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

1.1. Product identifier — ELite H Clean

Substance / mixture	mixture
Number	HEM00023
UFI	N52Y-WJEY-PE71-2U7Q

Other mixture names

ELite H Clean
ELite H Clean

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

Mixture's intended use

ELite H Clean is a cleaning solution designed for regular cleaning, flushing and washing of capillaries, tubing and chambers and for removing residual blood residues in ELite hematology analyzers.

Main intended use

PC-MED-OTH Other medical devices

Secondary uses

PC-TEC-19 Reagents and laboratory chemicals

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Name or trade name	Erba Lachema s.r.o.
Address	Karásek 2219/1d , Brno, 62100 Czech Republic
Identification number (CRN)	26918846
VAT Reg No	CZ26918846
Phone	+420 517 077 111
E-mail	msds@erba.com
Web address	www.erba.com

Competent person responsible for the safety data sheet

Name	Erba Lachema s.r.o.
E-mail	msds@erba.com

1.4. Emergency telephone number

European emergency number: 112 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Met. Corr. 1, H290
Skin Corr. 1B, H314
Eye Dam. 1, H318
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

Most serious adverse physico-chemical effects

May be corrosive to metals.

Most serious adverse effects on human health and the environment

Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

Sodium hypochlorite

Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.

Supplemental information

EUH031	Contact with acids liberates toxic gas.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Does not contain any PMT or vPvM components. When the solution is acidified, very dangerous chlorine gas is released, which may be accompanied by other dangerous gases depending on the type of acid used.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances specified below. Note: contains sodium hypochlorite, solution, content active chlorine 12.5%

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 017-011-00-1 CAS: 7681-52-9 EC: 231-668-3	Sodium hypochlorite	<64	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH031 Specific concentration limit: EUH031: C ≥ 5 %	1

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 Registration number: 01-2119457892-27-0000	sodium hydroxide	<1.1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Specific concentration limit: Skin Corr. 1B, H314: 2 % ≤ C < 5 % Skin Corr. 1A, H314: C ≥ 5 % Eye Irrit. 2, H319: 0.5 % ≤ C < 2 % Skin Irrit. 2, H315: 0.5 % ≤ C < 2 %	2

Notes

1 *Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid … %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.*

2 *A substance for which exposure limits are set.*

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Take care of your own safety, do not let the affected person walk! Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Depending on the situation, call the medical rescue service and always ensure medical treatment.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

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

If inhaled

Inhaling vapours can cause corrosion of the breathing system.

If on skin

Causes severe skin burns.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment. If health problems persist, or in case of doubt, seek medical advice.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist. The extinguishing agents should be adapted to burning substances in the surrounding area.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage. The mixture is not flammable. It has oxidizing properties, when sodium hypochlorite decomposes, oxygen is released, which supports combustion. It forms explosive mixtures with organic substances. In case of fire, a container heated to a high temperature may explode. In case of contact with acids, a violent reaction may occur, releasing heat and forming toxic chlorine oxides. The products of thermal decomposition in case of fire are corrosive gases.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

May be corrosive to metals. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. Remove all ignition sources. Provide sufficient ventilation. Observe the principles of work safety in chemical laboratories.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents. Absorb spillage to prevent material damage.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment. Observe the principles of safety work in chemical laboratories. Ensure good ventilation/extraction in the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Keep only in original packaging. Store locked up.

Storage class	8B - Non-combustible corrosive substances
Storage temperature	min 2 °C, max 30 °C

The specific requirements or rules relating to the substance/mixture

At higher temperatures, the decomposition is accelerated.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

Czech Republic **Government Regulation 20/2025 Coll.**

Substance name (component)	Type	Value
sodium hydroxide (CAS: 1310−73−2)	PEL	1 mg/m³
	NPK-P	2 mg/m³

Notes

Irritating to mucous membranes (eyes, respiratory system) and skin.

Other information of limit values

chlorine (CAS 7782-50-5):
WEL (maximum permissible concentration in workplace air) 1.5 mg/m3
TWA (maximum permissible exposure limit) 0.5 mg/m3

Short-term exposure:
DNEL inhalation: 3.1 mg/m3 (local and systemic effects)
Long-term exposure:
DNEL inhalation: 1.55 mg/m3 (local and systemic effects)
DNEL oral: 0.26 mg/kg bw/day
DNEL dermal: 0.5% (chronic local effects)

8.2. Exposure controls

Take off contaminated clothing and wash before reuse. Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Glove material	Thickness	Breakthrough time	Class
Polyvinyl chloride (PVC)		>480 min	6

Respiratory protection

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage. Do not allow to enter surface waterways or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	yellow, pale yellow
Odour	chlorine

Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	The product is non-flammable.
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	12 (undiluted)
Kinematic viscosity	data not available
Solubility in water	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	data not available
Relative vapour density	data not available
Particle characteristics	data not available
Form	liquid, transparent

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with acids with evolution of heat and toxic chlorine oxides.

10.2. Chemical stability

The product is stable under normal conditions. Sodium hypochlorite is under spontaneous decomposition.

10.3. Possibility of hazardous reactions

At higher temperatures and in the presence of daylight, the decomposition of the product accelerates. This decomposition is catalyzed by some metals (Cu, Al, Ni, Mn, Fe). When in contact with acidic substances, including atmospheric CO2, unstable hypochlorous acid is released, which decomposes into chlorine and oxygen.

10.4. Conditions to avoid

Protect from sunlight and heat.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents. May be corrosive to metals. Acids, metals – copper, aluminum, nickel, magnesium, iron, organic substances such as amines, methanol, ammonium salts.

