

TERT-BUTYL 2-AMINOISOBUTYRATE HYDROCHLORIDE

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Revision No: 1

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

1.1. Product identifier

Product name: TERT-BUTYL 2-AMINOISOBUTYRATE HYDROCHLORIDE

CAS number: 84758-81-6

Product code: OR315173

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 LtdUnits 3 & 4ParkwayDentonManchesterM34 3SGUKTel:0161 337 9971Fax:0161 336 6932Email: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:WarningHazard pictograms:GHS07: Exclamation mark



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

P261: Avoid breathing dust.

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

TERT-BUTYL 2-AMINOISOBUTYRATE HYDROCHLORIDE

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: TERT-BUTYL 2-AMINOISOBUTYRATE HYDROCHLORIDE

CAS number: 84758-81-6

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.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides (NOx). Hydrogen chloride (HCI).

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.

Section 6: Accidental release measures

TERT-BUTYL 2-AMINOISOBUTYRATE HYDROCHLORIDE

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| 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. Do not create dus. 6.2. Environmental precautions: Do not discharge into drains or rivers. 6.3. Methods and material for containment and cleaning up Clean-up procedures: 7.1. Precautions for safe handling: Transfer to a closable, labelled salvage container for disposal by an appropriate method. 6.4. Reference to other sections: Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.1. Precautions for safe handling: Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood. 7.2. Conditions for safe storage- inducing any incompatibilities Storage contlines: 8. Storage contlines: Storage tomp 2-8 C. Sutable packaging: Must only be kept in original packaging. 7.3. Specific end use(s): No data available. Storage contlines: No data available. Specific end use(s): No data available. DNEL / PNEC No data available. DNEL / PNEC No data available. | | |
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| | Hand protection: | |
| Skin protection: Protective clothing. | - | |
| | Skin protection: | Protective clothing. |

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Section 9: Physical and chemical properties

| 9.1. Information on basic physical and chemical properties | | | |
|--|--------------------|------------------------------|--------------------|
| State: | Solid | | |
| Evaporation rate: | No data available. | | |
| Oxidising: | No data available. | | |
| Solubility in water: | No data available. | | |
| Viscosity: | No data available. | | |
| Boiling point/range℃: | No data available. | Melting point/range °C: | No data available. |
| Flammability limits %: lower: | No data available. | upper: | No data available. |
| Flash point ℃: | No data available. | Part.coeff. n-octanol/water: | No data available. |
| Autoflammability℃: | No data available. | Vapour pressure: | No data available. |
| Relative density: | No data available. | pH: | No data available. |
| VOC g/l: | 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. Nitrogen oxides

(NOx). Hydrogen chloride (HCl).

Section 11: Toxicological information

11.1. Information on toxicological effects

TERT-BUTYL 2-AMINOISOBUTYRATE HYDROCHLORIDE

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: | Transfer to a suitable container and arrange for collection by specialised disposal |
|------------------------|---|
| | company. 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. |

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Section 14: Transport information

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

Section 15: Regulatory information

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

Specific regulations: Not applicable.

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 |
| | ~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994- |
| | 2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry |
| | Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc_admet/tox/tox/ |
| 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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