

1 - Product and Company Information

ProductName 3-BROMOPHENYLZINC IODIDE, 0.5M SOLUTION IN TETRAHYDROFURAN (NO BULK SALES ALLOWED)

2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Highly flammable. Reacts violently with water. May form explosive peroxides. Harmful if swallowed. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect.

3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I
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3-BROMOPHENYLZINC IODIDE, 0.5M SOLUTION IN TETRAHYDROFURAN	None	None	None
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Ingredient Name	Percent	CAS #	EC no	Annex I
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TETRAHYDROFURAN, WITH 82.59 109-99-9	203-726-8			None
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BHT INHIBITOR

Symbols: F-Xi

R-Phrases: 11-19-36/37

Highly flammable. May form explosive peroxides. Irritating to eyes and respiratory system.

3-BROMOPHENYLZINC IODIDE 17.41 186000-44-2 None None

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable: Do not use water.

SPECIAL RISKS

Specific Hazard(s): Water reactive material. Flammable liquid.

Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SPECIFIC METHOD(S) OF FIRE FIGHTING

Use water spray to cool fire-exposed containers.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep container closed. Keep away from heat, sparks, and open flame. Handle and store under nitrogen. Unsuitable: In the absence of inhibitors, tetrahydrofuran tends to absorb and react with oxygen from the air to form explosive peroxides which may detonate when they become concentrated by evaporation or distillation, are combined with other compounds resulting in an explosive mixture or are disturbed by heat, shock, or friction.

Incompatible Materials: Do not allow contact with water.

Store at 2-8°C

SPECIAL REQUIREMENTS: Handle and store under inert gas. May develop pressure. Open carefully. Do not distill to dryness.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

All operations should be carried out in a glove bag or similar enclosure to avoid accidental contact. Wash thoroughly after handling. Discard contaminated clothing and shoes.

EXPOSURE LIMITS - EUROPEAN UNION

Source	Type	Value
OEL	OEL	150 mg/m ³
		50 ppm

Remarks: Skin

EXPOSURE LIMITS - DENMARK

Source	Type	Value
OEL	TWA	148 mg/m ³
		50 ppm

Remarks: H

EXPOSURE LIMITS - GERMANY

Source	Type	Value
TRGS 900	OEL	150 mg/m ³
		50 ppm

Remarks: =2=

Remarks: Y, TRGS 901-92

EXPOSURE LIMITS - SWITZERLAND

Source	Type	Value
OEL	OEL	150 mg/m ³
		50 ppm

Remarks: C M

EXPOSURE LIMITS - UNITED KINGDOM

Source	Type	Value
OEL	OEL	300 mg/m ³
		100 ppm

Source	Type	Value
OEL	STEL	599 mg/m ³
		200 ppm

Remarks: Skin

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

Special Protective Measures: Faceshield (8-inch minimum).

9 - Physical and Chemical Properties

Appearance

Physical State: Liquid

Property

Value

At Temperature or Pressure

pH

N/A

BP/BP Range

N/A

MP/MP Range

N/A

Flash Point

-17.220 °C

Method: closed cup

Flammability

N/A

Autoignition Temp

N/A

Oxidizing Properties

N/A

Explosive Properties

N/A

Explosion Limits

N/A

Vapor Pressure

N/A

SG/Density

1.023 g/cm³

Partition Coefficient

N/A

Viscosity

N/A

Vapor Density

N/A

Saturated Vapor Conc.

N/A

Evaporated Rate

N/A

Bulk Density

N/A

Decomposition Temp.

N/A

Water Content

N/A

Surface Tension

N/A

Miscellaneous Data

N/A

Solubility

N/A

10 - Stability and Reactivity

STABILITY

Stable/Unstable

Conditions of Instability: Do not allow water to enter container. Air

Materials to Avoid: Reacts violently with water. Strong oxidizing agents

Exposure can cause: Can cause CNS depression.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation if absorbed through the skin.

Inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

TARGET ORGAN INFORMATION

Kidneys, Liver, Central nervous system.

CHRONIC EXPOSURE - CARCINOGEN

Reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Exposure can cause: Can cause CNS depression.

ECOTOXICOLOGICAL EFFECTS

Test Type: LC50 Fish

Source Type

Value

OEL OEL

150 mg/m³

Time: 96 h

50 ppm

Remarks: Skin

EXPOSURE LIMITS - DENMARK

Source

Type

Value

OEL

TWA

148 mg/m³

Time: 8 h

50 ppm

Remarks: H

EX