Belarus	Ukraine	Slovakia	Slovenia
Highly refined base oil			TWA: 5mg/m <sup>3</sup>	
(Viscosity >20.5 cSt @40°C)				

Slovakia Nariadenie Vlády Slovenskej republiky z 16. januára 2002 o ochrane zdravia pri práci s karcinogénnymi a mutagénnymi faktormi.

#### Derived No Effect Level (DNEL)

Workers Systemic toxicity

Not determined

Workers Local effects

Not determined

**Consumers Systemic toxicity** 

Not determined

**Consumers Local effects** 

Not determined

Predicted No Effect Concentration (PNEC)

Not determined

# 8.2. Exposure controls

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

Engineering controls should be considered as the first line of protection against adverse exposure to harmful substances. Administrative controls and PPE should be used in the absence of engineering controls or as supplemental controls where engineering controls are insufficient in reducing specific exposures to an acceptable level.

#### **Eye Protection**

Safety glasses with side-shields.

#### **Hand Protection**

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn. The following glove type may be suitable for handling this product:. Protective gloves complying with EN 374.

Nitrile rubber Glove thickness => 0.38 mm Break through time => 480 min Butyl rubber Glove thickness => 0.64 mm Break through time => 480 min

Glove material suitability will vary depending on specific use conditions. Consideration should be given to variables such as operational characteristics, anticipated contact time, task requirements and other factors relevant to the selection of PPE. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Any specific glove information provided is based on published literature and glove manufacturer data. Barrier creams may help to protect the exposed areas of skin. Barrier creams should not be applied after exposure has occurred. Gloves should be replaced regularly and if there is any sign of damage to the glove material.

# Skin and body protection

Long sleeved clothing.

#### **Respiratory protection**

No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

This information is based on the state in which the specific product is delivered and on the intended use specified within this SDS. This information is provided based on literature reference, manufacturer specifications and recommendations and/or derived by analogy with similar substances. The level of protection and types of exposure controls will vary depending on potential exposure conditions.

#### Hygiene measures

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

#### **Environmental Exposure Controls**

No special environmental precautions required.

#### Thermal hazards

None under normal use conditions

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on basic physical and chemical properties

Physical state	liquid	Appearance	clear amber
Odor	Hydrocarbon-like	Odor threshold	Not Determined

Property Values Remarks

pH Not Determined
Melting point / freezing point
Boiling point / boiling range Not Determined
Not Determined

Flash point 206 °C / 403 °F ASTM D 92

Evaporation rate

Flammability (solid, gas)

Not Determined

Not Determined

Flammability Limit in Air

Upper flammability limit: Not Determined Lower flammability limit: Not Determined

Vapor pressureNot DeterminedVapor densityNot Determined

Relative density 0.8822 @15°C

Solubility(ies)

Partition coefficient
Autoignition temperature

Decomposition temperature

Not Determined
Not Determined
Not Determined

Kinematic viscosity 161.1 cSt @ 40 °C ASTM D 445

Explosive properties Not applicable Oxidizing Properties Not applicable

9.2. Other information

 Viscosity, kinematic (100°C)
 18.35 cSt @ 100°C
 ASTM D 445

 Pour Point
 -33 °C / -27 °F
 ASTM D 97

VOC Content (ASTM E-1868-10) Not Determined Not Determined

# **SECTION 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

None under normal use conditions

#### 10.2. Chemical stability

Stable under normal conditions

#### 10.3. Possibility of hazardous reactions

None under normal use conditions

#### 10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition, Extremes of temperature and direct sunlight

#### 10.5. Incompatible materials

Oxidizing agent

#### 10.6. Hazardous decomposition products

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on toxicological effects

#### **Product Information - Principle Routes of Exposure**

InhalationNone knownEye contactNone knownSkin contactNone knownIngestionNone known

# Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

#### Acute toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Highly refined base oil (Viscosity	>2000 mg/kg	>2000 mg/kg	
>20.5 cSt @40°C)			

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.

Sensitization

**Respiratory Sensitization Skin sensitization**Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

Specific target organ systemic

toxicity (single exposure)

Based on available data, the classification criteria are not met

Specific target organ systemic 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.

