

## KRONOTREAT 9006

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

Product trade name : KRONOTREAT 9006

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

Intended uses : Passivation  
 Uses advised against : All other applications except: Passivation

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

Paint Trade LLC  
 Ukraine, Dnipro, Startova Str.3  
 phone: +38 (056) 375-70-25  
 fax: +38 (056) 375-70-30  
 info@silta.ua, www.silta.ua

**1.4. Emergency telephone number**

: +38(056)375-70-25

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

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 2015/830.

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

Carcinogenicity	Category 1A – H350 May cause cancer.
Germ cell mutagenicity	Category 1B H340 May cause genetic defects.
Reproductive toxicity, category 2	Category 2 - H361f Suspected of damaging fertility
Acute toxicity	Category 3 - H331 Toxic if inhaled.
Acute toxicity	Category 4 - H302 Harmful if swallowed.
Specific target organ toxicity - repeated exposure	Category 1 – H372 Causes damage to organs through prolonged or repeated exposure
Skin corrosion	Category 1A – H314 Causes severe skin burns and eye damage
Serious eye damage	Category 1 - H318 Causes serious eye damage.
Specific target organ toxicity - single exposure	Category 3 – H335 May cause respiratory irritation
Respiratory sensitization	Category 1 – H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization	Category 1 - H317 May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity	Category 2 - H411 Toxic to aquatic life with long lasting effects.

**Classification procedure: Calculation method**

**2.2. Label elements**

Label elements :



Contains : CHROMIUM TRIOXIDE Phosphoric acid

Hazard Statements :  
 H350 May cause cancer.  
 H340 May cause genetic defects.  
 H361f Suspected of damaging fertility.  
 H331 Toxic if inhaled.  
 H302 Harmful if swallowed.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H314 Causes severe skin burns and eye damage.



**SAFETY DATA SHEET**  
according to Regulation (EC) No 1907/ 2006  
as amended by Regulation (EU) No 2015/ 830

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H335 May cause respiratory irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects. Restricted to professional users.

Precautionary statements : P260 Do not breathe dust / fume / gas / mist / vapours / spray.  
P201 Obtain special instructions before use.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P280 Wear protective gloves/ protective clothing / eye protection / face protection.  
P310 Immediately call a POISON CENTER / doctor / . . .

**2.3. Other hazards**

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

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1. Substances**

Not applicable. Product is a mixture

**3.2. Mixture**

Description of the mixture:

Product is a mixture of water, salts, acids, additives

**Hazardous ingredients**

Chemical name	EC No	Index.No	REACH Registration No	Weight %	Classification according to Regulation (EC) No 1272/2008 (CLP)
CHROMIUM TRIOXIDE 1333-82-0	215-607-8	024-001-00-0		10-15	Ox. Sol. 1 H271, Carc. 1A H350, Muta. 1B H340, Repr. 2 H361f, Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, STOT RE 1 H372, Skin Corr. 1A H314, Eye Dam. 1 H318, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
Phosphoric acid 7664-38-2	231-633-2	015-011-00-6	01-2119485924-24	1-5	Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B

Full text of H- and EUH-phrases: see section 16

**SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures**

General notes: : First aid may be given by the first person 'on the spot'. However, it is generally known that a first aider a person is with first aid training. First aiders should be familiar with the specific conditions and hazards at the workplace.  
Show this safety data sheet to the doctor in attendance.

Following 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.  
Move to fresh air.

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

Following eye contact: : 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.

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

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

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

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

No data available

**SECTION 5: FIREFIGHTING MEASURES**

**5.1. Extinguishing media**

Suitable extinguishing media: : carbon dioxide, foam, powder and water spray.

Unsuitable extinguishing media: None

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

Hazardous combustion products : **Do not breathe combustion products.**

**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**

Block the leakage if there is no hazard.

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 into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

See also 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.

**7.3. Specific end use(s)Информация отсутствует**

Recommendations See our technical data sheet

Industrial sector specific solutions: See our technical data sheet.

Exposure scenario(s): Exposure scenario is not yet available

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

Regulatory References:



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### Kurzzeitwerte

ESP España LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

GBR United Kingdom EH40/2005 Workplace exposure limits (Third edition,published 2018)

ITA Italia DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017

EU OEL EU Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.

TLV-ACGIH ACGIH 2019

### CHROMIUM TRIOXIDE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	0,005		0,1		
TLV-ACGIH		0,05				

### Phosphoric acid

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2		4	INHAL	
MAK	DEU	2		4	INHAL	
VLA	ESP	2	1			
WEL	GBR	1		2		
VLEP	FRA	1	0,2	2	0,5	
VLEp	ITA	1		2		
OEL	EU	1		2		
TLV-ACGIH		1		3		

### Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

## 8.2. Exposure controls

Technical measures to prevent exposure

- : 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.
- When choosing risk management measures and operating conditions, consult the exposure scenarios attached. Provide an emergency shower with face and eye wash station.
- The product must be used inside a closed circuit, in a well-ventilated environment and with strong localised aspiration systems in place. Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).



