

Revision Date 23-Mar-2012

Revision Number 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Identifier**

**Product Description:** tert-Butyl carbazate  
**Cat No.** 107880000; 107880050; 107880250; 107881000; 107885000  
**Synonyms** t-Butyloxycarbonyl-hydrazide; BOC-hydrazide

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

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 001-800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300  
 CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable solids.	Category 2

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16*

**Symbol(s)** F - Highly flammable  
 T - Toxic

**R-phrases** R11 - Highly flammable

**Risk Combination Phrases** R24/25 - Toxic in contact with skin and if swallowed  
 R36/37/38 - Irritating to eyes, respiratory system and skin

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**SECTION 2. HAZARDS IDENTIFICATION**

**Label Elements**



**Signal Word**

**Danger**

**Hazard Statements**

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- H301 - Toxic if swallowed
- H311 - Toxic in contact with skin
- H228 - Flammable solid

**Precautionary Statements - EU (§28, 1272/2008)**

- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Other Hazards**

No information available.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Hydrazinecarboxylic acid, 1,1-dimethylethyl ester 870-46-2	EEC No. 212-795-3	99	870-46-2	F;R11 T;R24/25 Xi;R36/37/38	Flam. Sol. 2 (H228) STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 3 (H301) Acute Tox. 3 (H311)	-
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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**SECTION 4. FIRST AID MEASURES**
**Description of first aid measures**
**Eye Contact**

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

**Ingestion**

Call a physician immediately. Clean mouth with water.

**Inhalation**

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

**Notes to Physician**

Treat symptomatically

**SECTION 5. FIRE-FIGHTING MEASURES**
**Extinguishing media**
**Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. chemical foam.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

Flammable. Combustible material.

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

**Environmental precautions**

Prevent further leakage or spillage if safe to do so

**Methods and material for containment and cleaning up**

Wear self-contained breathing apparatus and protective suit. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

**SECTION 7. HANDLING AND STORAGE****Precautions for Safe Handling**

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use only in area provided with appropriate exhaust ventilation. Use explosion-proof equipment. Use only non-sparking tools.

**Conditions for safe storage, including any incompatibilities**

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Flammables area.

**Specific End Uses****SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)**

No information available.

**Predicted No Effect Concentration (PNEC)**

No information available.

**Exposure controls****Engineering Measures**

Use explosion-proof electrical/ventilating/lighting/equipment

**Personal protective equipment****Eye Protection**

Goggles

**Hand Protection**

Protective gloves

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

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**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls**

No information available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State**

Solid

**Appearance**

Off-white

**odor**

odorless

**pH**

No information available.

**Vapor Pressure**

1 mmHg @ 70 °C

**Boiling Point/Range**

63 - 65°C / 145.4 - 149°F @ 0.1 mmHg

**Melting Point/Range**

37 - 41°C / 98.6 - 105.8°F

**Flash Point**

91°C / 195.8°F

**Autoignition Temperature**

No information available.

**Specific Gravity**

1.020

**Molecular Formula**

C5 H12 N2 O2

**Molecular Weight**

132.16

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity

Chemical Stability

Stable under normal conditions. Moisture sensitive.

Possibility of Hazardous Reactions

**Hazardous Polymerization**

No information available.

**Hazardous Reactions .**

No information available.

Conditions to Avoid

To avoid thermal decomposition, do not overheat, Keep away from open flames, hot surfaces and sources of ignition, Incompatible products, Exposure to moist air or water.

Incompatible Materials

Strong oxidizing agents, Strong bases.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Ammonia.

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**SECTION 11. TOXICOLOGICAL INFORMATION**Information on Toxicological EffectsAcute Toxicity**Product Information** No acute toxicity information is available for this product**Component Information**Chronic Toxicity**Carcinogenicity** There are no known carcinogenic chemicals in this product**Sensitization**

No information available.

**Mutagenic Effects**

No information available.

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Endocrine Disruptor Information**

None known

**SECTION 12. ECOLOGICAL INFORMATION**Toxicity**Ecotoxicity effects** Do not empty into drainsPersistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessmentOther adverse effects

No information available

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**SECTION 13. DISPOSAL CONSIDERATIONS**
**Waste treatment methods**

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations

**Contaminated Packaging** Empty containers should be taken to local recyclers for disposal

**SECTION 14. TRANSPORT INFORMATION**
**IMDG/IMO**

**UN-No** 2926  
**Hazard Class** 4.1  
**Subsidiary Hazard Class** 6.1  
**Packing Group** II  
**Proper Shipping Name** FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.

**ADR**

**UN-No** 2926  
**Hazard Class** 4.1  
**Subsidiary Hazard Class** 6.1  
**Packing Group** II  
**Proper Shipping Name** FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.

**IATA**

**UN-No** 2926  
**Hazard Class** 4.1  
**Subsidiary Hazard Class** 6.1  
**Packing Group** II  
**Proper Shipping Name** FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.\*

**SECTION 15. REGULATORY INFORMATION**
**Safety, health and environmental regulations/legislation specific for the substance or mixture**
**International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Hydrazinecarboxylic acid, 1,1-dimethylethyl ester	212-795-3	-		X	-	X	-	-	-	-	-

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**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment****SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R11 - Highly flammable

R48 - Danger of serious damage to health by prolonged exposure

R24/25 - Toxic in contact with skin and if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

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**Revision Summary**

Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet