

Beiblatt zum Sicherheitsdatenblatt / Supplement to the safety data sheet

Abschnitt 1 / Section 1

- 1.1 Produktidentifikation / Product identification
- 1.2 Verwendungen des Stoffs / Uses of the substance
- s. Original-Datenblatt / see original safety data sheet
- s. Original-Datenblatt / see original safety data sheets. Original-Datenblatt / see original safety data sheet
- 1.3 Einzelheiten zum Lieferanten / Details of the supplier

Firmenname / Supplier Stürmer Maschinen GmbH,
Straße / Street Dr.-Robert-Pfleger-Str. 26,
Ort / City D-96103 Hallstadt

Tel. / Phone +49 (0)951 96555 - 0 (07:00 - 17:00 Uhr / 07:00 am - 05:00 pm)

E-Mail / E-Mail info@stuermer-maschinen.de

1.4 Notrufnummer / Emergency Telephone

Wählen Sie die passende Notrufnummer anhand des GHS-Symbols auf Ihrem Gefahrgut oder entsprechend Abschnitt 2.2 des orig. Sicherheitsdatenblattes *. Call the appropriate emergency number using the GHS symbol on your dangerous goods or according to section 2.2 of the original safety data sheet *.

GHS Gefahren- piktogramm / GHS symbol	GHS-Kürzel/ GHS-no.	Mögliche Signalwörter/ <i>Warning</i>	Gefährdungsklassen / Description of hazards	Notrufnummer */ Emergency Phone *
	GHS01 bis GHS09			+49 (0)951 96555 - 590 Sammelnotrufnummer Gefahrstoffe
	GHS01	Gefahr oder Achtung / Danger or Attention	Explosive Stoffe/Gemische und Erzeugnisse mit Explosivstoff, selbstzersetzliche Stoffe/Gemische, organische Peroxide / Explosive substances / mixtures and products containing explosives, self-reactive substances / mixtures, organic peroxides	- 591
(8)	GHS02	Gefahr oder Achtung / Danger or Attention	Selbstzersetzliche Stoffe/Gemische, organische Peroxide, entzündbare Gase, Aerosole Flüssigkeiten, Feststoffe, selbsterhitzungsfähige Gemische, pyrophore Flüssigkeiten und Feststoffe, Stoffe/Gemische, die bei Berührung mit Wasser entzündbare Gase bilden / Self-reactive substances / mixtures, organic peroxides, flammable gases, aerosols, liquids, solids, self-heating mixtures, pyrophoric liquids and solids, substances / mixtures which form flammable gases on contact with water	- 592
®	GHS03	Gefahr oder Achtung / Danger or Attention	Oxidierende Gase, Flüssigkeiten, Feststoffe / Oxidizing gases, liquids, solids	- 593
	GHS04	Achtung / Attention	Verdichtete, verflüssigte, gelöste und tiefgekühlt verflüssigte Gase / Compressed, liquefied, dissolved and refrigerated liquefied gases	- 594
	GHS05	Gefahr oder Achtung / Danger or Attention	Verätzung der Haut, schwere Augenschäden, auch metallkorrosive Eigenschaften / Chemical burns to the skin, severe eye damage, also metal-corrosive properties	- 595
	GHS06	Gefahr / Danger	Äußerst schwere und schwere akute Gesundheitsschäden oder Tod / Extremely severe and severe acute damage to health or death	- 596
<u>(!)</u>	GHS07	Achtung / Attention	Akute Gesundheitsschäden, Reizung der Haut, der Augen und der Atemwege, Sensibilisierung der Haut, narkotisierende Wirkungen / Acute damage to health, irritation of the skin, eyes and the respiratory tract, sensitization of the skin, narcotic effects	- 597
\$	GHS08	Gefahr oder Achtung / Danger or Attention	Chronische Gesundheitsschäden (Organschädigungen) bei einmaliger oder mehrmaliger Exposition, krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkungen, Lungenschäden durch Eindringen von Substanzen in die Lunge (Aspirationsgefahr), Sensibilisierung der Atemwege / Chronic damage to health (damage to organs) after single or multiple exposure, carcinogenic, mutagenic and reproductive effects, lung damage due to the penetration of substances into the lungs (risk of aspiration), sensitization of the respiratory tract	- 598
X	GHS09	Achtung oder ohne Signalwort/ Attention or without wording	Giftig für Wasserorganismen mit kurz- und langfristiger Wirkung / Toxic to aquatic organisms with short and long-term effects	- 599

