Safety Data Sheet

according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

FeDOX

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

Use of the substance/mixture

acidic Cleaner Industrial use.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	FERTAN Korrosionsschutz Vertriebsgesellschaft GmbH
Street:	Industriepark AW-Hallen - Saar Lor Lux Strasse 14
Place:	D-66115 SAARBRUECKEN
Telephone:	+49 (0) 681 710 46
e-mail:	gehring@fertan.com
Contact person:	Gehring Michael
Internet:	www.fertan.com
Responsible Department:	Dr. Gans-Eichler e-mail: info@tge-consult.de Chemieberatung GmbH Tel.: +49(0)251/394868-69 Raesfeldstr. 22 www.tge-consult.de D-48149 Münster

1.4. Emergency telephone number:

+49 (0) 681 710 46 Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Substance or mixture corrosive to metals: Met. Corr. 1
Skin corrosion/irritation: Skin Corr. 1
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
May be corrosive to metals.
Causes severe skin burns and eye damage.
Causes serious eye damage.

The mixture was classified as corrosive precautionary due to an extreme pH-value (pH <2).

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Phosphoric acid ...%; orthophosphoric acid
glycolic acid
Oxirane, 2-methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether

Signal word: Danger

Pictograms:

Hazard statements

H290 May be corrosive to metals.

H314	Causes severe skin burns and eye damage.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
77-92-9	citric acid			20 - < 25 %
	201-069-1		01-2119457026-42	
	Eye Irrit. 2; H319			
7664-38-2	Phosphoric acid ...%; orthophosphoric acid			1 - < 5 %
	231-633-2	015-011-00-6	01-2119485924-24	
	Met. Corr. 1, Skin Corr. 1B; H290 H314			
79-14-1	glycolic acid			1 - < 5 %
	201-180-5		01-2119485579-17	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H332 H314 H318			
174955-61-4	Oxirane, 2-methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether			1 - < 5 %
	Acute Tox. 4, Eye Dam. 1; H302 H318			
68439-51-0	Alcohols, C12-14 ethoxylated propoxylated			1 - < 5 %
	Aquatic Chronic 3; H412			

Full text of H and EUH statements: see section 16.

Labelling for contents according to Regulation (EC) No 648/2004

< 5 % non-ionic surfactants, < 5 % amphoteric surfactants.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician. In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Sand. Foam. Carbon dioxide (CO2). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2)

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (refer to section 8).
Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)
Conditions to avoid: aerosol or mist formation
Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

Further information on storage conditions

Recommended storage temperature: 20°C
Protect against: Light. UV-radiation/sunlight. heat. moisture.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7664-38-2	Phosphoric acid ...%; orthophosphoric acid			
Worker DNEL, long-term		inhalation	local	1 mg/m³
Consumer DNEL, long-term		inhalation	local	0,73 mg/m³
Worker DNEL, acute		inhalation	local	2 mg/m³
79-14-1	glycolic acid			
Worker DNEL, long-term		inhalation	systemic	10,56 mg/m³
Worker DNEL, acute		inhalation	systemic	9,2 mg/m³
Worker DNEL, long-term		inhalation	local	1,53 mg/m³
Worker DNEL, acute		inhalation	local	9,2 mg/m³
Worker DNEL, long-term		dermal	systemic	57,69 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,6 mg/m³
Consumer DNEL, acute		inhalation	systemic	2,3 mg/m³

Consumer DNEL, acute	inhalation	local	2,3 mg/m³
Consumer DNEL, long-term	dermal	systemic	28,85 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,75 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
77-92-9	citric acid
Freshwater	0,44 mg/l
Marine water	0,044 mg/l
Freshwater sediment	34,6 mg/kg
Marine sediment	3,46 mg/kg
Micro-organisms in sewage treatment plants (STP)	1000 mg/l
Soil	33,1 mg/kg
79-14-1	glycolic acid
Freshwater	0,031 mg/l
Freshwater (intermittent releases)	0,312 mg/l
Marine water	0,003 mg/l
Freshwater sediment	0,115 mg/kg
Marine sediment	0,011 mg/kg
Secondary poisoning	16,66 mg/kg
Micro-organisms in sewage treatment plants (STP)	7 mg/l
Soil	0,007 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

When using do not eat, drink or smoke.

