



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

1 of 14

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

1.1. Product identifier

Code: F_72
Product name: ACIDO Cloridrico Puro
INDEX number: 017-002-01-X
EC number: 231-595-7
CAS number: 7647-01-0
Registration Number: 01-2119484862-27
UFI: S660-D04U-8004-9AEH

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

Identified Uses	Industrial	Professional	Consumer
Descaler	-	✓	✓

Uses Advised Against

Do not use for uses other than those indicated

1.3. Details of the supplier of the safety data sheet

Name: NEW FADOR S.r.l.
Full address: via Mario Calderara, 31
District and Country: 25018 Montichiari (BS)
Italia

Tel. +39 030961 243

www.newfador.it

e-mail address of the competent person
responsible for the Safety Data Sheet

info@newfador.it

1.4. Emergency telephone number

For urgent inquiries refer to: NEW FADOR S.r.l.

+39 030961 243

(08.30 - 17.30)

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:

Substance or mixture corrosive to metals, category 1	H290	May be corrosive to metals.
Skin corrosion, category 1B	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.

2.2. Label elements

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

Hazard pictograms:



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

2 of 14



Signal word:

Danger

Hazard statements:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P271 Use only outdoors or in a well-ventilated area.
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.
P310 Immediately call a POISON CENTER/doctor
P405 Store locked up.
P501 Dispose of contents / container in accordance with current regulations.

Contains: HYDROCHLORIC ACID...%
INDEX 017-002-01-X

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

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	Conc. %	Classification (EC) 1272/2008 (CLP)
HYDROCHLORIC ACID...%		
INDEX 017-002-01-X	32	Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: B
EC 231-595-7		Skin Corr. 1B H314: \geq 25%, Skin Irrit. 2 H315: \geq 10% - < 25%, Eye Dam. 1 H318: \geq 25%, Eye Irrit. 2 H319: \geq 10% - < 25%, STOT SE 3 H335: \geq 10%
CAS 7647-01-0		
REACH Reg. 01-2119484862-27		



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

3 of 14

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more serious symptoms, call 118 to obtain immediate health rescue.

Eyes: Remove, if present, the contact lenses if the situation allows you to perform the operation easily. Wash immediately and abundantly with water for at least 15 minutes, opening the eyelids well. Consult a doctor immediately.

Leather: remove contaminated clothing. Wash immediately and abundantly with running water (and soap if possible). Consult a doctor. Avoid further contacts with contaminated clothing.

Ingestion: do not induce vomiting if not expressly authorized by the doctor. Do not administer anything by oral way if the subject is unconscious. Consult a doctor immediately.

Inhalation: bring the subject to the open air, far from the place of the accident. Consult a doctor immediately.

Rescuer protection

It is good practice for the rescuer who provides help to a person who has been exposed to a chemical substance or mixture to wear personal protective equipment. The nature of these protections depends on the hazard of the substance or mixture, the mode of exposure and the extent of contamination. In the absence of other more specific indications, it is recommended to use disposable gloves in case of possible contact with biological liquids. For the type of PPE suitable for the characteristics of the substance or mixture, refer to section 8.

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

In case of inhalation: Irritation of the respiratory tract, cough. Inhalation of larger quantities may cause laryngospasm with shortness of breath.

In case of skin contact: reversible skin lesions (redness, swelling, burning)

In case of contact with eyes: serious damage to eyes

In case of ingestion: Ingestion may cause irritation of the mouth, throat, digestive system, diarrhea and vomiting. Vomiting can enter the lungs causing damage (aspiration)

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

In case of symptoms, whether acute or delayed, consult a doctor.

In the event of an accident or feeling unwell, consult a doctor immediately (show the instructions for use or safety data sheet if possible).

Treatment: Symptomatic treatment.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye washing.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinction means

The extinction vehicles are the traditional ones: carbon dioxide, foam, dust and nebulized water.

Non -suitable extinction means

None in particular.

5.2. Special hazards arising from the substance or mixture

Dangers due to exposure in case of fire

Avoid breathing combustion products.

