In an emergency, contact :-

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Material Safety Data Sheet

Section 1 – Product and Company Identification

Product Name: MP-Triacetoxyborohydride
Reference Code: 800517, 800413, 800414, 800415, 800416.
Manufacturers Name: Biotage GB Limited,
Dyffryn Industrial Estate, Hengoed, CF82 7RJ, UK

Section 2 – Composition/Information on Ingredients

CAS Number: Macroporous polystyrene/divinylbezene: None.
Tetrahydrofuran: 109-99-9.
Chemical Families: 90% Macroporous polystyrene backbone cross-linked (10-25%) with a divinylbenzene that has been functionalised with a triethylammonium triacetoxyborohydride group.
10% by weight tetrahydrofuran.

Section 3 – Hazards Identification

Very small particles (5µm or less) may pass through skin and mucous membranes. May cause irritation of the nose, throat, dizziness and headache. Tetrahydrofuran is an anesthetic in high concentrations. Use safety glasses, avoid contact with eyes and wear gloves.

Section 4 – First Aid Measures

Inhalation: Symptoms of over exposure may include cough and discomfort. If large amounts are inhaled, move affected person to fresh air. If breathing is difficult give oxygen. If breathing has stopped begin resuscitation measures. Seek medical attention.
Skin Contact: Wash with soap and water.
Eye Contact: Contamination of the eyes should be treated by immediate and prolonged (at least 15 minutes) irrigation of the eyes with copious amounts of water by separating the eyelids with the fingers. If redness or discomfort persist, seek medical attention.
Ingestion: Wash out mouth with copious amounts of water if person is conscious. Seek medical attention.

Section 5 – Fire-Fighting Measures

Extinguishing Media: Appropriate to surroundings.
Special Fire Fighting Procedures: Wear full protective clothing and self contained positive pressure breathing apparatus certified by NIOSH when fighting chemically related fires.
Noteable Fire and Explosion Hazards: Thermal decomposition may emit toxic monomer vapour and flammable hydrogen gas. Product duct/air mixtures may be flammable.

Section 6 - Accidental Release Measures

Avoid inhaling dust. Wearing appropriate personal protective equipment, shovel or sweep up dust, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after manual pickup is complete.

Section 7 – Handling and Storage

Handling: Properly designed equipment is vital if these resins are to be used in conjunction with strong oxidising agents such as nitric acid to prevent a rapid build-up of pressure and possible explosion. Do not tightly pack dry resins in glass containers. Dry resin beads expand when exposed to solvents. Failure to allow for expansion can cause glass containers to shatter.
Storage: Store in a sealed container in a cool, dry place. The maximum recommended storage temperature for this material is 20°C. Do not contact with hot ignition source.

Section 8 – Exposure Controls/Personal Protection

Ventilation: Adequate ventilation is required to protect personnel from exposure to chemical vapours or dusts exceeding occupational exposure limits and to minimise fire hazards.
Respiratory: A respirator is not necessary under normal operating conditions.
Eyes: Safety glasses are considered minimum protection. Chemical safety goggles or face shield may be necessary depending on quantity of material and conditions of use. Emergency eye wash fountains should be available in the vicinity of any possible exposure.
Skin: Chemical resistant protective gloves and clothing are recommended. The choice of protective gloves or clothing must be based on chemical resistance and other user requirements.

Section 9 – Physical and Chemical Properties

Appearance and Odour: Off white to cream powder, slight odour.

Section 10 – Stability and Reactivity

Stability:	Stable when stored under specific conditions of storage, shipment and/or use. Avoid temperatures above 40°C.
Incompatibilities:	Avoid contact with strong oxidising agents, particularly nitric acid. Avoid contact with concentrated mineral acids.
Hazardous Decomposition or By-products:	Thermal decomposition may yield toxic fumes such as monomer, carbon dioxide, carbon monoxide, nitrogen oxides, borane or boron oxides and hydrogen.
Hazardous Polymerisation:	Will not occur.

Section 11 – Toxicological Information

No toxicity data is available for this material.

Section 12 - Ecological Information

No data available.

Section 13 – Disposal Considerations

Contact a licensed professional waste disposal service to dispose of this material. Bury in a landfill site approved for the disposal of chemical and hazardous waste. Observe all federal, state and local environmental regulations.

Section 14 – Transport Information

DOT and IATA-DGR regulations: UN/ID# 2813.

Section 15 – Regulatory Information

OHSA Hazard Communication Standard classification not yet determined.

Exposure Limits:	There are no established exposure limits for this product.
Harmful:	R20 : Harmful by inhalation, R36/37 : Irritating to eyes and respiratory system, S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, S36 : Wear suitable protective clothing, S22 : Do not breathe dust.

Section 16 – Other Information

Unless otherwise noted, the above information pertains only for the base material and similar types of components in the sample. When no toxicity data is provided, it is prudent to handle this chemical as hazardous. Furthermore, since individual chemical hypersensitivity cannot be predicted, every chemical should be handled with due respect.

This material safety data sheet is offered without charge to the clients of Biotage. Information contained in this sheet is the most current available to Biotage at the time of preparation and is issued as a matter of information only, no warranty as to its accuracy or completeness is expressed or implied.

Key to Abbreviations
CAS: Chemical Abstract Service. **DOT:** Department of Transportation 49 Code of Federal Regulations. **IATA-DGR:** International Air Transport Association – Dangerous Goods Regulation. **NA:** Not Applicable. **NIOSH:** National Institute for Occupational Safety and Health. **TWA:** Time Weighted Average. **N/E**: Not established, means a value has not been set or there is no information available.

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