

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : N -Hydroxyurethane

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a dangerous substance according to GHS.
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C3H7NO3
Molecular Weight : 105,09 g/mol

CAS-No.	EC-No.		Classification	Concentration
Ethyl hydroxycarbamate 589-41-3	209-648-0	-	-	-

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: -20 °C

Handle and open container with care.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form clear, viscous, liquid
Colour dark red

Safety data

pH no data available
Melting point no data available

Boiling point 113 - 116 °C at 4 hPa
Flash point 113 °C - closed cup
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

LD50 Oral - rat - > 10.000 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

Genotoxicity in vitro - Mammal - lymphocyte
DNA damage

Genotoxicity in vitro - Hamster - Lungs
Mutation in mammalian somatic cells.

Genotoxicity in vitro - Hamster - Lungs
Sister chromatid exchange

Genotoxicity in vitro - mouse - Embryo
Cytogenetic analysis

Genotoxicity in vitro - mouse - Embryo
Morphological transformation.

Genotoxicity in vitro - rat - Liver
Unscheduled DNA synthesis

Genotoxicity in vitro - Human - leukocyte
Cytogenetic analysis

Genotoxicity in vitro - Human - HeLa cell
DNA inhibition

Genotoxicity in vivo - Hamster - Intraperitoneal
Sister chromatid exchange

Genotoxicity in vivo - mouse - Intraperitoneal
Sister chromatid exchange

Genotoxicity in vivo - rat - Intraperitoneal
Sister chromatid exchange

Carcinogenicity

Carcinogenicity - mouse - Intraperitoneal
Tumorigenic:Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Leukaemia

Carcinogenicity - mouse - Intraperitoneal
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Leukaemia

Carcinogenicity - mouse - Unreported
Tumorigenic:Neoplastic by RTECS criteria. Tumorigenic Effects: Uterine tumors. Lungs, Thorax, or Respiration:Tumors.

Carcinogenicity - rat - Subcutaneous
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Tumors.

Carcinogenicity - rat - Intraperitoneal
Tumorigenic:Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration:Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Reproductive toxicity - mouse - Subcutaneous
Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Developmental Toxicity - Hamster - Intraperitoneal
Effects on Embryo or Fetus: Fetal death.

Developmental Toxicity - Hamster - Intraperitoneal
Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Musculoskeletal system.

Developmental Toxicity - Hamster - Intraperitoneal
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Eye, ear.

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.

Additional Information

RTECS: FB1750000

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

Further information



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