



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

1 of 13

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

1.1. Product identifier

Code:	F_35
Product name	Muriatic ACID
INDEX number	017-002-01-X
EC number	231-595-7
CAS number	7647-01-0
Registration Number	01-2119484862-27
UFI :	8030-N0M4-W00T-TPV4

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
Skin corrosion, category 1A

H290
H314

May be corrosive to metals.
Causes severe skin burns and eye damage.

2.2. Label elements



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

2 of 13

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

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
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.
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.
P405 Store locked up.
P501 Dispose of contents / container in accordance with current regulations.

Contains: HYDROCHLORIC ACID 9,6 %

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

Contains:

Identification	Conc. %	Classification (EC) 1272/2008 (CLP)
HYDROCHLORIC ACID 32%		
CAS 7647-01-0	$29 \leq x < 31$	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: B



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

3 of 13

EC 231-595-7

Skin Corr. 1B H314: $\geq 25\%$, Skin Irrit. 2 H315: $\geq 10\%$, Eye Dam. 1 H318: $\geq 25\%$, Eye Irrit. 2 H319: $\geq 10\%$, STOT SE 3 H335: $\geq 10\%$

INDEX 017-002-01-X

REACH Reg. 01-2119484862-27

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

3.2. Mixtures

Information not relevant

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.

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.

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 firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

4 of 13

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

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):

8A

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ESP
ITA

España
Italia

Límites de exposición profesional para agentes químicos en España 2021
Decreto Legislativo 9 Aprile 2008, n.81



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

5 of 13

PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
EU	OEL EU	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.
	TLV-ACGIH	ACGIH 2021

HYDROCHLORIC ACID 32%

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	
TLV-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

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

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.

EYE PROTECTION

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

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

6 of 13

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	colourless	Remark: Visual
Odour	characteristic	Method: olfactory
Odour threshold	not available	Reason for missing data: not determined
Melting point / freezing point	not available	Reason for missing data: not determined
Initial boiling point	not available	Reason for missing data: not determined
Flammability	not available	Reason for missing data: not determined
Lower explosive limit	not available	Reason for missing data: The substance/mixture is not flammable
Upper explosive limit	not available	Reason for missing data: The substance/mixture is not explosive
Flash point	not available	Reason for missing data: The substance/mixture is not explosive
Auto-ignition temperature	not available	Reason for missing data: The substance/mixture is not flammable
Decomposition temperature	not available	Reason for missing data: The substance/mixture does not self -have
Self-accelerating decomposition temperature (SADT)	not available	Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and mixtures that they can decompose
pH	<2	Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and mixtures that they can decompose
Kinematic viscosity	not available	Method: pHmeter
Dynamic viscosity	< 10 cP	Reason for missing data: not determined
Solubility	soluble in water	Remark: the mixture is a liquid
Dissolution rate	not available	Reason for missing data: The mixture does not contain nanoform
Partition coefficient: n-octanol/water	not available	Reason for missing data: does not apply to inorganic and ionic liquids and, as a rule, it does not apply to blends
Dispersion stability	not available	Reason for missing data: The mixture does not contain nanoform
Vapour pressure	not available	Reason for missing data: not determined
Density and/or relative density	not available	Reason for missing data: not determined
Relative vapour density	not available	Reason for missing data: not determined
Particle characteristics		
Method:	It only applies to solids	

9.2. Other information

9.2.1. Information with regard to physical hazard classes



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

7 of 13

Information not available

9.2.2. Other safety characteristics

Explosive properties

not classified as explosive,
contains no explosive
substances according to CLP
Art. (14 (2))

Oxidising properties

the product is not an oxidizing
substance

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction 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

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

HYDROCHLORIC ACID 32 %

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

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

HYDROCHLORIC ACID 32%

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

10.6. Hazardous decomposition products

HYDROCHLORIC ACID 32%

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

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

8 of 13

Interactive effects

Information not available

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 32%

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

Respiratory sensitization

Information not available

Skin sensitization

Information not available

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

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

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.



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

9 of 13

SECTION 12. Ecological information

12.1. Toxicity

HYDROCHLORIC ACID 32%

LC50 - for Fish	> 3,25 mg/l/96h
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 32%

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

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.



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

10 of 13

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 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: NO

IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80

Special provision: -

IMDG: EMS: F-A, S-B

IATA: Cargo:

Pass.:

Special provision:

Limited
Quantities: 1
L

Limited
Quantities: 1
L
Maximum
quantity: 30 L

Maximum
quantity: 1 L

A3, A803

Tunnel
restriction
code: (E)

Packaging
instructions:
855
Packaging
instructions:
851

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

11 of 13

SECTION 15. Regulatory information

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

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
Eye Dam. 1	Serious eye damage, category 1
Skin Corr. 1B	Skin corrosion, category 1B
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H290	May be corrosive to metals.



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

12 of 13

H318	Causes serious eye damage.
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).

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 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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 04/06/2020

Revision n° 3

Rev. Date 06/06/2023

Page

13 of 13

- 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 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:

02 / 09 / 12 / 15 / 16.