Combustion can produce gas and vapors potentially harmful to health such as carbon dioxide, carbon monoxide, satisfying, nox and irritating fumes.



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

4 of 14

5.3. Advice for firefighters

INFORMAZIONI GENERALI

Raffreddare con getti d'acqua i contenitori per evitare la decomposizione del prodotto e lo sviluppo di sostanze potenzialmente pericolose per la salute. Indossare sempre l'equipaggiamento completo di protezione antincendio. Raccogliere le acque di spegnimento che non devono essere scaricate nelle fognature. Smaltire l'acqua contaminata usata per l'estinzione ed il residuo dell'incendio secondo le norme vigenti.

EQUIPAGGIAMENTO

Indumenti normali per la lotta al fuoco, come un autorespiratore ad aria compressa a circuito aperto (EN 137), completo antifiama (EN469), guanti antifiama (EN 659) e stivali per Vigili del Fuoco (HO A29 oppure A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For those who do not intervene directly

Stop the leak if there is no danger.

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal clothing. These indications are valid both for those employed in the processes and for emergency interventions.

Remove unnecessary personnel.

6.1.2. For those who intervene directly

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal clothing. These indications are valid both for those employed in the processes and for emergency interventions.

6.2. Environmental precautions

Prevent penetration into the soil/subsoil. Prevent runoff into surface water or sewer system.

Retain contaminated wash water and discard it.

6.3. Methods and material for containment and cleaning up

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

Provide sufficient ventilation of the area affected by the leak. Disposal of contaminated material must be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal is reported in sections 8 and 13

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Manipulate the product after consulting all the other sections of this safety card. Avoid the dispersion of the product in the environment. Do not eat, nor drink, nor smoking during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labeled containers. Store the containers away from any incompatible materials, checking section 10.

7.3. Specific end use(s)



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

5 of 14

Refer to the final uses identified in the subsection 1.2 of this form.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

ESP	España	Límites de exposición profesional para agentes químicos en España 2024 Decreto Legislativo 9 Aprile 2008, n.81
ITA	Italia	
PRT	Portugal	
EU	OEL EU	Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração
	ACGIH	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; 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 98/24/EC; Directive 91/322/EEC. ACGIH 2025

HYDROCHLORIC ACID...%

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	7,6	5	15	10	
VLEP	ITA	8	5	15	10	
VLE	PRT	8	5	15	10	
OEL	EU	8	5	15	10	
ACGIH				2,9 (C)	2 (C)	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	15 mg/m3		8 mg/m3		15 mg/m3		8 mg/m3	

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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

Generic hygiene practice at work involves certain measures (for example, shower and change of clothes at the end of the work shift) in order to avoid Any type of third party contamination and appropriate cleaning practices (i.e. regular cleaning with adequate cleaning devices), do not eat and smoke in the workplace.

In general, inhalation and ingestion must be avoided. Unless different indications, shoes and work clothing must be worn certificates. Contaminated work clothing must not be brought out of the workplace.

Ensure good general ventilation in the place of and effective local aspiration or other technical equipment in order to maintain levels in the air below the exposure limit values.

In the absence of adequate ventilation, automatic indicators and warnings to report the achievement of the concentrations or dangerous conditions.

If this is not possible, frequent checks and measurements must be performed.

For the choice of personal protective equipment, ask for advice from their DPI suppliers.

Individual protection devices must report the EC marking certifying their compliance with current regulations.



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

6 of 14

Provide an emergency shower with face and eye wash station.

Hands protection

Protect your hands with category III work gloves (Report EN 374).

Recommended materials: nitrilic rubber, pvc, butyl rubber, neoprene.

Protection class: 6 (permeation time greater than 480 minutes according to the EN 374 standard).

Speaking of the recommended material: ≥ 0.4 mm

During the identification phase of the relevant material and the relative thickness to be used, it is highly recommended to compare directly with the DPI producer to evaluate the actual protection on the basis of use and the duration of use.

