Safety Data Sheet
DPF-FLUSH

Safety Data Sheet dated 8/3/2021, version 6.0
This version cancels and substitutes any previous version

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

1.1. Product identifier
Mixture identification:
Trade name: DPF-FLUSH
1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Diesel particulate filter cleaner
1.3. Details of the supplier of the safety data sheet
Company:
ERRECOM SPA
Via Industriale, 14
Corzano (BS) Italy
Tel. +39 030/9719096
Competent person responsible for the safety data sheet:
lab@errecom.it
1.4. Emergency telephone number
+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)


Warning, Eye Irrit. 2, Causes serious eye irritation.


Warning, STOT SE 3, May cause drowsiness or dizziness.

Adverse physicochemical, human health and environmental effects:
No other hazards
2.2. Label elements
Hazard pictograms:

Warning
Hazard statements:
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
Precautionary statements:
P261 Avoid breathing vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves and eye protection.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
Special Provisions:
None
Contains
propan-2-ol
Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

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 the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 20% - < 25%	propan-2-ol	Index number: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH No.: 01-21194575 58-25-XXXX	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336
>= 2.5% - < 5%	ethanol	Index number: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 REACH No.: 01-21194576 10-43-XXXX	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319
>= 1% - < 2.5%	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	CAS: 308062-28-4 EC: 931-292-6 REACH No.: 01-21194900 61-47-XXXX	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411
>= 0.1% - < 0.25%	sodium hydroxide	Index number: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 REACH No.: 01-21194578 92-27-XXXX	2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318 Specific Concentration Limits: C >= 5%: Skin Corr. 1A H314 2% <= C < 5%: Skin Corr. 1B H314 0,5% <= C < 2%: Skin Irrit. 2 H315 0,5% <= C < 2%: Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

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

No information available.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

CO_2 or Dry chemical fire extinguisher.

Alcohol resistant foam fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

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

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

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.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

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.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well-ventilated place.
Always keep in a well ventilated place.
Keep away from food, drink and feed.
Incompatible materials:
See subsection 10.5
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propan-2-ol - CAS: 67-63-0

ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair
AGW - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm
MAK - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm
VLA - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm
VLEP - STEL(15min): 980 mg/m3, 400 ppm
WEL - TWA(8h): 999 mg/m3, 400 ppm - STEL(15min): 1250 mg/m3, 500 ppm
TLV - TWA(8h): 980 mg/m3, 400 ppm - STEL(15min): 1225 mg/m3, 500 ppm
NDS - TWA(8h): 900 mg/m3 - STEL(15min): 1200 mg/m3
NPHV - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3
MV - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 2000 mg/m3, 800 ppm
GVI - TWA(8h): 999 mg/m3, 400 ppm - STEL(15min): 1250 mg/m3, 500 ppm
TLV (CZ) - TWA(8h): 500 mg/m3, 200 ppm - STEL(15min): 1000 mg/m3, 400 ppm
TLV (EST) - TWA(8h): 350 mg/m3, 150 ppm - STEL(15min): 600 mg/m3, 250 ppm

ethanol - CAS: 64-17-5

ACGIH - STEL(15min): 1884 mg/m3, 1000 ppm - Notes: A3 - URT irr
AGW - TWA(8h): 380 mg/m3, 200 ppm - STEL(15min): 1520 mg/m3, 800 ppm
MAK - TWA(8h): 380 mg/m3, 200 ppm - STEL(15min): 1520 mg/m3, 800 ppm
VLA - STEL(15min): 1910 mg/m3, 1000 ppm
VLEP - TWA(8h): 1900 mg/m3, 1000 ppm - STEL(15min): 9500 mg/m3, 5000 ppm
WEL - TWA(8h): 1920 mg/m3, 1000 ppm
TLV (GR) - TWA(8h): 1900 mg/m3, 1000 ppm
GVI - TWA(8h): 1900 mg/m3, 1000 ppm
NDS - TWA(8h): 1900 mg/m3
NPHV - TWA(8h): 960 mg/m3, 500 ppm - STEL(15min): 1920 mg/m3
TLV - TWA(8h): 1000 mg/m3
TLV (CZ) - TWA(8h): 1000 mg/m3, 522 ppm - STEL(15min): 3000 mg/m3, 1566 ppm
TLV (EST) - TWA(8h): 1000 mg/m3, 500 ppm - STEL(15min): 1900 mg/m3, 1000 ppm

sodium hydroxide - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

DNEL Exposure Limit Values

propan-2-ol - CAS: 67-63-0

Consumer: 26 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 500 mg/m³ - Consumer: 89 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 888 mg/kg - Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

ethanol - CAS: 64-17-5

Worker Industry: 1900 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 950 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Worker Professional: 11 mg/kg - Consumer: 5.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 6.2 mg/m³ - Consumer: 1.53 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.44 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

sodium hydroxide - CAS: 1310-73-2

Worker Professional: 1 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term (repeated)

PNEC Exposure Limit Values

propan-2-ol - CAS: 67-63-0

Target: Fresh Water - Value: 140.9 mg/l
Target: Marine water - Value: 140.9 mg/l
Target: Freshwater sediments - Value: 552 mg/kg
Target: Aquatic, periodic release - Value: 140.9 mg/l
Target: Microorganisms in sewage treatments - Value: 2251 mg/l
Target: Secondary poisoning - Value: 160 mg/kg
Target: Soil (agricultural) - Value: 28 mg/kg

ethanol - CAS: 64-17-5

Target: Fresh Water - Value: 0.96 mg/l
Target: Marine water - Value: 0.79 mg/l
Target: Freshwater sediments - Value: 36 mg/kg
Target: Marine water sediments - Value: 2.9 mg/kg
Target: Aquatic, periodic release - Value: 2.75 mg/l
Target: Microorganisms in sewage treatments - Value: 580 mg/l
Target: Secondary poisoning - Value: 0.72 mg/kg
Target: Soil (agricultural) - Value: 0.63 mg/kg

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Target: Fresh Water - Value: 0.034 mg/l
Target: Marine water - Value: 0.003 mg/l
Target: Freshwater sediments - Value: 5.24 mg/kg
Target: Marine water sediments - Value: 0.524 mg/kg
Target: Soil (agricultural) - Value: 1.02 mg/kg
Target: Aquatic, periodic release - Value: 0.0335 mg/l
Target: Microorganisms in sewage treatments - Value: 24 mg/kg

8.2. Exposure controls

Eye protection:

Use close safety visors, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable material:
NR (natural rubber, natural latex).
PVC (polyvinyl chloride).

CR (polychloroprene, chloroprene rubber).
Break through time : > 480 min
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Material thickness: 0.7 mm minimum.

Respiratory protection:

In the case of vapour formation use a respirator with an approved filter.
Mask with filter "A", brown colour

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	red	--	--
Odour:	characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	N.A.	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	>93 ° C	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	11	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	total	--	--
Solubility in oil:	partial	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0.96 g/mL (+20°C/+68°F)	--	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

It may generate dangerous reactions (See subsections below)

10.2. Chemical stability
Stable under normal conditions

10.3. Possibility of hazardous reactions
Contact with strong acids can cause violent reactions and explosions.
Potential hazard for exothermic reactions.

10.4. Conditions to avoid
No data available

10.5. Incompatible materials
Strong acids.
Strong oxidizing agents.

10.6. Hazardous decomposition products
No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

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
The product is classified: Eye Irrit. 2 H319

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
The product is classified: STOT SE 3 H336

i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met

j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

propan-2-ol - CAS: 67-63-0

a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 4710 mg/kg
Test: LD50 - Route: Skin - Species: Rat 12800 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat 72.6 mg/l - Duration: 4h
Test: LD50 - Route: Skin - Species: Rabbit 6290 mg/kg

ethanol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
Test: LC50 - Route: Inhalation - Species: Mouse > 20 mg/l - Duration: 4h

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 1064 mg/kg
Test: NOAEL - Route: Oral - Species: Rat 88 mg/kg/day
Test: LOAEL - Route: Skin - Species: Mouse 0.045 mg/cm²

b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin Positive

c) serious eye damage/irritation:
Test: Eye Irritant Positive

d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin Negative

sodium hydroxide - CAS: 1310-73-2

b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive

c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Positive - Source: Guidelines 405 Test OECD

e) germ cell mutagenicity:
Test: Ames test - Species: Salmonella Typhimurium Negative

11.2. Information on other hazards
Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Not classified for environmental hazards
Based on available data, the classification criteria are not met

propan-2-ol

a) Aquatic acute toxicity:
Endpoint: EC0 - Species: Fish 10000 mg/l - Duration h: 48 - Notes: Pimephales promelas
Endpoint: LC50 - Species: Fish > 1400 mg/l - Duration h: 96 - Notes: Lepomis macrochirus
Endpoint: LC50 - Species: Fish 6550 mg/l - Duration h: 96 - Notes: Pimephales promelas

ethanol

a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 11200 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia > 12300 mg/l - Duration h: 48 - Notes: Species: Daphnia magna
Endpoint: EC50 - Species: Algae > 275 mg/l - Duration h: 72 - Notes: Species: Chlorella vulgaris

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish 2.67 mg/l
Endpoint: EC50 - Species: Daphnia 3.1 mg/l
Endpoint: IC50 - Species: Algae 0.143 mg/l

b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Algae 0.067 mg/l - Duration h: 72

sodium hydroxide

a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish 189 mg/l - Duration h: 48
Endpoint: EC0 - Species: Daphnia = 40.4 mg/l - Duration h: 48 - Notes: Species: Ceriodaphnia dubia
Endpoint: LC50 - Species: Fish 125 mg/l - Duration h: 96 - Notes: Species: Gambusia affinis
Endpoint: LC50 - Species: Fish 45.4 mg/l - Duration h: 96 - Notes: Species Oncorhynchus mykiss

12.2. Persistence and degradability
propan-2-ol - CAS: 67-63-0
Biodegradability: Readily biodegradable
ethanol - CAS: 64-17-5
Biodegradability: Readily biodegradable - Test: Solubility in water - Notes: 1000 - 10000 mg/L
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4
Biodegradability: Readily biodegradable

12.3. Bioaccumulative potential
propan-2-ol - CAS: 67-63-0
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.05
ethanol - CAS: 64-17-5
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.350000-

12.4. Mobility in soil
N.A.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration >= 0.1%

12.7. 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 or ID number
Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
N.A.

14.3. Transport hazard class(es)
N.A.

14.4. Packing group
N.A.

14.5. Environmental hazards
ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user
N.A.

14.7. Maritime transport in bulk according to IMO instruments
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)
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) n. 2020/878
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
Restriction 40

Restrictions related to the substances contained:

No restriction.

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:

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	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.