

# Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

## SECTION 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Code HI93723-0  
 Product name Chromium VI HR Reagent

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

Intended use Determination of Chromium(VI) in Water Samples.

### 1.3. Details of the supplier of the safety data sheet

Name Hanna Instruments S.R.L.  
 Full address str. Hanna Nr 1  
 District and Country 457260 loc. Nusfalau (Salaj)  
 Romania  
 Tel. +40 260607700  
 Fax +40 260607700

e-mail address of the competent person responsible for the Safety Data Sheet msds@hanna.ro

### 1.4. Emergency telephone number

For urgent inquiries refer to International: +1 7035273887 - UK, London: +44 2038073798 - CHEMTREC 24 hours/365 days

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### Hazard classification and indication:

Acute toxicity, category 3	H331	Toxic if inhaled.
Skin corrosion, category 1A	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

#### Hazard pictograms:



Signal words: Danger

#### Hazard statements:

H331	Toxic if inhaled.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

#### Precautionary statements:

**SECTION 2. Hazards identification** ... / >>

P260	Do not breathe dust, fume, gas, mist, vapours, spray.
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].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 or doctor.

Contains: POTASSIUM DISULFATE

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

**SECTION 3. Composition/information on ingredients**

**3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
POTASSIUM DISULFATE INDEX	50 $\leq$ x < 100	Acute Tox. 3 H331, Skin Corr. 1A H314, Eye Dam. 1 H318, EUH071 LC50 Inhalation mists/powders: 0,85 mg/l/4h
EC 232-216-8		
CAS 7790-62-7		
REACH Reg. 01-2119987095-26		
SULPHAMIC ACID INDEX	30 $\leq$ x < 50	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Aquatic Chronic 3 H412
EC 016-026-00-0		
CAS 226-218-8		
REACH Reg. 01-2119488633-28		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

**SECTION 4. First aid measures**

**4.1. Description of first aid measures**

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

**POTASSIUM DISULFATE**  
Irritation and corrosion, Cough, Shortness of breath. Risk of blindness!.

**SULPHAMIC ACID**  
Irritant effects, Cough, Shortness of breath, Pain, shock.

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

Information not available

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

#### POTASSIUM DISULFATE

Not combustible. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: Sulphur oxides.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 6.1A

[SECTION 7. Handling and storage](#) ... / >>

7.3. Specific end use(s)

Information not available

[SECTION 8. Exposure controls/personal protection](#)

8.1. Control parameters

POTASSIUM DISULFATE

Predicted no-effect concentration - PNEC								
Normal value in fresh water					0,68		mg/l	
Normal value in marine water					0,068		mg/l	
Normal value for fresh water sediment					2,5		mg/kg/d	
Normal value for marine water sediment					0,25		mg/kg/d	
Normal value for water, intermittent release					6,8		mg/l	
Normal value of STP microorganisms					800		mg/l	
Normal value for the terrestrial compartment					0,092		mg/kg/d	
Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Inhalation							0,13	0,13
							mg/m3	mg/m3

SULPHAMIC ACID

Predicted no-effect concentration - PNEC								
Normal value in fresh water					1,8		mg/l	
Normal value in marine water					0,18		mg/l	
Normal value for fresh water sediment					8,36		mg/kg/d	
Normal value for marine water sediment					0,84		mg/kg/d	
Normal value for water, intermittent release					0,48		mg/l	
Normal value of STP microorganisms					20		mg/l	
Normal value for the terrestrial compartment					5		mg/kg/d	
Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Oral			VND	5				
				mg/kg bw/d				
Inhalation			VND	17,4			VND	70,5
				mg/m3				mg/m3
Skin			VND	5			VND	10
				mg/kg bw/d				mg/kg bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

**SKIN PROTECTION**

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

**EYE PROTECTION**

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

**SECTION 8. Exposure controls/personal protection**      ... / >>

**RESPIRATORY PROTECTION**

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

**SECTION 9. Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Properties	Value	Information
Appearance	powder	
Colour	white	
Odour	odourless	
Melting point / freezing point	not available	
Initial boiling point	not applicable	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not applicable	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	1.2 - 1.5	Method:ASTM D1293-18 Concentration: 1,5 % Temperature: 25 °C
Kinematic viscosity	not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	2,3	
Relative vapour density	not available	
Particle characteristics	not available	

**9.2. Other information**

**9.2.1. Information with regard to physical hazard classes**

Information not available

**9.2.2. Other safety characteristics**

Total solids (250°C / 482°F)	100,00 %
Explosive properties	not applicable
Oxidising properties	not applicable

**SECTION 10. Stability and reactivity**

**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**SULPHAMIC ACID**

Decomposes at 205°C/401°F.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

The powders are potentially explosive when mixed with air.