# **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

No special environmental measures are necessary

Chemical name	Algae/aquatic plants	Fish	Crustacea
Highly refined base oil (Viscosity	>100: 72 h mg/L	>100: 96 h mg/L	>100: 48 h mg/L
>20.5 cSt @40°C)	_	_	_

### 12.2. Persistence and degradability

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

#### 12.3. Bioaccumulative potential

No information available

#### 12.4. Mobility

The product is insoluble and floats on water

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

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

#### 12.6. Other adverse effects

None known

# **SECTION 13: DISPOSAL CONSIDERATIONS**

# 13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

\_\_\_\_\_\_

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal. Observe all label precautions until container is cleaned, reconditioned or

destroyed.

Other Data According to the European Waste Catalog, Waste Codes are not product specific, but

application specific. Waste codes should be assigned by the user based on the application

for which the product was used.

# **SECTION 14: TRANSPORT INFORMATION**

#### 14.1. UN-Number

Not regulated

#### 14.2. UN proper shipping name

Not regulated

#### 14.3. Transport hazard class

Not regulated

#### 14.4. Packing Group

Not regulated

#### 14.5. Environmental Hazards

None

#### 14.6. Special precautions for users

None

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

Not applicable

**IMDG** Not regulated

ADR Not regulated

<u>IATA</u> Not regulated

ADN Not regulated

# **SECTION 15: REGULATORY INFORMATION**

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

# **EU** legislation

The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)
Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)
European Agreement concerning the International Carriage of Dangerous Goods by Road
Safety Data Sheet according to Regulation EC 1907/2006 (REACh) with its amendment regulation EC 2015/830
European Agreement concerning the International Carriage of Dangerous Goods by Road/ Regulations concerning the

International Carriage of Dangerous Goods by Rail

International Civil Aviation Organization / International Air Transport Association Dangerous Goods Regulation

#### Substance(s) of Very High Concern

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

#### Authorizations and/or restrictions on use:

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII). This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

#### **National regulations**

**Germany WGK Classification** 

Hazard to water/Class 2

Product Registration number Denmark Registration (DK)

No information available

#### International Regulations

Ozone-depleting substances (ODS)

Not applicable

**Persistent Organic Pollutants** 

Not applicable

**Chemicals Subject to Prior Informed Consent (PIC)** 

Not applicable

#### **International Inventories**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory All ingredients are on the inventory or exempt from listing

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List All ingredients are on the inventory or exempt from listing

**AICS** - Australian Inventory of Chemical Substances All ingredients are on the inventory or exempt from listing

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances All ingredients are on the inventory or exempt from listing

**KECL** - Korean Existing and Evaluated Chemical Substances All ingredients are on the inventory or exempt from listing

**IECSC** - China Inventory of Existing Chemical Substances All ingredients are on the inventory or exempt from listing

**ENCS** - Japan Existing and New Chemical Substances All ingredients are on the inventory or exempt from listing

**TCSI** - Taiwan National Existing Chemical Inventory Contact supplier for inventory compliance status

NZIoC - New Zealand Inventory of Chemicals

All ingredients are on the inventory or exempt from listing

#### Other Information

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical name	CAS No	EC-No	REACH Registration Number
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	265-090-8	01-2119488706-23-xxxx
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	265-091-3	01-2119487081-40-xxxx
Residual oils (petroleum), solvent deasphalted	64741-95-3	265-096-0	01-2119487081-40-xxxx
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4	265-097-6	01-2119483621-38-xxxx
Distillates (petroleum), solvent-refined light naphthenic	64741-97-5	265-098-1	01-2119480374-36-xxxx
Residual oils (petroleum), solvent-refined	64742-01-4	265-101-6	01-2119488707-21-xxxx
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	01-2119467170-45-xxxx
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	01-2119480375-34-xxxx
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	01-2119484627-25-xxxx
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7	01-2119487077-29-xxxx
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	265-159-2	01-2119480132-48-xxxx
Residual oils (petroleum), hydrotreated	64742-57-0	265-160-8	01-2119489287-22-xxxx
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3	
Residual oils (petroleum), solvent-dewaxed	64742-62-7	265-166-0	01-2119480472-38-xxxx
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	01-2119471299-27-xxxx
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7	265-174-4	01-2119487080-42-xxxx
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	265-176-5	01-2119485040-48-xxxx
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	276-735-8	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	276-736-3	01-2119555262-43-xxxx
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9	01-2119474878-16-xxxx
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	276-738-4	01-2119474889-13-xxxx
Lubricating oils	74869-22-0	278-012-2	01-2119495601-36-xxxx
White mineral oil (petroleum)	8042-47-5	232-455-8	

