

Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 5-Norbornene-2-carboxaldehyde

Compound ID: AR003NMS CAS Number: 5453-80-5

Indentified uses: Laboratory chemicals, manufacture of chemical compounds

Company: Aaron Chemicals LLC

Phone: +1 619-356-0497

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids.(Category 3), H226

For the full text of the H-Statements mentioned in this Section, see Section 16.

Pictogram



Signal Word danger

Hazard statements

H226 Flammable liquid and vapor

Precautionary statements

P403+P235 Store in a well-ventilated place. Keep cool.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: 5-Norbornene-2-carboxaldehyde

CAS Number: 5453-80-5
Molecular Formula: C8H100
Molecular Weight: 122 1600

Molecular Weight: 122.1600 g/mol

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

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

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 or section 11)

Indication of any immediate medical attention and special treatment needed

no data available

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, nitrogen oxides (NOx), Hydrogen bromide gas

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Inert atmosphere.

2-8°C.

Specific end use(s)

Apart from the uses mentioned in section 1, no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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

Face shield and safety glasses 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.

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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance / Form: liquid

Odor: no data available Odor Threshold: no data available pH: no data available Melting point: no data available Boiling point/range: 182.2°C at 760 mmHg Flash point: no data available Evapouration rate: no data available Flammability: no data available Upper/lower flammability: no data available explosive limits: no data available Vapor pressure: no data available Vapour density: no data available Relative density: no data available Water solubility: no data available Partition coefficient: no data available Auto-ignition temperature: no data available Decomposition Temp: no data available no data available log Pow: Viscosity: no data available Explosive properties: no data available Oxidizing properties: no data available

Other safety information no data available

10. STABILITY AND REACTIVITY

no data available Reactivity:

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous no data available

reactions

Conditions to avoid no data available Incompatible materials no data available no data available Hazardous decomposition

products

IARC:

NTP:

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

11. TOXICOLOGICAL INFORMATION

Classified based on available data. For more details, see section 2 Acute toxicity: Classified based on available data. For more details, see section 2 Skin corrosion/irritation: Classified based on available data. For more details, see section 2 Serious eye damage/irritation Respiratory or skin sensitisation Classified based on available data. For more details, see section 2 Classified based on available data. For more details, see section 2 Germ cell mutagenicity

Carcinogenicity:

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.

No component of this product present at levels greater than or equal to 0.1% ACGIH:

is identified as a carcinogen or potential carcinogen by ACGIH.

No component of this product present at levels greater than or equal to 0.1%

is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1%

OSHA: is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Specific target organ toxicity -

single exposure

no data available no data available

Specific target organ toxicity -

repeated exposure

no data available Aspiration hazard

Additional Information no data available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity no data available Persistence and degradability Bioaccumulative potential no data available no data available no data available no data available

Results of PBT and vPvB

PBT/vPvB assessment not available as chemical safety assessment not

assessment required/not conducted

Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods 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.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: UN 1989 IMDG: UN 1989 IATA-DGR: UN 1989

14.2 UN proper shipping name

ADR/RID: liquid, corrosive, n.o.s (5-Norbornene-2-carboxaldehyde) IMDG: liquid, corrosive, n.o.s (5-Norbornene-2-carboxaldehyde) liquid, corrosive, n.o.s (5-Norbornene-2-carboxaldehyde) liquid, corrosive, n.o.s (5-Norbornene-2-carboxaldehyde)

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA-DGR: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA-DGR: III

14.5 Environmental hazards

ADR/RID: - IMDG: - IATA-DGR: -

14.6 Special precautions for user

Further information: No data available

15. REGULATORY INFORMATION

No chemicals in this material are subject to the reporting requirements of

SARA 302: SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS

numbers that exceed the threshold (De Minimis) reporting levels established

No components are subject to the Massachusetts Right to Know Act.

by SARA Title III, Section 313.

Acute Health Hazard

SARA 311/312 Hazards

Massachusetts Right To Know

Components

Pennsylvania Right To Know

Components

New Jersey Right To Know

Components

omponents

California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.Acute toxicityEye Irrit.Eye irritationSkin Irrit.Skin irritation

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aaron Chemicals shall not be held liable for any damage resulting from handling or from contact with the above product. See invoice or packing slip for additional terms and conditions of sale.