Eye/face protection

Wear eye/face protection. DIN EN 166

Hand protection

Wear suitable gloves.
Suitable material:
FKM (fluororubber). - Thickness of glove material: 0,4 mm
Breakthrough time >= 8 h
Butyl rubber. - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm
Breakthrough time >= 8 h
PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
-exceeding exposure limit values
-insufficient ventilation and aerosol or mist formation
Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P2
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellowish-clear
Odour:	characteristic
pH-Value:	<1 (1% 2,4)

Changes in the physical state

Melting point:	No information available.
Initial boiling point and boiling range:	100 °C
Sublimation point:	No information available.
Softening point:	No information available.
Pour point:	No information available.
Flash point:	>100 °C
Sustaining combustion:	No data available

Flammability

Solid:	No information available.
Gas:	No information available.

Explosive properties

none

Lower explosion limits:	No information available.
Upper explosion limits:	No information available.
Ignition temperature:	No information available.

Auto-ignition temperature

Solid:	No information available.
Gas:	No information available.
Decomposition temperature:	No information available.

Oxidizing properties
none

Vapour pressure: (at 20 °C)	No information available.
Vapour pressure: (at 50 °C)	No information available.
Density (at 20 °C):	1,165- 1,170 g/cm³
Bulk density:	No information available.
Water solubility:	miscible.

Solubility in other solvents
No information available.

Partition coefficient:	No information available.
Viscosity / dynamic:	No information available.
Viscosity / kinematic:	No information available.
Flow time:	No information available.
Vapour density:	No information available.
Evaporation rate:	No information available.
Solvent separation test:	No information available.
Solvent content:	No information available.

9.2. Other information

Solid content:	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions
No information available.

10.4. Conditions to avoid
Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials
Materials to avoid: Oxidizing agents, strong. Reducing agents, strong. strong alkalis

10.6. Hazardous decomposition products
Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution
No information available.

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
77-92-9	citric acid				

	oral	LD50 5400 mg/kg	Mouse	ECHA Dossier	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	ECHA Dossier	OECD Guideline 402
7664-38-2	Phosphoric acid ...%; orthophosphoric acid				
	oral	LD50 2600 mg/kg	Rat	ECHA Dossier	
79-14-1	glycolic acid				
	oral	LD50 2040 mg/kg	Rat	Study report (1998)	EPA OPP 81-1
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 (3,6) mg/l	Rat.,male. , OECD 403	ECHA Dossier	
174955-61-4	Oxirane, 2-methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes severe skin burns and eye damage.
Specific concentration limit (SCL):
Phosphoric acid ...%; orthophosphoric acid CAS n°: 7664-38-2
>= 25 % Skin Corr. 1B
>= 10 <= 25 % Eye Irrit. 2A
>= 10 <= 25 % Skin Irrit. 2

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
citric acid:
In-vitro mutagenicity:
Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Result: negative. Literature information: ECHA Dossier

Phosphoric acid ...%; orthophosphoric acid:
In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay) Result: negative.
Reproductive toxicity: Method: OECD 422. Species: Rat. Exposure duration: 52 d. Result : NOAEL >=500 mg/kg bw/day Literature information : ECHA Dossier

glycolic acid:
In vitro mutagenicity/genotoxicity: No experimental indications of mutagenicity in-vitro exist. Reproductive toxicity: Exposure time: 111d; Species: Rat. Method: OECD Guideline 415 Result: NOEL = 600 mg/kg bw/day
Developmental toxicity/teratogenicity: Exposure time: 21d; Species: Rat. Method: OECD Guideline 414 Result: NOEL = 150 mg/kg bw/day ; Literature information: ECHA Dossier