# 15.2. Chemical Safety Assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

# **SECTION 16: OTHER INFORMATION**

#### Key or legend to abbreviations and acronyms used in the safety data sheet

Repr.-Reproduction toxicity
Asp. Tox. - Aspiration Toxicity
Acute Tox. - Acute Toxicity
Aquatic Acute - Acute Aquatic Toxicity

Aquatic Acute - Acute Aquatic Toxicity

Aquatic Chronic - Chronic Aquatic Toxicity

Eye Dam. - Eye Damage Eye Irrit. - Eye Irritation Skin Corr. - Skin Corrosion Skin Irrit. - Skin Irritation Skin Sens. - Skin Sensitizer

Resp. Sens. - Respiratory Sensitizer

STOT SE - Specific target organ systemic toxicity (Single exposure)

STOT RE - Specific target organ systemic toxicity (repeated exposure)

VOC - Volatile organic compounds

# Full text of H-Statements which may be referred to under Sections 2 and 3

H224 - Extremely flammable liquid and vapor	H341 - Suspected of causing genetic defects
H225 - Highly flammable liquid and vapor	H350 - May cause cancer
H226 - Flammable liquid and vapor	H351 - Suspected of causing cancer
<ul> <li>H270 - May cause or intensify fire; oxidizer</li> </ul>	H360 - May damage fertility or the unborn child
<ul> <li>H271 - May cause fire or explosion; strong oxidizer</li> </ul>	H361 - Suspected of damaging fertility or the unborn child
H272 - May intensify fire; oxidizer	H362 - May cause harm to breast-fed children
H290 - May be corrosive to metals	H370 - Causes damage to organs
H300 - Fatal if swallowed	H371 - May cause damage to organs
H301 - Toxic if swallowed	H372 - Causes damage to organs through prolonged or repeated
H302 - Harmful if swallowed	exposure
<ul> <li>H304 - May be fatal if swallowed and enters airways</li> </ul>	• H373 - May cause damage to organs through prolonged or repeated
H310 - Fatal in contact with skin	exposure
H311 - Toxic in contact with skin	H400 - Very toxic to aquatic life
H312 - Harmful in contact with skin	H410 - Very toxic to aquatic life with long lasting effects
H314 - Causes severe skin burns and eye damage	H411 - Toxic to aquatic life with long lasting effects
H315 - Causes skin irritation	H412 - Harmful to aquatic life with long lasting effects
H317 - May cause an allergic skin reaction	H413 - May cause long lasting harmful effects to aquatic life
H318 - Causes serious eye damage	• H360Df - May damage the unborn child. Suspected of damaging fertility
H319 - Causes serious eye irritation	H360D - May damage the unborn child
H330 - Fatal if inhaled	H360FD - May damage fertility. May damage the unborn child
H331 - Toxic if inhaled	H360F - May damage fertility
H332 - Harmful if inhaled	H361d - Suspected of damaging the unborn child
<ul> <li>H334 - May cause allergy or asthma symptoms or breathing difficulties</li> </ul>	• H361fd - Suspected of damaging fertility. Suspected of damaging the
if inhaled	unborn child
H335 - May cause respiratory irritation	H361f - Suspected of damaging fertility
H336 - May cause drowsiness or dizziness	• EUH066 - Repeated exposure may cause skin dryness or cracking
H340 - May cause genetic defects	EUH210 - Safety data sheet available on request
	EUH208 - May produce an allergic reaction

#### Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

Physical hazardsOn basis of test dataHealth HazardsCalculation MethodEnvironmental HazardsCalculation Method

Revision Date 01-17-2018

**Revision Note** This SDS has been revised in the following section(s), 3, 8, 15, 16.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.