

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

Date last revised: August 5, 2014 Date printed: August 5, 2014

SECTION 1. ----- CHEMICAL IDENTIFICATION-----

CATALOG #: 6H60-1-59

NAME: BIS(TRIMETHYLENE)DIBORATE

SYNONYM: 2,2'-PROPANE-1,3-DIYLDIOXY-BIS[1,3,2]DIOXABORINANE;

BORIC ACID CYCLIC ESTER WITH 1,3-PROPANEDIOL; BORIC ACID 1,3-PROPANEDIOL CYCLIC ESTER

SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - -

CAS NUMBER: 20905-35-5 MDL NUMBER: MFCD03701690 MOLECULAR FORMULA: C₉H₁₈B₂O₆ MOLECULAR WEIGHT: 243.86

SECTION 3. ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS

IRRITANT.

IRRITANT TO RESPIRATORY TRACT, TO SKIN AND EYES.

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 NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CONSULT A PHYSICIAN.

EYE EXPOSURE

ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS. CALL A POISON CENTER. CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL. DERMAL EXPOSURE

IN CASE OF CONTACT, WASH SKIN IMMEDIATELY WITH SOAP AND COPIOUS AMOUNTS OF WATER. CONSULT A PHYSICIAN.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

FLASHPOINT

NOT ESTABLISHED

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 OUANTITIES OF WATER.

FIREFIGHTING

PROTECTIVE EQUIPMENT: 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.

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 PERSONNEL TO A SAFE PLACE.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS, AND HEAVY

RUBBER GLOVES. AVOID BREATHING VAPORS, MIST OR GAS.

ENSURE ADEQUATE VENTILATION.

ENVIRONMENTAL PRECAUTIONS

DO NOT LET PRODUCT ENTER DRAINS.

METHODS FOR CLEANING UP

ABSORB ON INERT MATERIAL AND SWEEP UP AND DISPOSE OF AS HAZARDOUS WASTE. PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS.

SECTION 7. ----- HANDLING AND STORAGE-----

HANDLING

USER EXPOSURE: AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID FORMATION OF DUST AND AEROSOLS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED. NORMAL MEASURES FOR PREVENTIVE FIRE PROTECTION. STORAGE

SUITABLE: KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. STORE IN A COOL DRY PLACE. AVOID DIRECT SUNLIGHT. STORE UNDER INERT GAS.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

ENGINEERING CONTROLS

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE

APPROPRIATE USE A DUST MASK TYPE N95 (US) OR TYPE P1 (EN 143) RESPIRATOR.

USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE

GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

HAND: HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. WASH AND DRY HANDS.

EYE: TIGHTLY FITTING CHEMICAL SAFETY GOGGLES.

GENERAL HYGIENE MEASURES

WASH HANDS THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

SECTION 9. - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR

LIOUID

PHYSICAL PROPERTIES

BOILING POINT: 145-148°C @ 0.2 mmHg
DENSITY: 1.154 g/mL @ 20 °C
REFRACTIVE INDEX: 1.454 @ 20 °C

SECTION 10. -----STABILITY AND REACTIVITY -----

STABILITY

STABLE: STABLE UNDER RECOMMENDED CONDITIONS.

CONDITIONS TO AVOID: OPEN FIRE AND FLAMES, EXTREMES OF TEMPERATURE, MOISTURE AND DIRECT SUNLIGHT.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON OXIDES, BORANE/BORON OXIDES.

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

ROUTE OF EXPOSURE

INHALATION: MAY BE HARMFUL IF INHALED. IRRITATING TO THE RESPIRATORY TRACT. INGESTION: MAY BE HARMFUL IF SWALLOWED.

SKIN: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. IRRITATING TO THE SKIN.

EYES: IRRITATING TO THE EYES.

SIGNS AND SYMPTOMS OF EXPOSURE

TO THE BEST OF OUR KNOWLEDGE, THE TOXICOLOGICAL PROPERTIES OF THIS PRODUCT HAVE NOT BEEN FULLY DETERMINED.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY.
CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS
MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN
IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.

SECTION 14. ----- TRANSPORT INFORMATION -----

UNRESTRICTED

SECTION 15. ----- REGULATORY INFORMATION -----

EU ADDITIONAL CLASSIFICATION
SYMBOL OF DANGER: Xi
INDICATION OF DANGER: IRRITANT.
RISK STATEMENTS: 36/37/38
SAFETY STATEMENTS: 23-24/25-26-36/37/39-45
US CLASSIFICATION AND LABEL TEXT
TSCA: NOT LISTED ON TSCA INVENTORY; FOR R&D USE ONLY

SECTION 16. ----- OTHER INFORMATION-----

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SYNQUEST LABS, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.