For the definitive choice of the material of work gloves, compatibility, degradation, breakage and permeation must be considered.

In the case of preparing, the resistance of work gloves to chemical agents must be verified before use as they are not predictable. Gloves

They have a wear time that depends on the duration and the use mode.

SKIN PROTECTION

Wear category II 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 airtight protective goggles (see standard EN ISO 16321).

RESPIRATORY PROTECTION

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. Use a mask with a type E filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

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.

ENVIRONMENTAL EXPOSURE CONTROLS

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

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	Color / soft yellow	Remark: Visual
Odour	characteristic	Method: olfactory
Odour threshold	5 ppm	Method: internal
Melting point / freezing point	not available	Reason for missing data: not determined
Initial boiling point	not available	Reason for missing data: not determined
Boiling range	not available	Reason for missing data: not determined
Flammability	not available	Reason for missing data: The substance/mixture is not flammable
Lower explosive limit	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Upper explosive limit	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Flash point	not available	Reason for missing data: The substance/mixture is not flammable
Auto-ignition temperature	not available	Reason for missing data: This property is not relevant to the safety and classification of this product.
Decomposition temperature	not available	Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

7 of 14

Self-accelerating decomposition temperature (SADT)	not available	mixtures that they can decompose Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and mixtures that they can decompose Method: pHmeter
pH	<1	Reason for missing data: This property is not relevant to the safety and classification of this product.
Kinematic viscosity	not available	Method: internal
Dynamic viscosity	< 10 cp	
Solubility	42.02 g / 100 g aqueous solution	Reason for missing data: The mixture does not contain nanoform
Dissolution rate	not available	Reason for missing data: does not apply to inorganic and ionic liquids and, as a rule, it does not apply to blends
Partition coefficient: n-octanol/water	not available	Reason for missing data: The mixture does not contain nanoform
Dispersion stability	not available	Remark:(referred to acid to 28%) Substance: HYDROCHLORIC ACID...%
Vapour pressure	115 mmHg	Temperature: 20 °C
Density and/or relative density	1,15 mg/l	Method: scaled scale and cylinder
Relative vapour density	1.03	

Particle characteristics

Median equivalent diameter

Remark: It only applies to solids

Size distribution

Remark: It only applies to solids

Dustiness

Remark: It only applies to solids

Specific surface area

Remark: It only applies to solids

Shape

Remark: It only applies to solids

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Acid/alkaline reserve	not available	Remark: Tests on the buffer capacity of the substance/mixture was not performed.
Miscibility	not available	Remark: See section 9.1 Solubility
Explosive properties	not available	Reason for missing data: Absent chemical groups associated with explosive properties in accordance with the provisions of Annex I, Part 2, chap. 2.1.4.3 of Reg. (EC) 1272/2008 – CLP
Oxidising properties	not available	Reason for missing data: Absent requirements related to the presence of atoms or chemical bonds associated with oxidizing properties in the molecules of the components according to Annex I, Part 2, 2.13.4 Reg. (CE) 1272/2008



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

8 of 14

SECTION 10. Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

In normal use and storage conditions, no dangerous reactions are predictable.

HYDROCHLORIC ACID...%

Risk of explosion on contact with: alkaline metals, aluminium powder, hydrogen cyanide, alcohol.

10.4. Conditions to avoid

None in particular. However, to follow the usual caution towards chemicals.

10.5. Incompatible materials

Strong acids, oxidizing agents.
Don't mix with other chemicals.

HYDROCHLORIC ACID...%

Incompatible with: alkalis, organic substances, strong oxidants, metals.

10.6. Hazardous decomposition products

For thermal decomposition or in the event of a fire you can free gases and vapors potentially harmful to health as carbon dioxide, carbon monoxide, satisfying, nox and irritating fumes.

HYDROCHLORIC ACID...%

In decomposition develops: hydrochloric acid fumes.

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

The mixture as such has not been subjected to specific tests, therefore no experimental evaluations are available; please refer to the information in this subsection.