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Personal protection equipment	:	
Eye and face protection:	:	Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166). In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.
Hand protection	:	Protect hands with category III work gloves (see standard EN 374). The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
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.
Respiratory protection	:	If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited. If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.
Thermal hazards	:	Product represents no thermal hazards
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. For information on controlling environmental exposure, see the exposure scenarios attached to this safety datasheet.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Основные физико-химические свойства

Appearancee	:	Liquid, dark brown
Odour	:	Characteristics
Odour threshold	:	No data available
pH	:	2,0 4%
Melting point / freezing point (°C)	:	No data available
Initial boiling point and boiling range (°C)	:	No data available
Flash point (°C)	:	Not applicable - (product contains water)
Evaporarion rate (BuAc =1)	:	No data available
Flammability (solid, gas)	:	No data available
Upper/lower flammability or explosive limits	:	No data available
Vapour pressure (kPa)	:	No data available
Vapour density (air=1)	:	No data available
Relative density (g/cm <sup>3</sup> ) at 40°C	:	1,138
Solubility(ies) in water	:	Soluble
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature (°C)	:	No data available
Decomposition temperature (°C)	:	No data available
Viscosity (mm <sup>2</sup> /s) at 20 °C	:	No data available
Explosive properties	:	Product is not explosive



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Oxidising properties : Product is not an oxidiser

### 9.2. Other information

Pourpoint (°C) <0

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable under recommended storage conditions

CHROMIUM TRIOXIDE

CHROMIUM TRIOXIDE: decomposes above 250°C.

Phosphoric acid

PHOSPHORIC ACID: decomposes at temperatures over 200°C.

### 10.2. Chemical stability

Stable under recommended storage conditions

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage. CHROMIUM TRIOXIDE

CHROMIUM TRIOXIDE: in water it reacts as an acid, attacks metals and behaves as a strong oxidising agent. Despite not being combustible, it may cause fires and explosions with combustibles and reducing agents.

Phosphoric acid

PHOSPHORIC ACID: risk of explosion on contact with nitromethane. May react dangerously with alkalis and sodium borohydride.

### 10.4. Conditions to avoid

Avoid overheating

### 10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material. CHROMIUM TRIOXIDE

CHROMIUM TRIOXIDE: organic substances, reducing substances, acetylaldehyde, acetic acid and acetic anhydride, diethyl ether, phosphorus, arsenic, sodium and potassium, selenium and many metal powders.

Phosphoric acid

PHOSPHORIC ACID: Metals, strong alkalis, aldehydes, sulphides and peroxides.

### 10.6. Hazardous decomposition products

CHROMIUM TRIOXIDE

CHROMIUM TRIOXIDE: chromium oxide.

Phosphoric acid

PHOSPHORIC ACID: phosphorus oxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

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

LC50 (Inhalation) of the mixture: 3,34 mg/l

LD50 (Oral) of the mixture: 366,67 mg/kg

LD50 (Dermal) of the mixture: >2000 mg/kg

Phosphoric acid

LD50 (Oral) 2600 mg/kg bw/day Rat

LD50 (Dermal) 2740 mg/kg bw/day Rabbit

CHROMIUM TRIOXIDE

LD50 (Oral) 55 mg/kg Rat



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LC50 (Inhalation) 0,217 mg/l/4h Rat

### SKIN CORROSION / IRRITATION

Corrosive for the skin

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Sensitising for the respiratory system GERM CELL MUTAGENICITY

May cause genetic defects

### CARCINOGENICITY

May cause cancer REPRODUCTIVE TOXICITY

Suspected of damaging fertility STOT - SINGLE EXPOSURE

May cause respiratory irritation STOT - REPEATED EXPOSURE

Causes damage to organs ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Phosphoric acid

LC50 - for Fish 75,1 mg/l/96h *Lepomis macrochirus* - Method OECD 203

EC50 - for Crustacea > 100 mg/l/48h *Daphnia magna* - Method OECD 202

EC50 - for Algae / Aquatic Plants > 100 mg/l/72h *Desmodesmus subspicatus*

### CHROMIUM TRIOXIDE

LC50 - for Fish 49 mg/l/96h *Channa punctata*

EC50 - for Crustacea 0,15 mg/l/48h *Daphnia magna*

### 12.2. Persistence and degradability

CHROMIUM TRIOXIDE

CHROMIUM TRIOXIDE: in anaerobic conditions the Chromium IV reduces to Chromium III in soil. In the atmosphere Chromium VI reduces to Chromium III.

