5-Norbornene-2-carboxylic acid 120-74-1 MSDS

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

Product identifiers
Product name: 5-Norbornene-2-carboxylic acid, mixture of endo and exo, predominantly endo
REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
CAS-No.: 120-74-1

Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Manufacture of substances

SECTION 2: Hazards identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Skin corrosion (Category 1B), H314
For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC
C Corrosive R34
For the full text of the R-phrases mentioned in this Section, see Section 16.

Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram
Signal word Danger
Hazard statement(s)
H314 Causes severe skin burns and eye damage.
Precautionary statement(s)
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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 or doctor/ physician.
Supplemental Hazard Statements none

Other hazards - none

SECTION 3: Composition/information on ingredients

Substances
Formula: C8H10O2
Molecular Weight: 138,16 g/mol
SECTION 4: First aid measures

Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed
no data available

SECTION 5: Firefighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture
Carbon oxides
Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

Further information
no data available

SECTION 6: Accidental release measures
Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Evacuate personnel to safe areas.
For personal protection see section 8.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage
Precautions for safe handling
Avoid inhalation of vapour or mist.
Normal measures for preventive fire protection.
For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities
Store in cool place. 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.

Specific end use(s)
A part from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection
Control parameters
Components with workplace control parameters
Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment
Eye/face protection
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin 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.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and chemical properties
Information on basic physical and chemical properties
a) Appearance Form: liquid
Colour: colourless
b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing Melting point/range: 34 - 42 °C
point
f) Initial boiling point and 136 - 138 °C at 19 hPa - lit.
boiling range
g) Flash point 113 °C - closed cup
h) Evaporation rate no data available
i) Flammability (solid, gas) no data available
j) Upper/lower no data available
flammability or explosive limits
k) Vapour pressure no data available
l) Vapour density no data available
m) Relative density 1,129 g/cm3 at 25 °C
n) Water solubility no data available
o) Partition coefficient: n- no data available
octanol/water
p) Auto-ignition no data available
temperature
q) Decomposition no data available
temperature
r) Viscosity no data available
s) Explosive properties no data available
t) Oxidizing properties no data available
Other safety information
no data available

SECTION 10: Stability and reactivity

Reactivity
no data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Incompatible materials
Strong oxidizing agents, Strong bases

Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
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
no data available

Specific target organ toxicity - single exposure
no data available
Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information
RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath,
Headache, Nausea

SECTION 12: Ecological information

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects
no data available

SECTION 13: Disposal considerations

Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

UN number
ADR/RID: 3265 IMDG: 3265 IATA: 3265

UN proper shipping name
ADR/RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid)
IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid)
IATA: Corrosive liquid, acidic, organic, n.o.s. (Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid)

**Transport hazard class(es)**
ADR/RID: 8  IMDG: 8  IATA: 8

**Packaging group**
ADR/RID: III  IMDG: III  IATA: III

**Environmental hazards**
ADR/RID: no  IMDG Marine pollutant: no  IATA: no

**Special precautions for user**
no data available

**SECTION 15: Regulatory information**
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Safety, health and environmental regulations/legislation specific for the substance or mixture**
no data available

**Chemical Safety Assessment**
For this product a chemical safety assessment was not carried out

**SECTION 16: Other information**

**Full text of H-Statements referred to under sections 2 and 3.**
H314 Causes severe skin burns and eye damage.
Skin Corr. Skin corrosion

**Full text of R-phrases referred to under sections 2 and 3**
C Corrosive
R34 Causes burns.

**Further information**
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