



MATERIAL SAFETY DATA SHEET

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: BENZOTRIAZOL-1-YLOXYTRIS(DIMETHYLAMINO) PHOSPHONIUM
HEXAFLUOROPHOSPHATE, 98+%

Catalog Numbers:

20980-0000, 20980-0010, 20980-0050, 20980-0250

Synonyms:

Benzotriazol-1-yl-oxy-tris(dimethylamino) phosphonium
hexafluorophosphate

Company Identification:

LEONID CHEMICALS
62/A-2 2nd Stage, Industrial Suburb
Yeshwanthpur, Bangalore -22, INDIA
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SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	: 56602-33-6
Chemical Name	: BENZOTRIAZOL-1-YLOXYTRIS(DIMETHYLAMINO)) PHOSPHONIUM HEXAFLUOROPHOSPHATE, 98+%
%	: 98+%
EINECS#	: 260-279-1
Hazard Symbols	: XI
Risk Phrases	: 36/37/38

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin. Moisture sensitive. Light sensitive.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

Ingestion of large amounts may cause gastrointestinal irritation. The toxicological properties of this substance have not been fully investigated.



Inhalation:

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic:

Not available.

SECTION 4 - FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

Notes to Physician:

NA

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

SECTION 7 - HANDLING AND STORAGE

Handling:

Use with adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage:

Store in a cool, dry place. Keep refrigerated. (Store below 4°C/39°F.)

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Powder
Color	: white - off-white
Odor	: Not available.
PH	: Not available.
Vapor Pressure	: Not available.
Viscosity	: Not available.
Boiling Point	: Not available.
Freezing/Melting Point	: 136.00-140.00 deg C
Autoignition Temperature	: Not available.
Flash Point	: Not available.
Explosion Limits, lower	: Not available.
Explosion Limits, upper	: Not available.
Decomposition Temperature	NA
Solubility in water	NA
Specific Gravity/Density	NA
Molecular Formula	C ₁₂ H ₂₂ N ₆ OP.PF ₆
Molecular Weight	442.27

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Ignition sources, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen fluoride gas.

Hazardous Polymerization:

Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 56602-33-6 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

BENZOTRIAZOL-1-YLOXYTRIS(DIMETHYLAMINO) PHOSPHONIUM

HEXAFLUOROPHOSPHATE, 98+% -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

NA

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

IATA

No information available.

IMO

No information available.

RID/ADR

No information available.

SECTION 15 - REGULATORY INFORMATION

European/International Regulations**European Labeling in Accordance with EC Directives**

Hazard Symbols: Xi

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 56602-33-6: No information available.

United Kingdom Occupational Exposure Limits**United Kingdom Maximum Exposure Limits****Canada**

CAS# 56602-33-6 is listed on Canada's DSL List.

CAS# 56602-33-6 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits**US FEDERAL****TSCA**

CAS# 56602-33-6 is not listed on the TSCA inventory.

It is for research and development use only.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 7/16/1996 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

