

Safety Data Sheet

ULTRACARE ACID CLEANER

Safety Data Sheet dated: 22/03/2024 - version 4



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

1.1. Product identifier

Mixture identification:

Trade name: ULTRACARE ACID CLEANER

Trade code: 9011503

UFI: N361-K0Q0-Y00J-EJS3

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

Recommended use: Cleaner

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road
Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Eye Irrit. 2 Causes serious eye irritation.

Skin Irrit. 2 Causes skin irritation.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/clothing and eye/face protection.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

Contains

phosphoric acid ... %

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 $\geq 0.1\%$

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: ULTRACARE ACID CLEANER

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

Qty	Name	Ident. Numb.	Classification	Registration Number
≥10 - <20 %	sulphamidic acid	CAS:5329-14-6 EC:226-218-8 Index:016-026-00-0	Eye Irrit. 2, H319; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	01-2119488633-28-XXXX
≥5 - <10 %	phosphoric acid ... %	CAS:7664-38-2 EC:231-633-2 Index:015-011-00-6	Met. Corr. 1, H290 Eye Dam. 1, H318 Acute Tox. 4, H302 Skin Corr. 1B, H314	01-2119485924-24-XXXX

Specific Concentration Limits:
C ≥ 25%: Skin Corr. 1B H314
10% ≤ C < 25%: Skin Irrit. 2 H315
10% ≤ C < 25%: Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

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 ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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

For non emergency personnel:

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Limit leakages with earth or sand.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand
Wash with plenty of water.
Retain contaminated washing water and dispose it.

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

Advice on general occupational hygiene:

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:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
phosphoric acid ... % CAS: 7664-38-2	DFG	GERMANY	Short Term: Ceiling - 4 mg/m ³
	ACGIH		Long Term: 1 mg/m ³ ; Short Term: 3 mg/m ³ eye, skin and upper respiratory tract irritation
	National SWEDEN		Long Term: 1 mg/m ³
	National FRANCE		Long Term: 1 mg/m ³ - 0.2 ppm; Short Term: 2 mg/m ³ - 0.5 ppm
	National SPAIN		Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
	National GREECE		Long Term: 1 mg/m ³ ; Short Term: 3 mg/m ³
	National DENMARK		Long Term: 1 mg/m ³
	National FINLAND		Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
	National GERMANY		Long Term: 2 mg/m ³

National	PORTUGAL	Long Term: 1 mg/m ³ ; Short Term: 3 mg/m ³
National	NORWAY	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	BELGIUM	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
NDS	POLAND	Long Term: 1 mg/m ³
NDSCh	POLAND	Short Term: 2 mg/m ³
CHE	SWITZERLAN D	Short Term: 2 mg/m ³
NDS	NETHERLAND S	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	CZECH REPUBLIC	Long Term: 1 mg/m ³
National	HUNGARY	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
Malaysi a OEL	MALAYSIA	Long Term: 1 mg/m ³
National	ESTONIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	LATVIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	CZECH REPUBLIC	Short Term: Ceiling - 2 mg/m ³
National	SLOVAKIA	Short Term: Ceiling - 2 mg/m ³
National	SLOVAKIA	Long Term: 1 mg/m ³
National	SLOVENIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	UNITED KINGDOM	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	BULGARIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	ROMANIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
TUR	TURKEY	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	LITHUANIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
National	CROATIA	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³
EU		Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Behaviour Indicative
CHE	SWITZERLAN D	Short Term: 4 mg/m ³

Predicted No Effect Concentration (PNEC) values

sulphamidic acid CAS: 5329-14-6 Exposure Route: Freshwater sediments; PNEC Limit: 0.173 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 0.0173 mg/kg

Derived No Effect Level (DNEL) values

sulphamidic acid CAS: 5329-14-6 Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 10 mg/kg; Consumer: 5 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 5 mg/kg

phosphoric acid ... % CAS: 7664-38-2 Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Industry: 2 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Industry: 1 mg/m³; Consumer: 0.36 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 10.7 mg/m³; Consumer: 4.57 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Consumer: 0.1 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, 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 materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: liquid

Color: Colourless

Odour: Characteristic

Melting point / freezing point: 0 °C (32 °F)

Initial boiling point and boiling range: 100 °C (212 °F)

Flammability: N.A.

Lower and upper explosion limit: Not available

Flash point: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: 2.00

Viscosity: 15.00 mPA-s

Kinematic viscosity: Not available

Solubility in water: very soluble

Solubility in oil: immiscible

Partition coefficient (n-octanol/water): Not available

Vapour pressure: 2.34

Relative density: 1.10 g/cm³

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

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

Toxicological information on main components of the mixture:

sulphamidic acid	a) acute toxicity	LD50 Oral Rat = 2065 mg/kg
phosphoric acid ... %	a) acute toxicity	LD50 Skin Rabbit > 2000 mg/kg LC50 Inhalation Rat > 3800 mg/m ³ 1h LD50 Oral Rat = 2600 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
sulphamidic acid	CAS: 5329-14-6 - EINECS: 226-218-8 - INDEX: 016-026-00-0	a) Aquatic acute toxicity : EC50 Daphnia = 71.6 mg/L 48h
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 14.2 mg/L 96h EPA
phosphoric acid ... %	CAS: 7664-38-2 - EINECS: 231-633-2 - INDEX: 015-011-00-6	b) Aquatic chronic toxicity : NOEC Fish > 60 mg/L
		b) Aquatic chronic toxicity : NOEC Daphnia = 19 mg/L 21d
		a) Aquatic acute toxicity : EC50 Algae = 48 mg/L 72h
		a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48h

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number or ID number

3264

14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid)

IATA-Technical name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid)

IMDG-Technical name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid)

14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-A, S-B

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 8

ADR-Hazard identification number: 80
ADR-Special Provisions: 274
ADR-Transport category (Tunnel restriction code): 3 (E)
ADR-Limited Quantity threshold: 5 L

Air (IATA):

IATA-Passenger Aircraft: 852
IATA-Cargo Aircraft: 856
IATA-Label: 8
IATA-Subsidiary hazards: -

IATA-Erg: 8L
IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage Code: Category A SW2
IMDG-Stowage Note: SGG1 SG36 SG49
IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 223 274
IMDG-EMS: F-A, S-B

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information

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

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 (EU) n. 2020/878
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
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. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

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

None

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: 3

Restrictions related to the substances contained: 40, 70, 75

SVHC Substances:

SVHC substances not present in a concentration $\geq 0.1\%$ (w/w)

National regulations

Produktregisteret Norge: 660562
MAL-kode: 00-4 (1993)
Lagerklasse (TRGS-510): 8B - Non-combustible corrosive substances

German Water Hazard Class.

Class 1: slightly hazardous for water.

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

Product contents:

Category: anionic surfactants Qty: < 5%

The product also contains:

Perfumes

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.16/1	Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

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 SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
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.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
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.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 4: First aid measures
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information