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Date updated	11/17/2008

**Section 1-Product Information**

Product name	BOP-Reagent
Product Cat. No.	C01519

**Section 2-Composition / Information on Ingredients**

Substance/Preparation:	Substance
Ingredient Name	Benzotriazole-1-yl-oxy-tris-(dimethylamino)-phosphonium
SARA 313	No
CAS	56602-33-6
Formula	C <sub>12</sub> H <sub>22</sub> F <sub>6</sub> N <sub>6</sub> OP <sub>2</sub>

**Section 3- Hazards Identification**

Emergency Overview	
Caution	The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Exercise due care.
HMIS Rating	
Health	2
Flammability	0
Reactivity	0
NFPA Rating	
Health	2
Flammability	0
Reactivity	0

For additional information on toxicity, please refer to Section 11.

**Section 4- First Aid Measures**

Oral Exposure	If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure	If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
Dermal Exposure	In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.
Eye Exposure	In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Section 5- Fire Fighting Measures**

Flash Point	Not available
Autoignition Temp	Not available
Flammability	Not available
Extinguishing Media	
Suitable	Carbon dioxide, dry chemical powder, or appropriate foam. Water spray
Fire Fighting	
Protective Equipment	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)	Emits toxic fumes under fire conditions.

**Section 6- Accidental Release Measures**

Procedure to be Followed in Case of Leak or Spill	Evacuate area
Procedure(s) of Personal Precaution(s)	Wear respirator, chemical safety goggles, rubber boots, and

Methods for Cleaning up	heavy rubber gloves Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.
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## Section 7-Handling and Storage

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Handling	
User Exposure	Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
Storage	
Suitable	Keep tightly closed.
Store at room temperature	

## Section 8-Exposure Controls/Personal Protection Equipment

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Engineering Controls	Mechanical exhaust required
Personal Protective equipment	
Respiratory	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) respirator.
Other	Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.
General Hygiene Measures	Wash thoroughly after handling

## Section 9- Physical and Chemical Properties

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Appearance	
Physical State	White powder
Property	
Molecular Weight	442.5 AMU
pH	Not available
BP/BP Range	Not available
MP/MP Range	136-140°C
Freezing Point	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Saturated Vapor Conc.	Not available
SG/Density	Not available
Bulk Density	Not available
Odor Threshold	Not available
Volatile%	Not available
VOC Content	Not available
Water Content	Not available
Solvent Content	Not available
Evaporation Rate	Not available
Viscosity	Not available
Surface Tension	Not available
Partition Coefficient	Not available
Decomposition Temp.	Not available
Flash Point	Not available
Explosion Limits	Not available
Flammability	Not available
Autoignition Temp	Not available
Refractive Index	Not available
Optical Rotation	Not available
Miscellaneous Data	Not available
Solubility	Solvent: Clear 25 mg/ml MeOH

## Section 10- Stability and Reactivity

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Stability	
Conditions of Instability	May discolor on exposure to light. May decompose on

Materials to avoid	exposure to moist air or water.
Hazardous Decomposition Products	Strong oxidizing agents
Hazardous Decomposition Products	Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen fluoride, Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.
Hazardous Polymerization	
Hazardous Polymerization	Will not occur

## Section 11- Toxicological Information

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Route of Exposure	
Skin Contact	May cause skin irritation
Skin Absorption	May be harmful if absorbed through the skin
Inhalation	Material may be irritating to mucous membranes and upper respiratory tract, May be harmful if inhaled.
Ingestion	May be harmful if swallowed
Conditions Aggravated by Exposure	The toxicological properties have not been thoroughly investigated.

## Section 12- Ecological Information

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No data available.

## Section 13- Disposal Considerations

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Appropriate Method of Disposal of Substance or Preparation	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.
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## Section 14- Transport Information

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DOT	
Proper Shipping Name	Flammable solids, organic, n.o.s.
UN#	1325
Class	4.1
Packing Group	Packing Group II
Hazard Label	Flammable solid
PIH	Not PIH
IATA	
Proper Shipping Name	Flammable solid, organic, n.o.s.
IATA UN Number	1325
Hazard Class	4.1
Packing Group	II

## Section 15- Regulatory Information

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EU Additional Classification	
Symbol of Danger	Xi
Indication of Danger	Irritant
R: 37/38-44	
Risk Statements	Irritating to respiratory system and skin. Risk of explosion if heated under confinement.
US Classification and Label Text	
Indication of Danger	Harmful
Risk Statements	Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.
United States Regulatory information	
SARA Listed	No
Canada Regulatory information	
WHMIS Classification	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL  
NDSL

Yes  
No

### **Section 16- Other Information**

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GenScript corporation MSDS is believed to be correct but only used as a guide for experienced personnel, GenScript shall not be held liable for any damage resulting from the handling or from contact with the above product.