

(R)-1-BENZYL-3-HYDROXYPYRROLIDINE

Page: 1

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# Section 1: Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

Product name: (R)-1-BENZYL-3-HYDROXYPYRROLIDINE

**CAS number:** 101930-07-8

Product code: OR4621

Synonyms: (R)-1-BENZYLPYRROLIDIN-3-OL

# 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

Company name: Apollo Scientific Ltd

Units 3 & 4
Parkway
Denton
Manchester
M34 3SG

UK

**Tel:** 0161 337 9971 **Fax:** 0161 336 6932

Email: david.tideswell@apolloscientific.co.uk

# 1.4. Emergency telephone number

### Section 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification under CLP: STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

Most important adverse effects: Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

# 2.2. Label elements

Label elements:

Hazard statements: H315: Causes skin irritation.

H319: Causes serious eye irritation.H335: May cause respiratory irritation.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark



(R)-1-BENZYL-3-HYDROXYPYRROLIDINE

Page: 2

Precautionary statements: P261: Avoid breathing dust.

P271: Use only outdoors or in a well-ventilated area.

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

#### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

# Section 3: Composition/information on ingredients

#### 3.1. Substances

Chemical identity: (R)-1-BENZYL-3-HYDROXYPYRROLIDINE

CAS number: 101930-07-8

#### Section 4: First aid measures

# 4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash

immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a

doctor.

# 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may

cause coughing or wheezing.

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

# Section 5: Fire-fighting measures

# 5.1. Extinguishing media

Extinguishing media: Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the

surrounding fire should be used. Use water spray to cool containers.

# 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes. Nitrogen oxides (NOx).

# 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

(R)-1-BENZYL-3-HYDROXYPYRROLIDINE

Page: 3

#### Section 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from

downwind. If outside keep bystanders upwind and away from danger point. Mark out the

contaminated area with signs and prevent access to unauthorised personnel. Turn

leaking containers leak-side up to prevent the escape of liquid.

# 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

# 6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for

disposal by an appropriate method.

#### 6.4. Reference to other sections

#### Section 7: Handling and storage

### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air. Only

use in fume hood.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Recommended

storage temp 2-8 °C. Light Sensitive. Air sensitive. Store under Argon.

Suitable packaging: Must only be kept in original packaging.

### 7.3. Specific end use(s)

Specific end use(s): No data available.

# Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

Workplace exposure limits: No data available.

# **DNEL/PNEC Values**

DNEL / PNEC No data available.

# 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

(R)-1-BENZYL-3-HYDROXYPYRROLIDINE

Page: 4

### Section 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale yellow

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

Boiling point/range ℃: 116/0.9mm Melting point/range ℃: No data available.

Flammability limits %: lower: No data available. upper: No data available.

Flash point ℃: 113 Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available. Vapour pressure: No data available.

**Relative density:** 1.07 g/cm3 **pH:** No data available.

VOC g/I: No data available.

#### 9.2. Other information

Other information: No data available.

# Section 10: Stability and reactivity

# 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

# 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

# 10.4. Conditions to avoid

Conditions to avoid: Heat.

# 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

# 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

# Section 11: Toxicological information

#### 11.1. Information on toxicological effects

(R)-1-BENZYL-3-HYDROXYPYRROLIDINE

Page: 5

### Relevant hazards for product:

| Hazard                        | Route | Basis                 |
|-------------------------------|-------|-----------------------|
| Skin corrosion/irritation     | DRM   | Hazardous: calculated |
| Serious eye damage/irritation | OPT   | Hazardous: calculated |
| STOT-single exposure          | INH   | Hazardous: calculated |

#### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may

cause coughing or wheezing.

# Section 12: Ecological information

# 12.1. Toxicity

Ecotoxicity values: No data available.

# 12.2. Persistence and degradability

Persistence and degradability: No data available.

#### 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

# 12.4. Mobility in soil

Mobility: No data available.

### 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

# 12.6. Other adverse effects

Other adverse effects: No data available.

# Section 13: Disposal considerations

# 13.1. Waste treatment methods

Disposal operations: MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND

FEDERAL REGULATIONS

Disposal of packaging: Dispose of as special waste in compliance with local and national regulations Observe

all federal, state and local environmental regulations.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

# **Section 14: Transport information**

**Transport class:** This product does not require a classification for transport.

(R)-1-BENZYL-3-HYDROXYPYRROLIDINE

Page: 6

# **Section 15: Regulatory information**

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

#### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

#### Section 16: Other information

#### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

> \* Data predicted using computational software. The OECD QSAR-Toolbox for grouping chemicals into categories. Developed by LMC bulgaria.

http://echa.europa.eu/support/oecd-qsar-toolbox

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Phrases used in s.2 and s.3: H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

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