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

1.1 Product identifier

- Trade name: 1,3-dimethylimidazolidin-2-one
- Article number: 0907
- CAS Number: 80-73-9
- EC number: 201-304-8

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:
  - Biosolve Chimie
  - 20 Rue Roger Husson, 57260 Dieuze, France
  - Tel: +33 3 878 675 80/81/82/83/84/85
  - Email: info@biosolvechimie.com
  - Biosolve B.V.
  - Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
  - Tel: +31-(0)40-2071300
  - Fax:+31-(0)40-2048537
  - Email: info@biosolve-chemicals.com

1.4 Emergency telephone number:

For emergency telephone numbers of the poisons centers in Europe please use this link: http://www.eapcct.org/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

- GHS08 health hazard
- STOT RE 2  H373  May cause damage to organs through prolonged or repeated exposure.
- GHS05 corrosion
- Eye Dam. 1  H318  Causes serious eye damage.
- GHS07
- Acute Tox. 4  H302  Harmful if swallowed.

(Contd. on page 2)
2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05  GHS07  GHS08

Signal word Danger

Hazard statements

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear eye protection / face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
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/doctor.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances

CAS No. Description
80-73-9 1,3-dimethylimidazolidin-2-one

Identification number(s)
EC number: 201-304-8

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters
Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions: Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid breathing vapor. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.

Further information about storage conditions:
Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket. Store at around 20°C.
Keep container tightly sealed.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Store protective clothing separately.
  - Avoid contact with the eyes.
  - Avoid contact with the eyes and skin.
- Respiratory protection:
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Protection of hands:
  - Protective gloves
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - Material of gloves
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
  - Penetration time of glove material
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection:
    - Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Liquid
  - Colour: Colourless
  - Odour: Characteristic
  - Odour threshold: Not determined.
- pH-value: Not determined.

(Contd. on page 5)
Change in condition

- Melting point/freezing point: 8 °C
- Initial boiling point and boiling range: 224-226 °C

Flash point: 114 °C

Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:
- Lower: 1.3 Vol %
- Upper: 8.4 Vol %

Vapour pressure at 20 °C: <1 hPa

Density at 20 °C: 1.056 g/cm³

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with water: Fully miscible.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:
- Dynamic: Not determined.
- Kinematic at 40 °C: 1.43 mm²/s

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Harmful if swallowed.

LD/LC50 values relevant for classification:

- Oral LD50: 1,261 mg/kg (rat)
- Dermal LD50: 986 mg/kg (rabbit)
46.2.1 · Primary irritant effect:
· Skin corrosion/irritation Based on available data, the classification criteria are not met.
· Serious eye damage/irritation
Causes serious eye damage.
· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
· Germ cell mutagenicity Based on available data, the classification criteria are not met.
· Carcinogenicity Based on available data, the classification criteria are not met.
· Reproductive toxicity Based on available data, the classification criteria are not met.
· STOT-single exposure Based on available data, the classification criteria are not met.
· STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure.
· Aspiration hazard Based on available data, the classification criteria are not met.

*SECTION 12: Ecological information

· 12.1 Toxicity
· Aquatic toxicity: No further relevant information available.
· 12.2 Persistence and degradability No further relevant information available.
· 12.3 Bioaccumulative potential No further relevant information available.
· 12.4 Mobility in soil No further relevant information available.
· Additional ecological information:
· General notes: Must not reach sewage water or drainage ditch undiluted or unneutralised.
· 12.5 Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.
· 12.6 Other adverse effects No further relevant information available.

*SECTION 13: Disposal considerations

· 13.1 Waste treatment methods
· Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue
HP 4 Irritant - skin irritation and eye damage
HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6 Acute Toxicity

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.
· Recommended cleansing agents: Water, if necessary together with cleansing agents.

*SECTION 14: Transport information

· 14.1 UN-Number
· ADR, IMDG, IATA
UN2810
Trade name: 1,3-dimethylimidazolidin-2-one

(Contd. of page 6)

14.2 UN proper shipping name
- ADR UN2810 TOXIC LIQUID, ORGANIC, N.O.S. (1,3-dimethylimidazolidin-2-one)
- IMDG, IATA TOXIC LIQUID, ORGANIC, N.O.S. (1,3-dimethylimidazolidin-2-one)

14.3 Transport hazard class(es)
- ADR
  - Class 6.1 (T1) Toxic substances.
  - Label 6.1

- IMDG, IATA
  - Class 6.1 Toxic substances.
  - Label 6.1

14.4 Packing group
- ADR, IMDG, IATA III

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
- Warning: Toxic substances.
- Danger code (Kemler): 60
- EMS Number: F-A,S-A

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
- Not applicable.

Transport/Additional information:
- ADR
  - Limited quantities (LQ) 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
  - Transport category 2
  - Tunnel restriction code E
- UN "Model Regulation": UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (1,3-DIMETHYLIMIDAZOLIDIN-2-ONE), 6.1, III

(Contd. on page 8)
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.04.2018
Revision: 29.01.2018

Trade name: 1,3-dimethylimidazolidin-2-one

(Contd. of page 7)

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
· Labelling according to Regulation (EC) No 1272/2008
  The substance is classified and labelled according to the CLP regulation.
· Hazard pictograms

  GHS05  GHS07  GHS08

· Signal word  Danger
· Hazard statements
  H302 Harmful if swallowed.
  H318 Causes serious eye damage.
  H373 May cause damage to organs through prolonged or repeated exposure.
· Precautionary statements
  P260 Do not breathe dust/fume/gas/mist/vapours/spray.
  P280 Wear eye protection / face protection.
  P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  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/doctor.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· Directive 2012/18/EU
· Named dangerous substances - ANNEX I Substance is not listed.
· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department
· Contact: Product safety department
· Abbreviations and acronyms:
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Acute Tox. 4: Acute toxicity – Category 4
  Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
· * Data compared to the previous version altered.