

## Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

### DELTA PLUS ECO

Date of first edition: 3/11/2021

Safety Data Sheet dated 2/23/2022

version 11

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

### 1.1. Product identifier

Mixture identification:

Trade name: DELTA PLUS ECO

Trade code: 19022021 -7

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

Recommended use: detergent

Uses advised against: Data not available.

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

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

### 1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

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

Skin Corr. 1A Causes severe skin burns and eye damage.

Eye Dam. 1 Causes serious eye damage.

STOT SE 3 May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

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

#### Pictograms and Signal Words



Danger

#### Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

#### Precautionary statements

P102 Keep out of reach of children.

P260 Do not breathe vapours.

P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves and eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P501 Dispose of contents/container in accordance with applicable regulations.

#### Contains

hydrogen chloride

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

##### Product contents:

non-ionic surfactants < 5%  
Perfumes

#### 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

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

N.A.

#### 3.2. Mixtures

Mixture identification: DELTA PLUS ECO

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

Qty	Name	Ident. Numb.	Classification	Registration Number
10-19,9 %	hydrogen chloride	CAS:7647-01-0 EC:231-595-7 Index:017-002-00-2	Skin Corr. 1B, H314 STOT SE 3, H335 Met. Corr. 1, H290 Eye Dam. 1, H318  Specific Concentration Limits: 10% $\leq$ C < 25%: Eye Irrit. 2 H319 C $\geq$ 10%: STOT SE 3 H335 C $\geq$ 25%: Skin Corr. 1B H314 10% $\leq$ C < 25%: Skin Irrit. 2 H315	

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### 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.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off 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 label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

#### 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).

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### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

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.

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### **SECTION 6: Accidental release measures**

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

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

#### **6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

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

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

#### **6.4. Reference to other sections**

See also section 8 and 13

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### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

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.

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

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

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### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

##### **Community Occupational Exposure Limits (OEL)**

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
hydrogen chloride	EU	NNN		8	5	15	10	
	NATIONAL	BELGIUM		8.000	5.000	15.000	10.000	
	NATIONAL	CANADA	C			7.500	5.000	Quebec
	NATIONAL	DENMARK		7.000	5.000	7.000	5.000	
	NATIONAL	FRANCE				7.600	5.000	
	NATIONAL	GERMANY		3.000	2.000	6.000	4.000	AGS
	NATIONAL	GERMANY		3.000	2.000	6.000	4.000	DFG
	NATIONAL	HUNGARY		8.000		16.000		
	NATIONAL	CHINA	C			7.500		
	NATIONAL	POLAND		5.000				
	NATIONAL	POLAND	C			10.000		
	NATIONAL	SINGAPORE				7.500	5.000	
	NATIONAL	SPAIN		7.600	5.000	15.000	10.000	
	NATIONAL	SWEDEN	C			8.000	5.000	
	NATIONAL	SWITZERLAND		3.000	2.000	6.000	4.000	
	NATIONAL	NETHERLANDS		8.000		15.000		
	NATIONAL	UNITED STATES OF AMERICA	C			7.000	5.000	NIOSH
	NATIONAL	UNITED STATES OF AMERICA				7.000	5.000	OSHA
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		2.000	1.000	8.000	5.000	
	NATIONAL	ITALY	C			2.900	2.000	
	NATIONAL	ITALY		8.000	5.000	15.000	10.000	
	NATIONAL	ARGENTINA	C				5.000	
	NATIONAL	AUSTRALIA	C			7.500	5.000	
	NATIONAL	BULGARIA		8.000	5.000	15.000	10.000	
	NATIONAL	CZECHIA		8.000		15.000		
	NATIONAL	KOREA, REPUBLIC OF			1.000	2.000		
	NATIONAL	CHILE	C			6.000	5.000	
	NATIONAL	CROATIA		8.000	5.000	15.000	10.000	
	NATIONAL	ESTONIA		8.000	5.000	15.000	10.000	
	NATIONAL	FINLAND				7.600	5.000	
	NATIONAL	JAPAN	C			3.000	2.000	
	NATIONAL	GREECE		7.000	5.000	7.000	5.000	
	NATIONAL	INDONESIA	C				2.000	
	NATIONAL	IRELAND		8.000	5.000	15.000	10.000	
	NATIONAL	ICELAND				8.000	5.000	
	NATIONAL	LATVIA		8.000	5.000	15.000	10.000	
	NATIONAL	LITHUANIA		8.000	5.000	15.000	10.000	
	NATIONAL	MALAYSIA	C			7.500	5.000	
	NATIONAL	MEXICO	C				2.000	
	NATIONAL	NEW	C			7.500	5.000	

