

**Tulobuterol hydrochloride, reference material****R1404-10MG**

Version 1.0

Revision Date 07/04/2019

Print Date 05/16/2023

**SECTION 1. IDENTIFICATION**

Product name : Tulobuterol hydrochloride, reference material

Number : 000000023434

Product Use Description : Laboratory chemicals, Reference Standard

Note : This sample is for research and development purposes only. The handling and use of this material must be supervised by qualified individuals. The chemical, physical and toxicological properties of this material have not been fully investigated. Use due precaution in handling, storage and disposal.

Manufacturer or supplier's details : Honeywell International Inc.  
1953 South Harvey Street  
Muskegon, MI 49442

For more information call : 1-800-368-0050  
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or**  
: **+1-703-527-3887**  
:  
: (24 hours/day, 7 days/week)

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Form : powder

Color : white

Odor : no data available

**Classification of the substance or mixture**

Classification of the substance : Acute toxicity, Category 4, Oral or mixture

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**GHS Label elements, including precautionary statements**

Symbol(s)

:



Signal word

: Warning

Hazard statements

: Harmful if swallowed.

Precautionary statements

: **Prevention:**

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/ eye protection/ face protection.

**Response:**

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

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

Formula

: C<sub>12</sub>H<sub>18</sub>ClNO \* HCl

Chemical nature

: Substance

Chemical name	CAS-No.	Concentration
Tulobuterol hydrochloride	56776-01-3	<=100.00 %

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**SECTION 4. FIRST AID MEASURES**

- General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately. Show this safety data sheet to the doctor in attendance.
- Inhalation : If inhaled, remove to fresh air. Call a physician if irritation develops or persists.
- Skin contact : After contact with skin, wash immediately with plenty of water. Get medical attention if irritation develops and persists.
- Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. If victim is fully conscious, give a cupful of water. Call a physician.

**Notes to physician**

- Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : The product is not flammable.  
In case of fire hazardous decomposition products may be produced such as:  
carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>).  
Hydrogen chloride gas

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Special protective equipment : Wear self-contained breathing apparatus and protective suit.  
for firefighters

Further information : Use extinguishing measures that are appropriate to local  
circumstances and the surrounding environment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, : Evacuate personnel to safe areas.  
protective equipment and : Wear personal protective equipment. Unprotected persons  
emergency procedures : must be kept away.  
: Ensure adequate ventilation.  
: Avoid dust formation.  
: Avoid breathing dust.  
: Avoid contact with skin, eyes and clothing.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for : Use mechanical handling equipment.  
containment and cleaning : Sweep up and shovel into suitable containers for disposal.  
up : Dispose of in accordance with local regulations.

**SECTION 7. HANDLING AND STORAGE****Handling**

Advice on protection against : Normal measures for preventive fire protection.  
fire and explosion

**Storage**

Conditions for safe storage, : Store in original container.  
including any : Keep containers tightly closed in a dry, cool and well-ventilated  
incompatibilities : place.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Protective measures : Ensure that eyewash stations and safety showers are close to

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the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Avoid breathing dust.  
Avoid contact with skin, eyes and clothing.

- Engineering measures : Use with local exhaust ventilation.
- Eye protection : Safety glasses with side-shields
- Hand protection : Latex gloves  
Gloves must be inspected prior to use.  
Replace when worn.
- Skin and body protection : Wear suitable protective equipment.  
Wear as appropriate:  
Protective suit
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures : Keep working clothes separately.  
Wash hands before breaks and at the end of workday.

**Exposure Guidelines**

Contains no substances with occupational exposure limit values.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Physical state : powder
- Color : white
- Odor : no data available
- Odor threshold : Note: no data available
- pH : Note: no data available
- Melting point/range : 157 - 162 °C
- Boiling point/boiling range : Note: no data available

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Flash point	: Note: Not applicable
Evaporation rate	: Note: no data available
Flammability	: The product is not flammable.
Lower explosion limit	: Note: no data available
Upper explosion limit	: Note: no data available
Vapor pressure	: Note: no data available
Vapor density	: Note: no data available
Density	: Note: no data available
Water solubility	: Note: no data available
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: Note: no data available
Decomposition temperature	: Note: No decomposition if stored and applied as directed.
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available
Molecular weight	: 264.19 g/mol

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Bulk density : Note: no data available

**SECTION 10. STABILITY AND REACTIVITY**

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Hazardous decomposition products formed under fire conditions.

Conditions to avoid : Avoid dust formation.

Incompatible materials : Strong oxidizing agents  
Strong acids

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:  
carbon oxides (CO, CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).  
Hydrogen chloride gas

**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : LD50: 560 mg/kg  
Species: Rat

Acute inhalation toxicity : Note: no data available

Acute dermal toxicity : Note: no data available

Skin irritation : Note: no data available

Eye irritation : Note: no data available

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Sensitisation : Note: no data available

Repeated dose toxicity : Note: no data available

Genotoxicity in vitro : Note: no data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity effects**

Toxicity to fish : Note: no data available

Toxicity to daphnia and other aquatic invertebrates : Note: no data available

Toxicity to algae : Note: no data available

**Elimination information (persistence and degradability)**

Biodegradability : Note: no data available

**Further information on ecology**

Additional ecological information : no data available

**SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

**SECTION 14. TRANSPORT INFORMATION****DOT** Not dangerous goods



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**TDG** Not dangerous goods**IATA** Not dangerous goods**IMDG** Not dangerous goods**SECTION 15. REGULATORY INFORMATION****Inventories**

US. Toxic Substances Control Act : Not On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : Not in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : Not in compliance with the inventory

Japan. Kashin-Hou Law List : Not in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI) : Not in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : Not in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : Not in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : Not in compliance with the inventory

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**National regulatory information**

**TSCA** : This material must be used in compliance with the TSCA Research and Development Exemption requirements (40 CFR 720.36).

:

**SARA 302 Components** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards** : Acute Health Hazard

**California Prop. 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SECTION 16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 1	1
Flammability	: 1	1
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

**Further information**

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group