Information on likely routes of exposure

Likely routes of exposure depend on the use of the mixture/substance.

Usually dermal exposure is the most likely, rarely inhalation and oral.

For the effects, please refer to the other subsections in this section and to section 4 of this sheet.

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

9 of 14

The mixture as such has not been subjected to specific tests, therefore no experimental evaluations are available; please refer to the other subsections in this section and to section 4 of this sheet.

Interactive effects

Under normal conditions of use no interactive effects are currently expected.

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

HYDROCHLORIC ACID...%

LC50 (Inhalation vapours):	3,2 mg/l/30 minuti mouse
----------------------------	--------------------------

SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

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

May cause respiratory irritation

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

HYDROCHLORIC ACID...%

LC50 - for Fish	> 3,25 mg/l/96h
-----------------	-----------------



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

10 of 14

EC50 - for Algae / Aquatic Plants	0,73 mg/l/
Chronic NOEC for Crustacea	5,5 mg/l Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	0,364 mg/l

12.2. Persistence and degradability

HYDROCHLORIC ACID...%

Solubility in water > 10000 mg/l

Degradability: information not available

12.3. Bioaccumulative potential

Information not available

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%.

12.6. Endocrine disrupting properties

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

Before disposal, it is always recommended to classify waste according to applicable national legislation.

Indicatively, the codes of the European waste list can be:

20 01 29* - detergents containing dangerous substances

15 01 10* - packaging containing residues of dangerous substances or contaminated by such substances

The release of waste in the sewer is strongly not recommended. The disposal of this product, solutions and any by-product must be carried out by always certifying the indications of the law on the protection of the environment and on the disposal of waste and the requirements of each relevant local authority.

Do not get rid of the product and the container except with the necessary precautions. Empty containers can contain product residues. Avoid the dispersion and outflow of material possibly spilled and the contact with soil, waterways, exhausts and sewers.

SECTION 14. Transport information

14.1. UN number or ID number



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

11 of 14

ADR / RID, IMDG, IATA: UN 1789

14.2. UN proper shipping name

ADR / RID: HYDROCHLORIC ACID
IMDG: HYDROCHLORIC ACID
IATA: HYDROCHLORIC ACID

14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8
IMDG: Class: 8 Label: 8
IATA: Class: 8 Label: 8



14.4. Packing group

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO
IMDG: not 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: 520		
IMDG:	EMS: F-A, S-B	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 30 L	Packaging instructions: 855
	Passengers:	Maximum quantity: 1 L	Packaging instructions: 851
	Special provision:	A3, A803	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

12 of 14

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

Seveso Category - Directive 2012/18/EU: None

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

Product

Point 3

Contained substance

Point 75 HYDROCHLORIC ACID...% REACH Reg.: 01-2119484862-27

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.

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:

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Skin Corr. 1	Skin corrosion, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

13 of 14

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).

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
- 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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- vPvM: Very persistent and very mobile
- 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)



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 03/07/2020

Revision n° 4

Rev. Date 09/02/2026

Page

14 of 14

- 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)
- 23. Delegated Regulation (UE) 2023/707
- 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
- 25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- 26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
- 27. Delegated Regulation (UE) 2024/2564 (XXII Atp. CLP)
- 28. Regulation (EU) 2024/2865

- 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

- ECHA CHEM website (ECHA Chemicals Database)

Note for the user:

The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force regarding hygiene and safety under his own responsibility. We do not assume responsibility for improper use.

Provide adequate training to personnel responsible for using chemical products.

CLASSIFICATION CALCULATION METHODS

Chemical-physical hazards: The classification of the product was derived from the criteria established by the CLP Regulation Annex I Part 2. The methods of evaluation of the chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on the calculation methods in Annex I of CLP Part 3, unless otherwise indicated in section 11.

Environmental hazards: The classification of the product is based on the calculation methods in Annex I of CLP Part 4, unless otherwise indicated in section 12.

Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 08 / 09 / 11 / 12 / 13 / 14 / 15 / 16.