10.6. Hazardous decomposition products

Not developed under normal uses. Toxic chlorine oxides, unstable hypochlorous acid (decomposes into chlorine and oxygen) when reacting with atmospheric CO2 and acidic substances.

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

sodium hydroxide					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	325 mg/kg		Rat	
Dermal	LD_{50}	1350 mg/kg		Rabbit	
Oral	LD_{50}	500 mg/kg		Rabbit	
Dermal	LD_{50}	40 mg/kg		Mouse	

Sodium hypochlorite					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	1100 mg/kg		Rat	
Dermal	LD_{50}	20000 mg/kg		Rabbit	
Inhalation	LC_{50}	10.5 mg/l		Rat	
Oral	LD_{50}	626 mg/kg		Rat	

Skin corrosion/irritation

Causes severe skin burns and eye damage.
Sodium hypochlorite: Corrosive, category 1B. Skin: (rabbit, guinea pig): 5.25% NaOCl – slightly irritating.

Serious eye damage/irritation

Causes severe skin burns and eye damage. Causes serious eye damage.
Sodium hypochlorite: Eyes (rabbit, monkey): 5% NaOCl – irritant (cornea, iris, conjunctiva).

Respiratory or skin sensitisation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Germ cell mutagenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Carcinogenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Reproductive toxicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.
Sodium hypochlorite is not classified as a substance toxic to reproduction.
Fertility NOAEL (oral): 5 mg Cl/kg bw/day. Development NOAEL (oral): 5.7 mg Cl/kg bw/day.

Toxicity for specific target organ - single exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - repeated exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.
Sodium hypochlorite: NOAEL (oral): 50 mg/kg bw/day.

Aspiration hazard

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.
Sodium hypochlorite:
Respiratory tract (mouse): 10% NaOCl (aerosol) - irritant.
Some sensory irritation reactions have been observed due to its chlorine content. Human studies have shown that chlorine gas is an irritant at concentrations above 0.5 ppm.

11.2. Information on other hazards

Endocrine disrupting properties

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption for humans.

Other information

not available

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Acute toxicity

sodium hydroxide				
Parameter	Value	Exposure time	Species	Environment
EC_{50}	76 mg/l	24 hours	Daphnia (Daphnia magna)	
EC_{50}	145 mg/l	24 hours	Fish (Poecilia reticulata)	
EC_{50}	40.4 mg/l	48 hours	Daphnia (Daphnia magna)	
LC_{50}	160 mg/l	24 hours	Fish (Carassius auratus)	

Sodium hypochlorite				
Parameter	Value	Exposure time	Species	Environment
LC_{50}	0.58 mg/l	96 hours	Fish (Lepomis macrochirus)	
LC_{50}	0.04 mg/l		Algae (Selenastrum capricornutum)	
EC_{50}	141 µg/l	48 hours	Daphnia (Daphnia magna)	
LC_{50}	0.2 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
LC_{50}	0.43-0.99 mg/l	30 minutes	Fish (Lepomis macrochirus)	
LC_{50}	0.19-1.55 mg/l	96 hours	Fish (Pimephales promelas)	
EC_{50}	32 mg/l	96 hours	Invertebrates (Dugesia tigrina)	

Chronic toxicity

Sodium hypochlorite				
Parameter	Value	Exposure time	Species	Environment
NOEC	0.04 mg/l	28 days	Fish (Mořské ryby)	
NOEC	0.007 mg/l		Aquatic invertebrates	

12.2. Persistence and degradability

Data for the mixture are not available.

Sodium hypochlorite:

Hypochlorite is a highly reactive substance that reacts rapidly with organic matter in soil and sewage. In water, there is an equilibrium between hypochlorous acid and hypochlorite anion at environmental pH. Biodegradation: Does not biodegrade. Chemical degradation: Reacts with acidic substances, including atmospheric CO2, to form unstable hypochlorous acid, which decomposes into chlorine and oxygen. It undergoes rapid photolysis.

12.3. Bioaccumulative potential

Data for the mixture are not available.

Sodium hypochlorite is not bioaccumulative or bioconcentrative due to its high solubility in water and high reactivity.

12.4. Mobility in soil

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PMT or vPvM components.

12.5. Results of PBT and vPvB assessment

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PBT or vPvB components. Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption in the environment.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

16 05 06* laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

Packaging waste type code

15 01 10* packaging containing residues of or contaminated by hazardous substances

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 1760

14.2. UN proper shipping name

CORROSIVE LIQUID, N.O.S. (mixture Sodium hypochlorite, sodium hydroxide)

14.3. Transport hazard class(es)

8 Corrosive substances

14.4. Packing group

II

14.5. Environmental hazards

The mixture is hazardous to the environment with long lasting effects.

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.	**80**
UN number	**1760**
Classification code	C9
Safety signs	8+hazardous for the environment

Tunnel restriction code	(E)

Air transport - ICAO/IATA

Packaging instructions passenger	851
Cargo packaging instructions	855

Marine transport - IMDG

EmS (emergency plan)	F-A, S-B
MFAG	760

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

EUH031	Contact with acids liberates toxic gas.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	Agreement concerning the international carriage of dangerous goods by road
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC_{50}	Concentration of a substance when it is affected 50 % of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
Met. Corr.	Corrosive to metals
NOEC	No observed effect concentration
NPK	Maximum admissible concentration
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
PEL	Permissible Exposure Limit
PMT	Persistent, mobile and toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
UN number	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very persistent and very bioaccumulative
vPvM	Very persistent and very mobile

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

6.0 General revision of all sections of the safety data sheet according to Commission Regulation (EU) 2020/878.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.