## ZEALAND

NATIONAL	PORTUGAL	C				2.000	
NATIONAL	ROMANIA		8.000	5.000	15.000	10.000	
NATIONAL	RUSSIAN FEDERATIO N				5.000		
NATIONAL	SLOVAKIA		8.000	5.000	15.000	10.000	
NATIONAL	SLOVENIA		8.000	5.000	15.000	10.000	
NATIONAL	SOUTH AFRICA	C			7.000	5.000	
NATIONAL	NORWAY	C			7.500	5.000	
NATIONAL	TAIWAN, PROVINCE OF CHINA		7.500	5.000			
NATIONAL	TURKEY		8.000	5.000	15.000	10.000	
ACGIH	NNN	C				2	A4 - URT irr
EU	NNN		8	5	15	10	

### Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
hydrogen chloride	7647-01-0		8.000 mg/m <sup>3</sup>	8.000 mg/m <sup>3</sup>	Human Inhalation	Long Term, local effects
			15.000 mg/m <sup>3</sup>	15.000 mg/m <sup>3</sup>	Human Inhalation	Short Term, local effects

### 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:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

## SECTION 9: Physical and chemical properties

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

Physical State Liquid

Color: Blue

Odour: Acidic

Odour threshold: N.A.

pH: =1.00

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: > 60°C / 93°C

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.00 REL

Solubility in water: Soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.  
Flammability: N.A.  
Volatile Organic compounds - VOCs = 0 % ; 0 g/l

**Particle characteristics:**

Particle size: N.A.

**9.2. Other information**

Miscibility: N.A.  
Conductivity: N.A.  
Evaporation rate: N.A.                      No other relevant information

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under normal conditions

**10.2. Chemical stability**

Data not available.

**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.

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**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	The product is classified: Skin Corr. 1A(H314)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
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	The product is classified: STOT SE 3(H335)
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:**

hydrogen chloride	a) acute toxicity	LC50 Inhalation of aerosol Rat = 8.30000 mg/l 30min	
	b) skin corrosion/irritation	Skin Corrosive Human Positive	human skin model
	c) serious eye damage/irritation	Eye Corrosive Positive	Excised Bovine Cornea
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Carcinogenicity Inhalation Rat Negative	

**11.2 Information on other hazards**

**Endocrine disrupting properties:**

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

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## 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.

No data available for the product

#### List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
hydrogen chloride	CAS: 7647-01-0 - EINECS: 231-595-7 - INDEX: 017-002-00-2	a) Aquatic acute toxicity : LC50 Fish = 20.50000 mg/L  a) Aquatic acute toxicity : LC50 Daphnia = 0.45000 mg/L a) Aquatic acute toxicity : EC50 Algae = 0.73000 mg/L c) Bacteria toxicity : EC50 = 0.23000 mg/L

### 12.2. Persistence and degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

N.A.

### 12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

### 12.6 Endocrine disrupting properties

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

### 12.7 Other adverse effects

N.A.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

### Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 8: Corrosive

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## SECTION 14: Transport information

### 14.1. UN number or ID number

1789

### 14.2. UN proper shipping name

ADR-Shipping Name: HYDROCHLORIC ACID  
IATA-Technical name: HYDROCHLORIC ACID  
IMDG-Technical name: HYDROCHLORIC ACID

### 14.3. Transport hazard class(es)

ADR-Class: 8  
  
IATA-Class: 8  
  
IMDG-Class: 8

### 14.4. Packing group

ADR-Packing Group: II  
  
IATA-Packing group: II

IMDG-Packing group: II

#### **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 exempt: No

ADR-Label: 8

ADR - Hazard identification number: 80

ADR-Special Provisions: 520

ADR-Transport category (Tunnel restriction code): 2 (E)

ADR Limited Quantities: 1 L

ADR Excepted Quantities: E2

Air ( IATA ) :

IATA-Passenger Aircraft: 851

IATA-Cargo Aircraft: 855

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803

Sea ( IMDG ) :

IMDG-Stowage Code: Category C

IMDG-Stowage Note: SGG1a SG36 SG49

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: -

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

N.A.

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### **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 (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. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 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. 2020/878

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

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: None

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



N.A.

**Regulation (EU) 649/2012 (PIC regulation):**

No Substance Listed

German Water Hazard Class.

NWG: Not hazardous for water

SVHC Substances:

No data available

**15.2. Chemical safety assessment**

A Chemical Safety Assessment has been carried out for the mixture.

