

SAFETY DATA SHEET 1,8-Diazabicyclo(5.4.0)undec-7-ene

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

1.1. Product identifier

Product name 1,8-Diazabicyclo(5.4.0)undec-7-ene

CAS number 6674-22-2

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

1.3. Details of the supplier of the safety data sheet

Supplier Molekula Ltd.

Lingfield Way, Darlington, DL1 4XX, United Kingdom +44 (0) 3302000333 info@molekula.com

1.4. Emergency telephone number

+44 (0) 7769276927

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Acute Tox. 3 - H301 Skin Corr. 1B - H314 Eye Dam. 1 - H318

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms





Signal word Danger

Hazard statements H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects.

1,8-Diazabicyclo(5.4.0)undec-7-ene

Precautionary statements P260 Do not breathe vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or 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.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name 1,8-Diazabicyclo(5.4.0)undec-7-ene

CAS number 6674-22-2

SECTION 4: First aid measures

- 4.1. Description of first aid measures
- 4.2. Most important symptoms and effects, both acute and delayed
- 4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
- 5.2. Special hazards arising from the substance or mixture
- 5.3. Advice for firefighters

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
- 6.2. Environmental precautions
- 6.3. Methods and material for containment and cleaning up
- 6.4. Reference to other sections

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
- 7.2. Conditions for safe storage, including any incompatibilities
- 7.3. Specific end use(s)

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

STEL:

TWA:

8.2. Exposure controls

SECTION 9: Physical and chemical properties

1,8-Diazabicyclo(5.4.0)undec-7-ene

9.1. Information on basic physical and chemical properties

Appearance Colourless to pale yellow liquid.

Odour Not known.

Odour threshold No information available.

pH (concentrated solution): 12.8 10g/l

Melting point -70°C/-94°F

Initial boiling point and range 261°C/501.8°F @ 760 mm Hg

Flash point 116°C/240.8°F

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Upper/lower flammability or

explosive limits

Upper flammable/explosive limit: 6.50% (V) Lower flammable/explosive limit: 1.00% (V)

Vapour pressure0.02 mbar @ 25°C/77°FVapour densityNo information available.Relative density1.018 g/cm3 @ 20°C/68°F

Solubility(ies) Soluble in water.

Partition coefficient No information available.

Auto-ignition temperature 260°C/500°F

Decomposition Temperature No information available. **Viscosity** 11.76 mPa s @ 20°C/68°F

9.2. Other information

Molecular weight 152.24

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 215.0

mg/kg)

Species Rat
ATE oral (mg/kg) 215.0

SECTION 12: Ecological information

12.1. Toxicity

1,8-Diazabicyclo(5.4.0)undec-7-ene

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Partition coefficient No information available.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3267 UN No. (IMDG) 3267 UN No. (ICAO) 3267 UN No. (ADN) 3267

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (1,8-Diazabicyclo(5.4.0)undec-7-ene)

Proper shipping name (IMDG) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (1,8-Diazabicyclo(5.4.0)undec-7-ene)

Proper shipping name (ICAO) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (1,8-Diazabicyclo(5.4.0)undec-7-ene)

Proper shipping name (ADN) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (1,8-Diazabicyclo(5.4.0)undec-7-ene)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C7

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

Transport labels



14.4. Packing group

IMDG packing group

ADR/RID packing group Ш

ICAO packing group Ш

Ш

Ш

ADN packing group

14.5. Environmental hazards

1,8-Diazabicyclo(5.4.0)undec-7-ene

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

IMDG Code segregation 18. Alkalis

group

EmS F-A, S-B

ADR transport category 2

Emergency Action Code 2X

Hazard Identification Number

(ADR/RID)

Tunnel restriction code (E)

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

80

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment

Inventories

US - TSCA

Present.

SECTION 16: Other information

Revision date 06/03/2023

Revision 1

SDS number 2179

Hazard statements in full H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.