DIETHYL ETHER

ProductName

2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Extremely flammable. Harmful if swallowed. Causes burns. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.

3 - Composition/Information on Ingredients

CAS# **Product Name** EC no Annex I DIBUTYLBORON TRIFLATE, 1.0M None None None SOLUTION INDIETHYL ETHER

C9H18BF3O3S

Formula Molecular Weight 274.11 AMU

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 EYE CONTACT Assure adequate flushing of the eyes by separating the eyelids

with fingers.

AFTER INGESTION If swallowed, wash out mouth with water provided person is

conscious. Call a physician. 5 - Fire Fighting Measures

EXTINGUISHING MEDIA Suitable: For small (incipient) fires, use media such as

"alcohol" foam, dry chemical, or carbon dioxide. For large

fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water. SPECIAL RISKS Specific Hazard(s): Extremely flammable. 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. SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Evacuate area. Shut off all sources of ignition.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear self-contained breathing apparatus, rubber boots, and heavy

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

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

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated

exposure. **STORAGE**

sparks, and open flame. Store in a cool dry place. Handle and store under nitrogen. SPECIAL REQUIREMENTS: Air sensitive.

Conditions of Storage: Keep tightly closed. Keep away from heat,

ENGINEERING CONTROLS Safety shower and eye bath. Use only in a chemical fume hood.

8 - Exposure Controls / Personal Protection

GENERAL HYGIENE MEASURES Wash contaminated clothing before reuse. Discard contaminated

shoes. Wash thoroughly after handling.

PERSONAL PROTECTIVE EOUIPMENT Special Protective Measures: Wear appropriate government approved

N/A

N/A

N/A

N/A

N/A

- 40.0 °C

Method: closed cup

respirator, chemical-resistant gloves, safety goggles, other

9 - Physical and Chemical Properties

protective clothing. Faceshield (8-inch minimum).

MP/MP Range Flash Point Flammability

BP/BP Range

Autoignition Temp

Oxidizing Properties

Explosive Properties N/A **Explosion Limits** N/A Vapor Pressure N/ASG/Density 0.815 g/cm3 Partition Coefficient N/AViscosity N/A Vapor Density N/A Saturated Vapor Conc. N/A Evaporation Rate N/A **Bulk Density** N/ADecomposition Temp. N/ASolvent Content N/A Water Content N/ASurface Tension N/A Conductivity N/AMiscellaneous Data N/ASolubility N/A 10 - Stability and Reactivity **STABILITY** Conditions of Instability: May decompose on exposure to air. Materials to Avoid: Strong oxidizing agents, Strong acids. HAZARDOUS DECOMPOSITION PRODUCTS Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Boron oxides, Hydrogen fluoride.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing,

ROUTE OF EXPOSURE

11 - Toxicological Information

SIGNS AND SYMPTOMS OF EXPOSURE

Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin. TARGET ORGAN INFORMATION Central nervous system. 12 - Ecological Information No data available.

Take the material (or its solution) and make a 5% solution in tetrahydrofuran. Cautiously add the solution dropwise to an

wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous

membranes and upper respiratory tract, eyes, and skin.

14 - Transport Information

UN#: 2924 Class: 3 PG: I Subrisk: 8

RID/ADR

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Proper Shipping Name: Flammable liquid, corrosive, **IMDG**

N.O.S. Severe Marine Pollutant: No Technical Name: Required

Subrisk: 8

Inhalation Packing Group I: No Technical Name: Required

15 - Regulatory Information CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

may cause drowsiness and dizziness. S-PHRASES: 9-16-26-33-36/37/39-45 Keep container in a well-ventilated place. Keep away from

sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take precautionary measures against static discharges. Wear

suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Caution: Substance not yet fully tested (EU).

16 - Other Information

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For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

ice-cooled, stirred basic solution of commercial bleach. Oxidation may release flammable hydrocarbon gases which must be vented. Let stand overnight. Adjust the pH to 7 and destroy excess hypochlorite with sodium bisulfite before disposal of solution. Observe all federal, state, and local environmental regulations.

UN#: 2924 Class: 3 PG: I

Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE, Marine Pollutant: No

UN#: 2924 Class: 3 PG: I Subrisk: 8 Proper Shipping Name: Flammable liquid, corrosive,

IATA

INDICATION OF DANGER: F+-C

Extremely Flammable. Corrosive.

R-PHRASES: 12-22-34-66-67

Extremely flammable. Harmful if swallowed. Causes burns. Repeated exposure may cause skin dryness or cracking. Vapors