

**SAFETY DATA SHEET**  
in accordance with Regulation (CE) Num. 1907/2006

NEOFER  
cod.54001?-54002?-54003?-54005?  
Revision: 2.1/ EN

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Date of print: 15/05/2018  
Date of review: 22/11/2017

## Safety data sheet

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

#### 1.1. Product identifier.

Code: 54001? – 54002? – 54003? – 54005?  
Product name: NEOFER

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

Intended use. Rust converter.  
Uses advised against This product is not recommended for all those uses not specifically identified on the label.

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

Name. SARATOGA INT. SFORZA S.P.A.  
Full address. Via T. Edison 76  
District and Country. 20090 Trezzano s/Naviglio (MI)  
ITALIA

Fax. +39 02 4452742

e-mail address of the competent person.

responsible for the Safety Data Sheet. trading@saratogasforza.com

#### 1.4. Emergency telephone number.

For urgent inquiries refer to.

Saratoga Int. Sforza S.p.A. Tel.+039 02445731 ( 09:00 – 13:00; 14:00 – 17:00 )

### SECTION 2. Hazards identification.

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

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).  
However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.  
Hazard classification and indication:

#### 2.2. Label elements.

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

Hazard pictograms: --

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Signal words: --

Hazard statements:

--

Precautionary statements:

**P102** Keep out of reach of children.

**2.3. Other hazards.**

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

**SECTION 3. Composition/information on ingredients.**

**3.2. Mixtures.**

Contains:

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

**Identification.**

**Classification 1272/2008  
(CLP).**

**2-BUTOXYETHANOL**

CAS. 111-76-2

$1 \leq x < 5$

Acute Tox. 4 H302, Acute  
Tox. 4 H312, Acute Tox. 4  
H332, Eye Irrit. 2 H319, Skin  
Irrit. 2 H315

EC. 203-905-0

INDEX. 603-014-00-0

Reg. no. 01-2119475108-36

**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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

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

For symptoms and effects caused by the contained substances, see chap. 11.

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**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 fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures.**

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

**6.2. Environmental precautions.**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. 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.

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**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):  
10

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

Information not available.

**SECTION 8. Exposure controls/personal protection.**

**8.1. Control parameters.**

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
TUR	Türkiye	2000/39/EC sayılı Direktifin ekidir
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2016

**2-BUTOXYETHANOL**

**Threshold Limit Value.**

Type	Country	TWA/8h	STEL/15min
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		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	49	10	196	40	SKIN.
MAK	DEU	49	10	98	20	SKIN.
VLA	ESP	98	20	245	50	SKIN.
VLEP	FRA	49	10	246	50	SKIN.
WEL	GBR	123	25	246	50	SKIN.
TLV	GRC	120	25			
VLEP	ITA	98	20	246	50	SKIN.
NDS	POL	98		200		
ESD	TUR	98	20	246	50	SKIN.
OEL	EU	98	20	246	50	SKIN.
TLV-ACGIH		97	20			

Predicted no-effect concentration - PNEC.

Normal value in fresh water	88	mg/l
Normal value in marine water	88	mg/l
Normal value for fresh water sediment	346	mg/kg
Normal value for water, intermittent release	91	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	2	mg/kg
Normal value for the terrestrial compartment	313	mg/kg

**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
Oral.				3.2 mg/kg bw/d				
Inhalation.				49 mg/m3				98 mg/m3
Skin.				38 mg/kg bw/d				75 mg/kg bw/d

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.

TLV of solvent mixture: 72 mg/m3.

**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. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

**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 I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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**EYE PROTECTION**

Wear airtight protective 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 A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**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.

Appearance	liquid
Colour	milky
Odour	mild
Odour threshold.	Not available.
pH.	Acido
Melting point / freezing point.	Not applicable.
Initial boiling point.	100 °C.
Boiling range.	n.a. °C.
Flash point.	Not applicable.
Evaporation Rate	Not available.
Flammability of solids and gases	not applicable
Lower inflammability limit.	Not applicable.
Upper inflammability limit.	Not applicable.
Lower explosive limit.	Not applicable.
Upper explosive limit.	Not applicable.
Vapour pressure.	4 mmHg
Vapour density	Not available.
Relative density.	ca. 1,15
Solubility	miscible
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not applicable.
Decomposition temperature.	Not applicable.
Viscosity	<20,5 mm2/sec (40°C)
Explosive properties	not applicable
Oxidising properties	not applicable

### 9.2. Other information.

Total solids (250°C / 482°F)	42,20 %
VOC (Directive 2010/75/EC) :	2,09 %
VOC (volatile carbon) :	1,25 %

## SECTION 10. Stability and reactivity.

### 10.1. Reactivity.

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

2-BUTOXYETHANOL  
Decomposes under the effect of heat.

**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.

2-BUTOXYETHANOL  
May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

**10.4. Conditions to avoid.**

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

2-BUTOXYETHANOL  
Avoid exposure to: sources of heat, naked flames.

**10.5. Incompatible materials.**

Information not available.

**10.6. Hazardous decomposition products.**

2-BUTOXYETHANOL  
May develop: hydrogen.

**SECTION 11. Toxicological information.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.  
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**11.1. Information on toxicological effects.**

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**ACUTE TOXICITY.**

LC50 (Inhalation - vapours) of the mixture:> 20 mg/l  
LC50 (Inhalation - mists / powders) of the mixture:Not classified (no significant component).  
LD50 (Oral) of the mixture:>2000 mg/kg  
LD50 (Dermal) of the mixture:>2000 mg/kg

2-BUTOXYETHANOL  
LD50 (Oral).615 mg/kg Rat  
LD50 (Dermal).405 mg/kg Rabbit  
LC50 (Inhalation).2,2 mg/l/4h Rat

**SKIN CORROSION / IRRITATION.**

Does not meet the classification criteria for this hazard class.

**SERIOUS EYE DAMAGE / IRRITATION.**

Does not meet the classification criteria for this hazard class.

**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.**

Does not meet the classification criteria for this hazard class.

**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.

## 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.

Information not available.

### 12.2. Persistence and degradability.

#### 2-BUTOXYETHANOL

Solubility in water. 1000 - 10000 mg/l

Rapidly biodegradable.

### 12.3. Bioaccumulative potential.

#### 2-BUTOXYETHANOL

Partition coefficient: n-octanol/water. 0,81

### 12.4. Mobility in soil.

Information not available.



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**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 greater than 0,1%.

**12.6. Other adverse effects.**

Information not available.

**SECTION 13. Disposal considerations.**

**13.1. Waste treatment methods.**

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**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.**

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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.

**SECTION 15. Regulatory information.**

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

Seveso Category - Directive 2012/18/EC:

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

None.

Substances in Candidate List (Art. 59 REACH).

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

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Information not available.

WGK 1: Low hazard to waters

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**15.2. Chemical safety assessment.**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**SECTION 16. Other information.**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 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

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10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament

- 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

- ECHA website

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.

Changes to previous review:

The following sections were modified:

01 / 02.