^{* 07:00 - 17:00} Uhr, außerhalb dieses Zeitraums kann die Nummer auf dem Sicherheitsdatenblatt angerufen werden / 07:00 am - 05:00 pm, outside this time, the number on the safety data sheet can be called

Für alle anderen Informationen siehe Original-Sicherheitsdatenblatt / For all other information, see the original safety data sheet

Safety Data Sheet dated 6/11/2020, version 1 - Regulation (EU) 2015/830

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

1.1. Product identifier

Mixture identification:

Trade name: DRAVY GT 46 BLU
Trade code: TENIND0394

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

Recommended use:

Lubricant for compressors and vacuum pumps.

Uses advised against:

All uses not indicated in the recommended uses.

1.3. Details of the supplier of the safety data sheet

Company:

TENNEX SRL

Via delle Crocette, 4 24066 Pedrengo BG

Tel.++39-035662054 fax, ++39-035656054

info@tennex.it

1.4. Emergency telephone number

Tennex Srl ++39-035662054 - Disponibile in orario di ufficio (8.00-12/14,18)

Centro antiveleni – "Osp. Pediatrico Bambino Gesù" – Roma – 06.68593726

Ospedale - Az. Osp. Univ. Foggia - Foggia - 0881.732326

Ospedale - Az. Osp. "A. Cardarelli" - Napoli - 081-7472870

Centro antiveleni – Policlinico "Umberto I" – Roma – 06-49978000

Ospedale – "Careggi" U.O. Tossicologia Medica – Firenze – 055-7947819

Centro antiveleni – Centro Nazionale di Informazione Tossicologica – Pavia – 0382-24444

Ospedale-Osp. Niguarda Ca' Granda - Città - 02-66101029

Ospedale – Azienda Ospedaliera Papa Giovanni XXII – Città – 800883300

Centro antiveleni - Policlinico "A. Gemelli" - Roma - 06-3054343

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

Restricted to professional users.

2.3. Other hazards

TENIND0394/1

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vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Num	ber	Classification
>= 90%	R 430	CAS: REACH No.:	848301-69-9 01-0000020 163-82-0001	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
>= 0.3% - < 0.5%	2,6-Di-tert-butylphe nol	EC:	204-884-0	 3.2/2 Skin Irrit. 2 H315 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410
>= 0.3% - < 0.5%	Reaction products fo Benzeneamine,N-p henyl-with nonene(branched)	EC:	253-249-4	4.1/C4 Aquatic Chronic 4 H413
>= 0.1% - < 0.25%	Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil - unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation	Index number: CAS: EC:	649-530-00- X 101316-72-7 309-877-7	as dangerous according to

	residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 oC (104 oF).]			
>= 0.1% - < 0.25%	Mineral Oil			The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
150 ppm	Diphenylamine	EC:	204-539-4	 3.1/3/Inhal Acute Tox. 3 H331 3.1/3/Dermal Acute Tox. 3 H311 3.1/3/Oral Acute Tox. 3 H301 3.9/2 STOT RE 2 H373 4.1/A1 Aquatic Acute 1

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing and wash with soap and water. Seek medical attention in case of irritation.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

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

Consult a doctor immediately, with the product safety data sheet, in case of aspiration or consistent inhalation of the product, or in any case in case of persistent irritation or other harmful effects caused by exposure to the product. There are no indications for specific medical treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

In case of fire, use a foam fire extinguisher to extinguish.

Extinguishing media which must not be used for safety reasons:

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

5.3. Advice for firefighters

Move undamaged containers from immediate hazard area if it can be done safely.

