

NEUTRALIZING DETERGENT LIQUID FOR STAINLESS STEEL

Place and date of issue: Villaverla: 19.03.2019

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Section 1: Identification of the substance / mixture and of the Company

Identification of the product, substance or mixture Product identifier 804139 (TC54462) Product name Neutralizing detergent liquid for stainless steel

1.2 Relevant identified uses of the substance or mixture and uses advised against Description/Use: Neutralizing liquid for exclusive use with electrolyte fluids

1.3 Details of the supplier of the safety data sheet

Supplier	TELWIN SPA
Street address	Via della Tecnica, 3
Country	36030 VILLAVERLA (VI)
Telephone number	+39 0445 858811
Fax	+39 0445 858800
e-mail address	telwin@telwin.com

1.4 Emergency telephone number

+39 0445 858811 (working hours)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP). The product, however, contains hazardous substances in such concentration to be declared in section no. 3, requiring a safety data sheet with adequate information, in compliance with Regulation (UE) 2015/830. Classification and hazard statement: --

2.2 Label elements

Hazard labelling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adaptations. Hazard pictograms: --Warnings: --

Hazard statements: **EUH210** Safety Data Sheet available on request. Safety advice: --

2.3 Other hazards

Based on data available, the product does not contain PBT or vPvB substances at levels in excess of 0.1%.

Section 3: Composition/information on ingredients

3.1 Substances

Information not relevant.

3.2 Mixtures

Contains:

 Identification.
 Conc. %

 CAS 112-34-5
 0,1 - 1,0

 CE 203-961-6
 INDEX 603-096-00-8

 Nr. Reg. 01-2119475104-44-xxxx
 Velocity

Classification 1272/2008 (CLP). Eye Irrit. 2 H319

The complete text of the hazard statements (H) is outlined in section 16 of the data sheet.



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Section 4: First aid measures

4.1 Description of first aid measures

No episodes of damage to staff responsible for product use have been reported. If necessary, implement the following measures: INHALATION: Remove casualty to fresh air. If breathing stops, practice artificial respiration. Immediately contact a doctor. INGESTION: Immediately contact a doctor. Induce vomiting only on doctor's orders. Never give anything by mouth to an unconscious person.

EYES: Wash immediately and thoroughly with running water for at least 10 minutes.

EYES and SKIN: Rinse with plenty of water. If irritation persists, consult a doctor.

- **4.2 Most important symptoms and effects, both acute and delayed** No episodes of damage to health ascribable to the product have been reported.
- **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 MEDIA The means of extinction are the traditional ones: carbon dioxide, foam, powder and nebulized water.

UNSUITABLE EXTINGUISHING MEDIA

Do not use water jets. Water is not efficient to extinguish fire, however it can be used to cool closed containers exposed to flames, preventing bursting and explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE Avoid breathing in inflamed products.

5.3 Advice for firefighters

GENERAL INFORMATION

In the event of fire, immediately cool the containers to avoid hazardous explosions (with decomposition of the product, excess pressure) and development of potentially hazardous substances for health. Always wear complete fire fighting equipment. If possible and without risk, move the containers of the product away from the fire. EQUIPMENT.

Wear normal fire fighting gear, such as an open circuit compressed air breathing apparatus (EN 137), fire retardant clothing (EN 469), fire retardant gloves (EN 659) and fire-fighter boots (HO A29 or A30).

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear appropriate personal protective equipment: avoid breathing. These indications apply to both workers and emergency intervention operators.

6.2 Environmental precautions

Prevent the product penetrating sewers, surface water and groundwater.

6.3 Methods and material for containment and cleaning up

Dike with earth or inert material. Collect most of the material and remove the residue with jets of water. Disposal of the material contaminated product 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 can be found in sections 8 and 13.



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Section 7: Handling and storage

7.1 Precautions for safe handling

Handle the product having firstly consulted all the sections of this safety data sheet. Avoid dispersion of the product in the environment. Do not eat, drink or smoke during use. Separate work clothing from normal clothing.

