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# Safety data sheet according to U.S.A. Federal Hazcom 2012

## 1. Identification

#### 1.1. Product identifier

Product name STRONG EDGE-B EXPRESS

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

Intended use LIQUID EPOXY HARDENER.

Identified Uses	Industrial	Professional	Consumer
ADHESIVE SYSTEM/TREATMENT	FOR STONE		
SECTOR	-	$\checkmark$	-
1.3. Details of the supplier of the safe	ety data sheet		
Name	Tenax Spa		
Full address	Via I Maggio, 226		
District and Country	37020 Volargne		(VR)
	Italy		

e-mail address of the competent person

responsible for the Safety Data Sheet msds@tenax.it

Product distribution by: TENAX USA - 7606 Whitehall Executive Center Drive - Unit 400 - Charlotte NC

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28273 Tel. +1 704-583-1173 - Tel: (800) 341 0432 - Fax +1 704-583-3166 -

info@tenaxusa.com

1.4. Emergency telephone number

For urgent inquiries refer to 1-800-5355053 (1-352-323-3500 international)

Tel.

Fax

# 2. Hazards identification

# 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Reproductive toxicity, category 2 Acute toxicity, category 4 Skin corrosion, category 1B Serious eye damage, category 1

Skin sensitization, category 1

Hazard pictograms:

Suspected of damaging fertility or the unborn child.

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage. May cause an allergic skin reaction.







Signal words: Danger

Hazard statements:

**H361** Suspected of damaging fertility or the unborn child.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.H317 May cause an allergic skin reaction.

Precautionary statements:

Prevention:



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#### 2. Hazards identification ...

**P201** Obtain special instructions before use.

**P202** Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust / fume / gas / mist / vapours / spray.
P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P264 Wash . . . thoroughly after handling.

**P270** Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

**P280** Wear protective gloves / clothing and eye / face protection.

Response:

P301+P312 IF SWALLOWED: Call a POISON CENTER / doctor / . . . / if you feel unwell.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: wash with plenty of water / . .

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice / attention.
P310 Immediately call a POISON CENTER / doctor / . . .

P330 Rinse mouth.

**P333+P313** If skin irritation or rash occurs: Get medical advice / attention.

**P363** Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

**P501** Dispose of contents / container according to applicable law.

#### 2.2. Other hazards

Environmental classification as for Reg. (EU) 1272/2008 (CLP):

The product is classified as hazardous for environment pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).

Classification and Hazard Statement

Hazardous to the aquatic environment, chronic toxicity, category 2

Toxic to aquatic life with long lasting effects.

Hazard pictograms:



Hazard statements:

**H411** Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

**P273** Avoid release to the environment.

Response:

P391 Collect spillage.

Storage:

Disposal:

**P501** Dispose of contents / container according to applicable law.

Additional hazards Information not available

# 3. Composition/information on ingredients

#### 3.1. Substances

Information not relevant



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## Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification Conc. % Classification:

1,3-Bis(aminomethyl)cyclohexane

2579-20-6 Acute toxicity, category 4 H302, Acute toxicity, category 4 H312, Acute toxicity, CAS 40.96

category 4 H332, Skin corrosion, category 1B H314

Acute toxicity, category 4 H302, Acute toxicity, category 4 H332

EC 219-941-5

INDEX

BENZYL ALCOHOL

CAS 100-51-6 15.98

EC 202-859-9

INDEX 603-057-00-5

NONYL PHENOL

CAS 25154-52-3 14.98 Reproductive toxicity, category 2 H361fd, Acute toxicity, category 4 H302, Skin corrosion,

category 1B H314, Hazardous to the aquatic environment, acute toxicity, category 1 H400 M=1, Hazardous to the aquatic environment, chronic toxicity,

category 1 H410 M=1

EC 246-672-0 INDEX 601-053-00-8

**BISPHENOL A** 

CAS 80-05-7 9.99

Reproductive toxicity, category 2 H361f, Serious eye damage, category 1 H318, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization,

category 1 H317, Hazardous to the aquatic environment, chronic toxicity, category 2 H411

EC 201-245-8 INDEX 604-030-00-0

3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

CAS 2855-13-2 Acute toxicity, category 4 H302, Acute toxicity, category 4 H312, Skin corrosion,

category 1B H314, Skin sensitization, category 1 H317,

Hazardous to the aquatic environment, chronic toxicity, category 3 H412

FC 220-666-8 INDEX 612-067-00-9

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

# 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 evelids 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

# 5. Fire-fighting 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



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# 5. Fire-fighting measures .../>

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).