STOT-single exposure

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

STOT-repeated exposure

Based on available data, the classification criteria are not met.
Phosphoric acid ...%; orthophosphoric acid:
Subchronic oral toxicity: Method: OECD 422. Species: Rat. Exposure duration: 54 d.
Result : NOAEL = 250 mg/Kg Literature information : ECHA Dossier

glycolic acid:
Subchronic oral toxicity: Exposure time: 90d; Species: Rat. Method: OECD Guideline 408 Result: NOEL = 150

mg/kg bw/day (70% sol); Literature information: ECHA Dossier

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
77-92-9	citric acid						
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Pimephales promelas	Photogr. Sci. Eng. 16(5):370-377 (1972)	
	Acute crustacea toxicity	EC50	> 50 mg/l	48 h	other aquatic crustacea: Dreissena polymorpha	Environ.Toxicol.Chem. 16(9): 1930-1934 (	
	Algea toxicity	NOEC	425 mg/l	8 d	Scenedesmus quadricauda	Water Research 14: 231-241 (1980)	
7664-38-2	Phosphoric acid ...%; orthophosphoric acid						
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Desmodesmus subspicatus	ECHA Dossier	
	Acute crustacea toxicity	EC50	>100 mg/l	48 h	Daphnia magna	ECHA Dossier	
79-14-1	glycolic acid						
	Acute fish toxicity	LC50	164 mg/l	96 h	Pimephales promelas	REACh Registration Dossier	other: US EPA Pesticide Assessment Guide
	Acute algae toxicity	ErC50	22,5 mg/l	72 h	Pseudokirchneriella subcapitata	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	141 mg/l	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202
	Acute bacteria toxicity	(> 100 mg/l)		3 h	Activated sludge	REACh Registration Dossier	OECD Guideline 209

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
77-92-9	citric acid			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	97 %	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
79-14-1	glycolic acid			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	78%	11	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			
174955-61-4	Oxirane, 2-methyl-, polymer with oxirane, mono[2-(6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl)ethyl] ether			
	OECD- Prüfrichtlinie 301 B	64%	28	SDS external
	Easily biodegradable (concerning to the criteria of the OECD)			
68439-51-0	Alcohols, C12-14 ethoxylated propoxylated			

	OECD 301F; ISO 9408; 92/69/EWG, C.4-D	> 60%	28	SDS external
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
77-92-9	citric acid	-1,55
79-14-1	glycolic acid	< 0,3

BCF

CAS No	Chemical name	BCF	Species	Source
77-92-9	citric acid	3,2		ECHA Dossier

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Waste disposal number of used product

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Phosphoric acid ...%; orthophosphoric acid, glycolic acid)

14.3. Transport hazard class(es): 8

14.4. Packing group: III

Hazard label: 8

Classification code: C9
Special Provisions: 274
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Phosphoric acid ...%; orthophosphoric acid, glycolic acid)

14.3. Transport hazard class(es): 8

14.4. Packing group: III

Hazard label: 8

Classification code: C9
Special Provisions: 274
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Phosphoric acid ...%; orthophosphoric acid, glycolic acid)

14.3. Transport hazard class(es): 8

14.4. Packing group: III

Hazard label: 8

Marine pollutant: NO
Special Provisions: 223, 274
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1760

14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Phosphoric acid ...%; orthophosphoric acid, glycolic acid)

14.3. Transport hazard class(es): 8

14.4. Packing group: III

Hazard label: 8

Special Provisions:	A3 A803
Limited quantity Passenger:	1 L
Passenger LQ:	Y841
Excepted quantity:	E1
IATA-packing instructions - Passenger:	852
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	856
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Safe handling: see section 7
Personal protection equipment: see section 8

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

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
citric acid
Phosphoric acid ...%; orthophosphoric acid
glycolic acid

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 3.
Rev. : 1,0 - Initial release 25.10.2017
Rev. : 2,0 - 27.04.2018, Changes in chapter: 2, 3, 12, 16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Rcglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln fuerGefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe
WGK: Wassergefaehrdungsklasse

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)