7.2 Conditions for safe storage, including any incompatibilities

Only store in the original container. Keep the containers closed, in a well-ventilated area, away from direct sunlight. Keep the containers far from any incompatible materials, checking section 10.

7.3 Specific end use(s).

Industrial use.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Reference Standards: ITA EU OEL EU

LEGISLATIVE DECREE 9.04.2008, 81 Directive (UE) 2017/2398; Directive (UE) 2017/164; Directive 2009/161/UE; Directive 2006/15/CE; Directive 2004/37/CE; Directive 2000/39/CE; Directive 91/322/CEE.

BUTILDIGLICOLE Threshold limit value					
Туре	Status	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VLEP	ITA	67,5	10	101,2	15
OEL	EU	67,5	10	101,2	15

Reference value of not EFFECT on the ENVIRONMENT

reference value in sea water	0,11	Mg/l
reference value for sediments in fresh water	4,4	Mg/kg
reference value for sediments in sea water	0,44	Mg/kg
reference value for water, intermittent release	11	Mg/l
reference value for STP microorganisms	200	Mg/l
reference value for the food chain (secondary poisoning)	56	Mg/kg
reference value for the terrestrial compartment	0,32	Mg/kg

Health - Derived no DNEL / DN							
EFFECTS ON CONSUMERS			EFFECTS ON WORKERS				
route of exposure	acute systemic (effects)	acute systemic (effects)	effects on workers	chronic local (effects)			acute systemic (effects)
inhalation				15 Mg/kg	101,2 mg/m3	10mg/kg	67,5 mg/m3
dermal							83 mg/kg/d

Legend:

C) = CEILING; INHALAB = Inhalable Fraction; BREATH = Breathable Fraction; TORAC = Thoracic Fraction; VND = identified danger, but no DNEL/PNEC available; NEA = no expected exposure; NEA = no identified danger



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8.2 Exposure controls

Air the environment well. Observe the usual safety precautions when handling chemicals. HAND PROTECTION: is not necessary. SKIN CONTACT: is not necessary. EYE CONTACT: is not necessary. Operate however according to good working practices. INHALATION: is not necessary. Operate however according to good working practices.

ENVIRONMENTAL EXPOSURE CONTROL.

Emissions from production processes, including those from ventilation equipment, should be monitored for regulatory compliance environmental protection.

Section 9: Physical and chemical properties

PROPERTIES VALUE Physical State Liquid Color Colorless Odor Odorless Odor threshold Not available pН 8.1 Melting or freezing point Not available Initial boiling point Not available Boiling range Not available Flash point Not available Evaporation rate Not available Flammability of solids and gases Not applicable (liquid product) Lower flammability limit Not available Upper flammability limit Not available Lower explosive limit Not applicable Upper explosion limit Not applicable Vapor pressure Not available Vapor density Not available Relative density 1 Solubility Completely Soluble in water Partition coefficient Not available Auto-ignition temperature Not available Decomposition temperature Not available Not available Viscosity Explosive properties Non-explosive product Oxidizing properties Not oxidizing

9.1 Information on basic physical and chemical properties environmental protection legislation.

9.2 Other information VOC (Directive 2010/75/EC): 0

VOC (volatile carbon): 0



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Section 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

The product is stable in normal use and storage conditions.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

None in particular. However, comply with the usual precautions for chemical products.

10.5 Incompatible materials

ACIDS

10.6 Hazardous decomposition products

No info

Section 11: Toxicological information

In the absence of test toxicology data on the product itself, the possible hazards to health of the product were evaluated based on the chemical properties contained, according to the reference legislation outlined for the classification. Therefore consider the concentration of individual hazardous substances possibly mentioned in sect. 3 to evaluate the toxicological effects deriving from exposure to the product.