Phosphoric acid

NOT rapidly degradable

### 12.3. Bioaccumulative potential

Information not available

### 12.4. Mobility in soil

CHROMIUM TRIOXIDE

CHROMIUM TRIOXIDE: slightly mobile in soil.

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Другие неблагоприятные воздействия

No data available

### 12.7. Additional information

No data 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**

UN 3264

**14.2 UN proper shipping name**

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. MIXTURE (CROMIC ACID AND PHOSPHORIC ACID)

**14.3 Transport hazard class(es)**

Hazard class: 8

**14.4 Packing group**

Packing group: II

**14.5 Environmental hazards**

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: NO

**14.6 Special precautions for user**

ADR / RID: HIN - Kemler: 80 Limited Quantities: 1 L Tunnel restriction code: (E)

Special Provision: -

IMDG: EMS: F-A, S-B Limited Quantities: 1 L

IATA: Cargo: Maximum quantity: 30 L Packaging instructions: 855

Pass.: Maximum quantity: 1 L Packaging instructions: 851

Special Instructions: A3, A803

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

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/EC: H2-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 Product Point 3

Contained substance

Point 28-29-47-72 CHROMIUM TRIOXIDE

Reg. no.: 01/2119458868/17/0001

Substances in Candidate List (Art. 59 REACH) CHROMIUM TRIOXIDE

Reg. no.: 01/2119458868/17/0001





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Substances subject to authorisation (Annex XIV REACH) CHROMIUM TRIOXIDE  
Reg. no.: 01/2119458868/17/0001  
Sunset Date: 21/09/2017

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:  
None

Substances subject to the Rotterdam Convention:  
None

Substances subject to the Stockholm Convention:  
None

Healthcare controls  
Workers exposed to this health-dangerous chemical agent must undergo sanitary checks carried out in compliance with 2004/37/EC directive.

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/ mixture by the supplier

## SECTION 16: OTHER INFORMATION

### Abbreviations and acronyms

CLP - Regulation (EC) No 1272/ 2008 on classification, labelling and packaging of substances and mixtures REACH - Regulation (EC) No 1907/ 2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals

### Key literature references and sources for data Compilation of safety data sheet:

Regulation (EC) No 1907/ 2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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

Amended by:  
Commission Regulation (EU) No 453/ 2010 of 20 May 2010 amending Regulation (EC) No 1907/ 2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)

Classification procedure: Calculation method

### Full text of H-Statements referred to under section 3

Ox. Sol. 1 Oxidising solid, category 1  
Carc. 1A Carcinogenicity, category 1A  
Muta. 1B Germ cell mutagenicity, category 1B  
Repr. 2 Reproductive toxicity, category 2  
Acute Tox. 2 Acute toxicity, category 2  
Acute Tox. 3 Acute toxicity, category 3  
Acute Tox. 4 Acute toxicity, category 4  
STOT RE 1 Specific target organ toxicity - repeated exposure, category 1  
Skin Corr. 1A Skin corrosion, category 1A  
Skin Corr. 1B Skin corrosion, category 1B  
Eye Dam. 1 Serious eye damage, category 1  
STOT SE 3 Specific target organ toxicity - single exposure, category 3  
Resp. Sens. 1 Respiratory sensitization, category 1  
Skin Sens. 1 Skin sensitization, category 1  
Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1  
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1  
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2  
H271 May cause fire or explosion; strong oxidiser.  
H350 May cause cancer.  
H340 May cause genetic defects.  
H361f Suspected of damaging fertility.  
H330 Fatal if inhaled.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H331 Toxic if inhaled.  
H302 Harmful if swallowed.  
H372 Causes damage to organs through prolonged or repeated exposure.



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H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

### **LEGEND:**

ADR: European Agreement concerning the carriage of Dangerous goods by Road  
CAS NUMBER: Chemical Abstract Service Number  
CE50: Effective concentration (required to induce a 50% effect)  
CE NUMBER: Identifier in ESIS (European archive of existing substances)  
CLP: EC Regulation 1272/2008  
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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit  
TWA: Time-weighted average exposure limit  
VOC: Volatile organic Compounds  
vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation  
WGK: Water hazard classes (German).

### **Training advice**

The information contained in this safety data sheet must be available to the professional user. The professional user of this product must be adequately informed about the possible hazards of this product. The professional user of this product must be adequately trained in the safe handling and use of chemical products.

### **Further information Disclaimer**

This product's safety information is provided to assist our customers in assessing compliance with safety/ health/ environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product.