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**SECTION 16: Other information**

Code	Description
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Code	Hazard class and hazard category	Description
2.16/1	Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/1A	On basis of test data (pH)
3.3/1	On basis of test data (pH)
3.8/3	Calculation method

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 MSDS 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  
KAHF: Keep Away From Heat  
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:**

- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION



## Exposure Scenario

### Hydrogen chloride

## Exposure Scenario, 16/02/2022

Substance identity	
	Hydrogen chloride
CAS No.	7647-01-0
INDEX No.	017-002-00-2
EINECS No.	231-595-7

## Table of contents

1. **ES 1**      Widespread use by professional workers

1. ES 1      Widespread use by professional workers	
<b>1.1 TITLE SECTION</b>	
Exposure Scenario name	Professional use of facade/surface cleaning products
Date - Version	16/02/2022 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
<b>Environment Contributing Scenario</b>	
CS1	ERC8a - ERC8b - ERC8e
<b>Worker Contributing Scenario</b>	
CS2 Equipment cleaning and maintenance	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Mixing operations	PROC19
<b>1.2 Conditions of use affecting exposure</b>	
<b>1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8b, ERC8e)</b>	
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8b, ERC8e)
<i>Product (article) characteristics</i>	
<b>Physical form of product:</b> Liquid, vapour pressure 0,5 - 10 kPa at STP	
<b>Concentration of substance in product:</b> Covers concentrations up to 40 %	
<b>1.2. CS2: Worker Contributing Scenario: Equipment cleaning and maintenance (PROC8a)</b>	
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
<i>Product (article) characteristics</i>	
<b>Physical form of product:</b> Liquid, vapour pressure 0,5 - 10 kPa at STP	
<b>Concentration of substance in product:</b> Covers concentrations up to 40 %	
<i>Amount used, frequency and duration of use/exposure</i>	
<b>Duration:</b> Covers use up to > 4 h	
<i>Technical and organisational conditions and measures</i>	
<b>Technical and organisational measures</b>	
Handle substance within a predominantly closed system provided with extract ventilation. Ensure operatives are trained to minimise exposures.	Dermal - minimum efficiency of: 90 %
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
<b>Personal protection</b>	
Wear suitable gloves tested to EN374.	

<b>Other conditions affecting worker exposure</b>			
Professional use <b>Temperature:</b> Assumes use at not more than 20 °C above ambient temperature.			
<b>1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)</b>			
<b>Process Categories</b>	Roller application or brushing (PROC10)		
<b>Product (article) characteristics</b>			
<b>Physical form of product:</b> Liquid, vapour pressure 0,5 - 10 kPa at STP			
<b>Concentration of substance in product:</b> Covers concentrations up to 40 %			
<b>Amount used, frequency and duration of use/exposure</b>			
<b>Duration:</b> Covers use up to > 4 h			
<b>Technical and organisational conditions and measures</b>			
<b>Technical and organisational measures</b> <table border="1"> <tr> <td>           Ensure operatives are trained to minimise exposures.            Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).         </td><td>Inhalation - minimum efficiency of: 90 %</td></tr> </table>		Ensure operatives are trained to minimise exposures. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	Inhalation - minimum efficiency of: 90 %
Ensure operatives are trained to minimise exposures. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	Inhalation - minimum efficiency of: 90 %		
<b>Conditions and measures related to personal protection, hygiene and health evaluation</b>			
<b>Personal protection</b> Wear suitable gloves tested to EN374.			
<b>Other conditions affecting worker exposure</b>			
Professional use <b>Temperature:</b> Assumes use at not more than 20 °C above ambient temperature.			
<b>1.2. CS4: Worker Contributing Scenario: Mixing operations (PROC19)</b>			
<b>Process Categories</b>	Manual activities involving hand contact (PROC19)		
<b>Product (article) characteristics</b>			
<b>Physical form of product:</b> Liquid, vapour pressure 0,5 - 10 kPa at STP			
<b>Concentration of substance in product:</b> Covers concentrations up to 40 %			
<b>Amount used, frequency and duration of use/exposure</b>			
<b>Duration:</b> Covers use up to > 4 h			
<b>Technical and organisational conditions and measures</b>			
<b>Technical and organisational measures</b> Ensure operatives are trained to minimise exposures.			
<b>Conditions and measures related to personal protection, hygiene and health evaluation</b>			
<b>Personal protection</b> Wear suitable gloves tested to EN374. Wear a full face respirator conforming to EN136.			
<b>Other conditions affecting worker exposure</b>			
Professional use <b>Temperature:</b> Assumes use at not more than 20 °C above ambient temperature.			
<b>1.3 Exposure estimation and reference to its source</b>			
N/A			

## 1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

### **Guidance to check compliance with the exposure scenario:**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.