11.1 Information on toxicological effects

Metabolism, kinetics, mechanism of action and other information: Information not available. Information on likely routes of exposure: Information not available. Immediate, delayed, and chronic effects from short and long-term exposure: Information not available. Interactive effects: Information not available.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: Not classified (no relevant component) LD50 (Oral) of the mixture: Not classified (no relevant component) LD50 (Cutaneous) of the mixture: Not classified (no relevant component)

BUTYLDIGLYCOL LD50 (Oral) 2410 mg / kg (OECD Guideline 401) LD50 (Cutaneous) 2764 mg / kg (OECD Guideline 402) LC50 (Inhalation)> 29 mg / I / 1h Weakly toxic as a result of only one ingestion. Weakly toxic by skin contact. Inhalation of a highly saturated vapor-air mixture is not an acute risk.

SODIUM BICARBONATE LD50 (Oral) 4220 mg / kg rat

SKIN CORROSION / CUTANEOUS IRRITATION Does not meet the classification criteria for this hazard class

BUTYLDIGLYCOL Experimental / calculated data: Skin corrosion / irritation rabbit: non-irritant. (OECD Guideline 404).

SERIOUS OCULAR DAMAGE / EYE IRRITATION Does not meet the classification criteria for this hazard class. In particularly sensitive individuals, irritation may occur.

BUTYLDIGLYCOL Experimental / calculated data: Serious eye damage / irritation rabbit: Irritant. (similar to OECD Guideline 405).



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RESPIRATORY OR CUTANEOUS SENSITIZATION Does not meet the classification criteria for this hazard class

BUTYLDIGLYCOL

Evaluation of the sensitizing effect: Tests on animals did not show sensitizing action. Experimental / calculated data: Guinea Pig Maximization Test guinea pig: non-sensitizer (OECD - guideline 406).

MUTAGENICITY ON GERMINAL CELLS Does not meet the classification criteria for this hazard class

BUTYLDIGLYCOL

Assessment of mutagenicity: The substance was not mutagenic on bacteria. The substance was not mutagenic for a mammalian cell culture. The substance does not have shown mutagenic effects in experiments on mammals.

CARCINOGENICITY Does not meet the classification criteria for this hazard class.

BUTYLDIGLYCOL Evaluation of carcinogenicity: The chemical structure does not cause particular suspicions of such an effect.

TOXICITY FOR REPRODUCTION Does not meet the classification criteria for this hazard class.

BUTYLDIGLYCOL Evaluation of reproductive toxicity: Results from animal studies do not show effects of impairment of fertility. Harmful effects on the development of offspring.

BUTYLDIGLYCOL Evaluation of teratogenicity: Animal tests did not reveal fetal damage.

SPECIFIC TOXICITY FOR TARGET ORGANS (STOT) - SINGLE EXPOSURE Does not meet the classification criteria for this hazard class.

SPECIFIC TOXICITY FOR TARGET ORGANS (STOT) - REPEATED EXPOSURE Does not meet the classification criteria for this hazard class.

BUTYLDIGLYCOL

Assessment of toxicity following repeated administration:

No repeated organ toxicity of the substance was observed after repeated administration. Prolonged or repeated contact may cause mild

skin irritations.

DANGER IN CASE OF ASPIRATION Does not meet the classification criteria for this hazard class.

Section 12: Ecological information

Use according to good working practices, avoiding release of the product in the environment. Notify the competent authorities if the product has reached waterways or it has contaminated the ground or vegetation.

12.1 Toxicity BUTYLDIGLYCOL

Aquatic plants: EC50 (96 h)> 100 mg / I (growth rate), Scenedesmus subspicatus (OECD - guideline 201, static) Nominal concentration. LC50 - Fish 1300 mg / I / 96h Lepomis macrochirus (OECD Guideline 203, static) EC50 - Crustaceans> 100 mg / I / 48h Daphnia magna (Dir.92 / 69 / EEC, C.2, static) EC10 Algae / Aquatic Plants> 1995 mg / I / 30 min (growth rate), Scenedesmus subspicatus-OECD - guideline 201

SODIUM BICARBONATE

LC50 - Fish 7550 mg / I / 96h Gambusia affinis



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EC50 - Crustaceans 2350 mg / I / 48h Daphnia magna NOEC Chronic Crustaceans> 576 mg / I (21 days) Daphnia magna NOEC Chronic Algae / Aquatic Plants 650 mg / I (5 days) Nitzschia linearis W. Sm.

