



MATERIAL SAFETY DATA SHEET

Section 1 - Product and Company Information

Product detail

Chemical Name: 3,4-Epoxycyclohexylmethyl-3,4-epoxycyclohexylcarboxylate

CAS Number: 2386-87-0

EC number: 219-207-4

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

Application of the substance / the preparation Laboratory chemicals

Manufacturer/Supplier

Lonwin Industry Group Limited

Address: Room A407, Tower A, Fagina Building, No 966 Huaxu Road,
Qingpu District, Shanghai, 201702, P.R. China.

Tel: 86-21-59885030

Tax: 86-21-65080210

Website: <http://www.lonwinchem.com>

Section 2 - Hazards Identification

2.1. Classification of the substance or mixture+

Classification according to Regulation (EC) No 1272/2008

Skin sensitisation (Category 1), H317

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

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008



Pictogram

Signal word Warning

Hazard-determining components of labelling:

7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

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

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

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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

P363 Wash contaminated clothing before reuse.

P321 Specific treatment (see on this label).

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3 - Composition/Information on Ingredients

3.1. Chemical characterization: Substances

CAS No. Description:

2386-87-0 7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate
97% min

Identification number(s):

EC number: 219-207-4

Section 4 - First Aid Measures

4.1. Description of first aid measures

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

After inhalation Supply fresh air and to be sure call for a doctor.

After skin contact Immediately wash with water and soap and rinse thoroughly.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.

Information for doctor

4.2. 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

4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5 - Fire Fighting Measures

5.1. Extinguishing media

Suitable extinguishing agents

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

5.2. Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information

Cool endangered receptacles with water spray.

Polymerisation caused by strong impact of heat may result in detonation of the receptacle.

Section 6 - Accidental Release Measures

6.1. Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

6.2. Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up:

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

6.4. Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Combustible liquids

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8 - Exposure Controls / Personal Protection

8.1 Control parameters

8.2 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

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.

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 (US) or type ABEK (EN14387)

respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators

and components tested and approved under appropriate government standards such as NIOSH (US) orCEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the

environment must be avoided

Section 9 - Physical/Chemical Properties

9.1. Information on basic physical and chemical properties

- a) Appearance Form: viscous liquid, Colour: colourless
- b) Melting point/freezingpoint Melting point/range: -37 °C - lit.
- c) Initial boiling point andboiling range 170 °C
- d) Flash point 193 °C - closed cup
- e) Vapour pressure < 0.01 mmHg at 20 °C
- f) Relative density 1.17 g/mL at 25 °C
- g) Water solubility < 1 g/l at 20 °C
- h) Partition coefficient: noctanol / water log Pow: 1.34

9.2. Other information

No further relevant information available.

Section 10 - Stability and Reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Thermal decomposition / conditions to be avoided: Stable at ambient temperature

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No further relevant information available.

10.5. Incompatible materials:

No further relevant information available.

10.6. Hazardous decomposition products:

Section 11 - Toxicological Information

11.1. Information on toxicological effects

Acute toxicity:

Acute toxicity

LD50 Oral - Rat - 4,490.0 mg/kg

LD50 Dermal - Rabbit - 2,346.0 mg/kg

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

Kidney injury may occur., Liver injury may occur., Respiratory disorders

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

Section 12 - Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Harmful to aquatic life

Section 13 - Disposal Considerations

13.1. Waste treatment methods

Product

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

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

Section 15 - Regulatory Information

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

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

15.2. Chemical safety assessment:

For this product a chemical safety assessment was not carried out

Section 16 - Other Information

Warranty

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall **Lonwin Industry Group Limited** be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if **Lonwin Industry Group Limited** has been advise the

possibility of such damages.