#### 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

# 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

# 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.

# 7.3. Specific end use(s)

Information not available

# 8. Exposure controls/personal protection

# 8.1. Control parameters

Information not available

# 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 comply with current regulations.

HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).

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.



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#### 8. Exposure controls/personal protection .../>>

#### 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.

**EYE PROTECTION** 

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). 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 or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84 and OSHA 29 CFR 1910.134.

**ENVIRONMENTAL EXPOSURE CONTROLS** 

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

(199,4 °F)

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

# 9. Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Appearance Not available Colour Not available Not available Odour Not available Odour threshold Not available Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Flash point 93 °C Not available Evaporation rate Flammability (solid, gas) Not available Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure Not available Vapour density Not available 1.00

Relative density

Relative density

Solubility

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

Explosive properties

Oxidising properties

Not available

Not available

Not available

Not available

9.2. Other information

VOC: 15,98 % - 159,80 g/litre VOC (volatile carbon): 12,41 % - 124,13 g/litre

# 10. Stability and reactivity

# 10.1. Reactivity

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

BENZYL ALCOHOL

Decomposes at temperatures above 870°C/1598°F.Possibility of explosion.

# 10.2. Chemical stability

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

# 10.3. Possibility of hazardous reactions



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#### 10. Stability and reactivity .../>

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

#### BENZYL ALCOHOL

May react dangerously with: hydrobromic acid,iron,oxidising agents,sulphuric acid.Risk of explosion on contact with: phosphorus trichloride.

#### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

May react dangerously with: strong oxidising agents, concentrated inorganic acids.

#### 10.4. Conditions to avoid

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

#### BENZYL ALCOHOL

Avoid exposure to: air, sources of heat, naked flames.

#### 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Avoid contact with: strong acids, strong oxidants.

#### 10.5. Incompatible materials

BENZYL ALCOHOL

Incompatible with: sulphuric acid,oxidising substances,aluminium.

#### 10.6. Hazardous decomposition products

Information not available

# 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

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

Interactive effects

Information not available

# ACUTE TOXICITY

LC50 (Inhalation) of the mixture: > 20 mg/l
LD50 (Oral) of the mixture: 987 mg/kg
LD50 (Dermal) of the mixture: >2000 mg/kg

 $1, 3\hbox{-Bis} (aminomethyl) cyclohexane$ 

 LD50 (Oral)
 700 mg/kg rat

 LD50 (Dermal)
 1700 mg/kg rat

NONYL PHENOL

 LD50 (Oral)
 580 mg/kg Rat

 LD50 (Dermal)
 2031 mg/kg Rabbit



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## 11. Toxicological information .../>>

BENZYL ALCOHOL

LD50 (Oral) 1230 mg/kg Rat LD50 (Dermal) 2000 mg/kg Rabbit

BISPHENOL A

 LD50 (Oral)
 3250 mg/kg rat

 LD50 (Dermal)
 3000 mg/kg rabbit

#### SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

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

Suspected of damaging fertility or the unborn child

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

# 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

# 12.1. Toxicity

1,3-Bis(aminomethyl)cyclohexane

LC50 - for Fish 130 mg/l/96h leuciscus idus

EC50 - for Algae / Aquatic Plants 90 mg/l/72h pseudomonas putida

NONYL PHENOL

LC50 - for Fish 0.19 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea 0.19 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 1.48 mg/l/72h Pseudokirchneriella subcapitata



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# 2. Ecological information ..../>>

