Material Safety Data Sheet BORA-CARE®

Health Emergencies: CHEMTREC®

SECTION I – PRODUCT IDENTIFICATION

Manufacturer: Nisus Corporation

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Product Trade Name: **BORA-CARE**®

EPA Registration No.: 64405-1 Chemical Family: Glycol borate solution

Formula: Proprietary Mixture CAS No.: N/A

DOT Hazard Classification: Not Regulated

Hazard Rating: NFPA Health 1 Slight hazard

Flammability 0 Reactivity 0

SECTION II – HAZARDOUS INGREDIENTS

Material or Component: Ethylene Glycol CAS No.: 107-21-1

TLV 50.00 ppm ACGIH Type CEIL

SECTION III - PHYSICAL DATA

Appearance: Clear viscous gel Specific Gravity: 1.38 g/ml % Volatile: 60% by weight Vapor Pressure: Negligible **Boiling Point:** Above 212° F Odor: None 50% aqueous solution 6.9 - 7.1% Solubility in Water: 100% pH:

SECTION IV – HEALTH HAZARD INFORMATION

EYE CONTACT: This material may cause eye irritation. Direct contact may cause burning, tearing and redness in sensitive

individuals.

SKIN CONTACT: This material is essentially non-irritating. Prolonged or repeated exposure t this material may cause

softening of the skin. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INGESTION: This material can be harmful if swallowed. It is slightly toxic to humans (oral lethal dose: greater than 5.0 g/kg). Ingestion of large amounts may cause nausea, mental sluggishness followed by difficulty in breathing and heart failure, kidney and brain damage, possibly death

INHALATION: Breathing high concentrations of vapors may cause nausea, dizziness or drowsiness, and irritation of the nose and throat. Pre-existing lung disorders may be aggravated by exposure to this material.

COMMENTS: None of the major constituents of this material have been identified as carcinogens or probable carcinogens by IARC or OSHA.

Ethylene glycol may cause congenital malformations (teratogenic) in mice and rats when administered by gavage or in the drinking water during organogenesis; not teratogenic when fed in the diet. Pre-existing kidney disorders may be aggravated by exposure to this material.

Acute oral LD_{50} – greater than 5gm/kg body weight (Sprague-Dawley male and female rats). Acute dermal LD_{50} – greater than 2gm/kg body weight (New Zealand Albino male and female rabbits). Acute inhalation LC_{50} – greater then 5mg/L for 4 hours (Sprague-Dawley male and female rats). Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal.

SECTION V – EMERGENCY AND FIRST AID PROCEDURES

Flush eyes with clean water for 15 minutes. If irritation persists, seek medical attention. **EYE CONTACT:**

SKIN CONTACT: Remove contaminated clothing. Cleanse affected area thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.

INHALATION: If irritation of the nose or throat develops, move away for the source of exposure and into fresh air. If irritation persists, seek medical attention. If victim is not breathing, artificial respiration should be administered. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INHALATION: SEEK EMERGENCY MEDICAL ATTENTION. If the victim is drowsy or unconscious, place on the left side with the head down. Do not give anything by mouth. If victim is conscious and alert, vomiting should be induced for ingestion of more the 1-2 tablespoons for and adult, preferably with syrup of ipecac under direction from a physician or poison center. If syrup of ipecac is not available, vomiting can be induced by gently placing two fingers in back of throat. If large amounts are ingested, treat for borate toxicity. If possible, do not leave victim unattended.

SECTION VI - REACTIBITY DATA

STABILITY: Stable

CONDITIONS TO AVIOD: Exposure to strong oxidizing agents.

INCOMPATIBILITY (MATERIALS TO AVOID): This material is incompatible with strong oxidizing agents. This product may

corrode aluminum

HAZARDOUS POLYMERIZATION; Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Ethylene oxide, carbon monoxide, carbon dioxide.

SECTION VII - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Above 220° F (Tag Closed Cup)

FLAMMABLE LIMITS:

CO₂, dry powder or universal type foam. **EXTINGUISHING MEDIA:**

Avoid inhaling smoke. The use of a SCBA is recommended for fire fighters. Water FIRE AND EXPLOSION HAZARDS:

spray may be useful in minimizing vapors and cooling containers exposed to heat and flame.

SECTION VIII – SPILL OR LEAK PROCEDURES

PRECAUTIONS IN CASE OF RELEASE OR SPILL: Absorb with organic liquid absorbent. Do not let material or

washwaters enter sewers or waterways.

WASTE DISPOSAL METHOD: Contact your State Pesticide, Environmental Control Agency or local

authorities for proper disposal guidelines.

SECTION IX - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Good ventilation. VENTILATION: Exhaust to ventilate.

PROTECTIVE GLOVES: The use of solvent resistant gloves is advised.

EYE PROTECTION:

OTHER PROTECTIVE EQUIPMENT: It is recommended that a source of clean water be available in the work area for

flushing eyes and washing skin.

SECTION X – SPEACIAL PRECAUTIONS

HANDLING AND STORAGE PRECUTIONS: Store between 40° F and 90° F. Do not store in direct sunlight. Keep

containers tightly closed.

OTHER PRECAUTIONS: Keep away from children and pets. Toxic to plants and shrubbery.

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