**SULPHAMIC ACID**

Risk of explosion on contact with chlorine. Reacts dangerously with metal nitrites and nitrates.

SECTION 10. Stability and reactivity ... / >>

10.4. Conditions to avoid

Avoid environmental dust build-up.

POTASSIUM DISULFATE  
 Exposure to moisture.

10.5. Incompatible materials

SULPHAMIC ACID  
 Chlorine, nitric acid, sodium nitrites and nitrates, potassium.

10.6. Hazardous decomposition products

SULPHAMIC ACID  
 Sulphur oxides and nitric oxides.

SECTION 11. Toxicological information

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

POTASSIUM DISULFATE

Acute inhalation toxicity, absorption, Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages, damage of respiratory tract, Lung oedema, Symptoms may be delayed - Skin irritation (in analogy to similar products), Causes severe burns. - Eye irritation (in analogy to similar products), Causes serious eye damage. Risk of blindness!

SULPHAMIC ACID

Acute oral toxicity, Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Pain, Possible damages:, shock - Acute inhalation toxicity, Symptoms: Cough, Shortness of breath, Irritation symptoms in the respiratory tract - Skin irritation, Result: Irritations, Causes skin irritation - Eye irritation, rabbit, Result: Severe irritations, Causes serious eye irritation.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	1,5 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

Corrosive to the respiratory tract.

POTASSIUM DISULFATE

LD50 (Oral):	2140 mg/kg Rat
LC50 (Inhalation mists/powders):	0,85 mg/l/4h Rat

SULPHAMIC ACID

LD50 (Dermal):	> 2000 mg/kg Rat
LD50 (Oral):	1050 mg/kg Guinea pig

SKIN CORROSION / IRRITATION

Corrosive for the skin  
 Classification according to the experimental Ph value

SERIOUS EYE DAMAGE / IRRITATION

**SECTION 11. Toxicological information** ... / >>

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

POTASSIUM DISULFATE	
LC50 - for Fish	680 mg/l/96h Pimephales promelas
EC50 - for Crustacea	720 mg/l/48h Daphnia magna

SULPHAMIC ACID	
LC50 - for Fish	70,3 mg/l/96h Pimephales promelas

12.2. Persistence and degradability

SULPHAMIC ACID	
Solubility in water	> 10000 mg/l
Degradability: information not available	

12.3. Bioaccumulative potential

SULPHAMIC ACID	
Partition coefficient: n-octanol/water	0,1 Log Kow

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

**SECTION 12. Ecological information**     ... / >>

12.6. Endocrine disrupting properties

**SULPHAMIC ACID**

Biological effects: Harmful effect due to pH shift. Further information on ecology, Discharge into the environment must be avoided.

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

**SECTION 13. Disposal considerations**

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information**

14.1. UN number or ID number

ADR / RID, IMDG, IATA:            2923

14.2. UN proper shipping name

ADR / RID:                    CORROSIVE SOLID, TOXIC, N.O.S. (POTASSIUM DISULFATE) MIXTURE

IMDG:                         CORROSIVE SOLID, TOXIC, N.O.S. (POTASSIUM DISULFATE) MIXTURE

IATA:                         CORROSIVE SOLID, TOXIC, N.O.S. (POTASSIUM DISULFATE) MIXTURE

14.3. Transport hazard class(es)

ADR / RID:                    Class: 8                    Label: 8 (6.1)



IMDG:                         Class: 8                    Label: 8 (6.1)



IATA:                         Class: 8                    Label: 8 (6.1)



14.4. Packing group

ADR / RID, IMDG, IATA:            II

14.5. Environmental hazards

ADR / RID:                    NO

IMDG:                         NO

IATA:                         NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 86 Special provision: -	Limited Quantities: 1 kg	Tunnel restriction code: (E)
IMDG:	EMS: F-A, S-B	Limited Quantities: 1 kg	
IATA:	Cargo: Pass.: Special provision:	Maximum quantity: 50 Kg Maximum quantity: 15 Kg A3, A803	Packaging instructions: 863 Packaging instructions: 859



## SECTION 14. Transport information ... / >>

### 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: H2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Contained substance  
Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors  
not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 1: Low hazard to waters

### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 3	Acute toxicity, category 3
Skin Corr. 1A	Skin corrosion, category 1A
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H331	Toxic if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008

SECTION 16. Other information ... / >>

- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for

[SECTION 16. Other information](#) ... / >>

evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 03.