**BISPHENOL A** 

LC50 - for Fish 4.6 mg/l/96h Pimephales promelas

EC50 - for Crustacea > 1 mg/l/48h Dapnia magna

EC50 - for Algae / Aquatic Plants 2.73 mg/l/72h Microalgae

Chronic NOEC for Fish 0.016 mg/l 444 d

Chronic NOEC for Crustacea 1.8 mg/l 48 h

#### 12.2. Persistence and degradability

1,3-Bis(aminomethyl)cyclohexane Degradability: information not available

BENZYL ALCOHOL Rapidly degradable

3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Solubility in water 1000 - 10000 mg/l

NOT rapidly degradable

BISPHENOL A
Rapidly degradable

#### 12.3. Bioaccumulative potential

BENZYL ALCOHOL

Partition coefficient: n-octanol/water 1.1

# 12.4. Mobility in soil

Information not available

#### 12.5. Results of PBT and vPvB assessment

Information not available

#### 12.6. Other adverse effects

Information not available

# 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.

# 14. Transport information

# 14.1. UN number

ADR / RID, IMDG, IATA: 2735

# 14.2. UN proper shipping name

ADR / RID: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. IMDG: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. IATA: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.

EPY 9.4.5 - SDS 1004.4



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# **Transport information**

## 14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8

IMDG: Class: 8 Label: 8

Class: 8 Label: 8 IATA:



# 14.4. Packing group

ADR / RID, IMDG, IATA:

#### 14.5. Environmental hazards

ADR / RID: **Environmentally Hazardous** 

IMDG: Marine Pollutant

IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

## 14.6. Special precautions for user

ADR / RID: Limited Quantities: 1 L HIN - Kemler: 80 Tunnel restriction code: (E)

Special Provision: -IMDG: EMS: F-A, S-B Limited Quantities: 1 L

Packaging instructions: 855 IATA: Cargo: Maximum quantity: 30 L

Pass.: Maximum quantity: 1 L Packaging instructions: 851

Special Instructions: A3, A803

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

# 15. Regulatory information

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

U.S. Federal Regulations

Clean Air Act Section 112(b):

No component(s) listed.

Clean Air Act Section 602 Class I Substances:

No component(s) listed.

Clean Air Act Section 602 Class II Substances:

No component(s) listed.

Clean Water Act – Priority Pollutants:

No component(s) listed.

Clean Water Act – Toxic Pollutants:

No component(s) listed.



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#### 15. Regulatory information ..../>

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:

80-05-7

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

No component(s) listed.

EPCRA 313 TRI:

80-05-7

RCRA Code:

No component(s) listed.

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations

Massachussetts:

100-51-6 BENZYL ALCOHOL

25154-52-3 NONYL PHENOL (Phenols)

80-05-7

Minnesota:

100-51-6 BENZYL ALCOHOL

New Jersey:

80-05-7

2855-13-2 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

New York:

No component(s) listed.

Pennsylvania:

100-51-6 BENZYL ALCOHOL

25154-52-3 NONYL PHENOL (Phenols)

80-05-7

California:

25154-52-3 NONYL PHENOL (Phenols)

Proposition 65:

This product does not contain any substances know to the State of California to cause cancer, reproductive harm or birth defects.

International Regulations

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

NONYL PHENOL - (NONYLPHENOLS)

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Candadian WHMIS

Information not available



# Tenax Spa

# STRONG EDGE-B EXPRESS

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# 16. Other information

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

Repr. 2 Reproductive toxicity, category 2
Acute Tox. 4 Acute toxicity, category 4
Skin Corr. 1B Skin corrosion, category 1B
Eye Dam. 1 Serious eye damage, category 1

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

**H361** Suspected of damaging fertility or the unborn child.

**H361f** Suspected of damaging fertility.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.

**H314** Causes severe skin burns and eye damage.

H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H317 May cause an allergic skin reaction.

**H400** Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

#### LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- 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
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- 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.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

# GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety



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#### 16. Other information ... / >

- Niosh Registry of Toxic Effects of Chemical Substances
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Comunication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"
- Minensota Chapter 5206 Departemnt Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

#### 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 / 03 / 04 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.