Use fire fighter's clothing conforming to European standard EN469.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

6.3. Methods and material for containment and cleaning up

For containment:

Wash the floor with water after collecting the spill. Introduce the collected material in safe and labeled containers.

If necessary, start the remediation procedure provided for in accordance with Legislative Decree 152/2006, part IV, title V.

For remediation:

If necessary, start the remediation procedure provided for in accordance with Legislative Decree 152/2006, part IV, title V.

Other information:

Do not use brushes or compressed air for cleaning surfaces or clothing.

Other information:

Don't use a brush or compressed air for cleaning surfaces or clothing.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Advice on general occupational hygiene:

Do not eat or drink while working.

Contamined clothing should be changed before entering eating areas.

Wash hands after use

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil - unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 oC (104 oF).] - CAS: 101316-72-7

- OEL Type: 11 - TWA(8h): 5 mg/m3

DNEL Exposure Limit Values

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil - unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 oC (104 oF).] - CAS: 101316-72-7

Worker Professional: 5.4 4 - Exposure: Human Inhalation - Frequency: Long Term, local effects

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Eye protection:

Visor and / or protective goggles (EN 166), do not use eye lenses.

Skin protection:

Wear clothing that guarantees total protection of eg. in PVC or Vaiton rubber cotton.

Hand protection:

NBR (nitrile rubber).

PVC (polyvinyl chloride).

Respiratory protection:

Not necessary for normal use of the product.

Thermal risks:

Nobody

Environmental exposure controls:

Nobody

Suitable technical controls:

Nobody

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	Clear Blue		
Odour:	Mild not		
	pungent		
Odour threshold:			
pH:			
Melting point / freezing point:	-30 °C		
Initial boiling point and	N.A.		
boiling range:	IN.A.		
Flash point:	295°C ° C	1	
Evaporation rate:	N.A.	1	
Solid/gas flammability:	N.A.	 	
Upper/lower flammability	N.A.		
or explosive limits:	IN.A.		
Vapour pressure:	N.A.	1	
Vapour density:	N.A.	1	
Relative density:		 	
Relative density.	0.830g/cm3 (20°C)		
Solubility in water:	Insoluble		
Solubility in oil:	N.A.		
Partition coefficient	N.A.		
(n-octanol/water):			
Auto-ignition temperature:	N.A.		
Decomposition	N.A.		
temperature:			
Viscosity:	46 mm2/sec		
Fundanius manantias	(40°C)		
Explosive properties:	N.A.		
Oxidizing properties:	N.A.		

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.		
Fat Solubility:	N.A.		
Conductivity:	N.A.		
Substance Groups	N.A.		
relevant properties			

SECTION 10: Stability and reactivity

- 10.1. Reactivity
- 10.2. Chemical stability
- 10.3. Possibility of hazardous reactions
- 10.4. Conditions to avoid
- 10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

DRAVY GT 46 BLU

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

i) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

R 430 - CAS: 848301-69-9

a) acute toxicity:

Test: 8 - Route: Oral - Species: Rat > 5.000 mg/kg

Test: Respiratory Tract Irritant - Route: Inhalation - Species: Rat > 5 mg/l - Duration: 4H

Test: Skin Irritant - Route: Skin - Species: Rabbit > 5000 mg/kg

2,6-Di-tert-butylphenol

a) acute toxicity:

Test: Respiratory Sensitization - Route: Oral - Species: Rat - Duration: 6

e) germ cell mutagenicity:

Notes: Non mutageno o genotossico

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil - unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 oC (104 oF).] - CAS:

101316-72-7

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a) acute toxicity:
                   Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
                   Test: LC50 - Route: Inhalation - Species: Rat > 5.53 mg/l - Duration: 4H
                   Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
            f) carcinogenicity:
                   Test: Skin Sensitization - Route: Skin - Species: Rat 0.25 ml/kg - Notes: (78 settimane)
            g) reproductive toxicity:
                   Test: Reproductive Toxicity - Route: Oral - Species: Rat > 1000 mg/kg - Duration: 11
            i) STOT-repeated exposure:
                   Test: 7 - Route: Oral - Species: Rat = 125 mg/kg - Duration: 11
                   Test: 10 - Route: Inhalation - Species: Rat > 980 mg/m3
                   Test: Skin Sensitization - Route: Skin - Species: Rat > 2000 mg/kg
            Diphenylamine
            i) STOT-repeated exposure:
                   Notes: L'esposizione ad elevata concentrazione di vapori o nebbie potrebbe essere
SECTION 12: Ecological information
      12.1. Toxicity
            Adopt good working practices, so that the product is not released into the environment.
      DRAVY GT 46 BLU
            The product is classified: Aquatic Chronic 3 - H412
      R 430 - CAS: 848301-69-9
            a) Aquatic acute toxicity:
                   Endpoint: 3 - Species: Fish > 100 mg/l
                   Endpoint: 3 - Species: Daphnia > 100 mg/l
                   Endpoint: 3 - Species: Algae > 100 mg/l
                   Endpoint: 4 - Species: Fish = 100 mg/l
                   Endpoint: 4 - Species: Daphnia = 100 mg/l
                   Endpoint: 4 - Species: 7 > 100 mg/l
      2,6-Di-tert-butylphenol
            a) Aquatic acute toxicity:
                   Endpoint: LC50 - Species: Fish = 1.4 mg/l - Duration h: 96 - Notes: Pimephales
                   promelas
                   Endpoint: LC50 - Species: Fish = 13 mg/l - Duration h: 96 - Notes: Trota arcobaleno
                   Endpoint: EC50 - Species: Daphnia = 0.45 mg/l - Duration h: 48
                   Endpoint: EC50 - Species: Daphnia = 0.8 mg/l - Duration h: 48
            c) Bacteria toxicity:
                   Endpoint: EC50 - Species: 4 > 1000 mg/l - Duration h: 0.24 - Notes: Fango
            e) Plant toxicity:
                   Endpoint: EC50 - Species: Algae = 3.6 mg/l - Duration h: 72
      Reaction products fo Benzeneamine, N-phenyl-with nonene (branched)
            a) Aquatic acute toxicity:
                   Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96
                   Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48
                   Endpoint: EC50 - Species: Algae = 600 mg/l - Duration h: 72
            c) Bacteria toxicity:
                   Endpoint: EC50 - Species: 6 = 2.433 mg/l - Duration h: 1
      Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated; Baseoil - unspecified;
      [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of
      atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers
      predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the
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order of 16cSt to 75cSt at 40 oC (104 oF).] - CAS: 101316-72-7

a) Aquatic acute toxicity:

Endpoint: 3 - Species: Daphnia > 10000 mg/l Endpoint: 5 - Species: Fish > 100 mg/l Endpoint: 2 - Species: Fish > 100 mg/l

b) Aquatic chronic toxicity:

Endpoint: 5 - Species: Daphnia = 10 mg/l Endpoint: 5 - Species: Fish > 1000 mg/l

Mineral Oil

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96 - Notes: Pimephales promelas

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: Alche verdi (Scenedesmus quadricauda)

Diphenylamine

a) Aquatic acute toxicity:

Endpoint: LC50 = 2.2 mg/l - Duration h: 48

Endpoint: EC50 - Species: Daphnia = 0.31 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae = 1.51 mg/l - Duration h: 72

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

R 430 - CAS: 848301-69-9

Bioaccumulative - Test: Kow - Partition coefficient 6

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.Ä.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

ŃΑ

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

TENIND0394/1

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 28

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H315 Causes skin irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

H331 Toxic if inhaled.

H311 Toxic in contact with skin.

H301 Toxic if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT RE 2	3.9/2	Specific target organ toxicity - repeated

		exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3
Aquatic Chronic 4	4.1/C4	Chronic (long term) aquatic hazard, category 4

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr.	Classification procedure
1272/2008	
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.

TWA: Time-weighted average WGK: German Water Hazard Class.