12.2 Persistence and degradability

Info not available

12.3 Bioaccumulative potential

Info not available

12.4 Mobility in soil

Info not available

12.5 Results of PBT and vPvB assessment

This product is none, or does not contain a substance called a PBT or vPvB (%> 0,1)

12.6 Other adverse effects

Info not available

Section 13: Disposal considerations

13.1 Waste treatment methods

Reuse, if possible. The residues of the product as such are to be considered non-hazardous special waste.

Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations. CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in accordance with national waste management regulations.

Section 14: Transport information

The product is not to be considered dangerous according to the provisions in force concerning the transport of dangerous goods by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1 UN number:

Not applicable.

- **14.2 UN proper shipping name:** Not applicable.
- **14.3 Transport hazard class(es):** Not applicable.
- **14.4** Packing group: Not applicable.
- **14.5 Environmental hazards:** Not applicable.
- **14.6** Special precautions for user: Not applicable.
- **14.7** Transport in bulk according to Annex II of Marpol and the IBC Code: Information not relevant.



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Section 15: Regulatory information

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

Seveso category - Directive 2012/18 / EC: None

Restrictions related to the product or substances contained according to Annex XVII Regulation (EC) 1907/2006 Substances contained

Point 55 BUTILDIGLICOLE Nr. Reg .: 01-2119475104-44-xxxx

Substances in Candidate List (Article 59 REACH)

Based on the available data, the product does not contain SVHC substances in percentages greater than 0.1%.

Substances subject to authorization (Annex XIV REACH): None Substances subject to export notification obligation Reg. (CE) 649/2012: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None

Sanitary checks: Information not available

15.2. Evaluation of chemical safety

A chemical safety assessment has been performed for the following substances: Butyldiglycol.

Section 16: Other information

Further information

Text of the hazard (H) indications mentioned in sections 2-3 of the sheet:Eye Irrit. 2Eye irritation, category 2H319Causes serious eye irritation.EUH210Safety data sheet available on request.

LEGEND:

- ADR: European Agreement for the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service number
- EC50: Concentration that gives effect to 50% of the population
- CE NUMBER: ID number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived level without effect
- EmS: Emergency Schedule
- GHS: Global harmonized system for the classification and labeling of chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subjected to tests
- IMDG: International Maritime Code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable concentration without effects
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any time of work exposure.
- TWA STEL: Short-term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulant according to REACH
- WGK: Aquatic hazard class (Germany)



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GENERAL BIBLIOGRAPHY:

- 1. Regulation (CE) 1907/2006 of the European Parliament (REACH)
- 2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
- 3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
- 4. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
- 5. Regulation (EU) 618/2012 of the European Parliament (III Atp CLP)
- 6. Regulation (EU) 487/2013 of the European Parliament (IV Atp CLP)
- 7. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
- 8. Regulation (EU) 605/2014 of the European Parliament (VI Atp CLP)
- 9. Regulation (EU) 830/2015 of the European Parliament
- 10. Regulation (EU) 1221/2015 of the European Parliament (VII Atp CLP)
- 11. Regulation (EU) 918/2016 of the European Parliament (VIII Atp. CLP)
- 12. Regulation (EU) 1179/2016 (IX Atp CLP)
- 13. Regulation (EU) 776/2017 (X Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA Agency website
- Database of SDS models of chemical substances Ministry of Health and Istituto Superiore di Sanità
- Note to the user:

The information contained in this sheet is based on the knowledge available from us at the date of the last 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 under his own responsibility current provisions on hygiene and safety. We do not take responsibility for improper use.

Provide adequate training for personnel involved in the use of chemical products.

Safety Data Sheet n.1 of 04/02/19.