

Bora-Care® with **MOLD-CARE™**



The Long-Term Solution to Mold *AND* Wood Destroying Organisms

Mold and decay fungi can be serious problems for builders and homeowners. Decay fungi can literally destroy the materials on which they grow. And fungal by-products and spores can pose potential health risks.

The active ingredient in Mold-Care™ is a specific disinfectant, the same disinfectant used to sanitize restaurants and hospitals. This disinfectant has been formulated by Nisus to be used with Bora-Care for even greater performance.

During a whole-house treatment, Bora-Care with Mold-Care is applied to all structural wood, providing long-term, whole-house protection against mold. But more importantly, wood destroying organisms—including termites, carpenter ants, wood boring beetles and decay fungi—that can cause structural failure are also eliminated.



Treated

Untreated



*Drywall treated with Bora-Care with Mold-Care
and placed in an incubator for 90 days.*

Bora-Care, Mold-Care and Nisus are trademarks or registered trademarks of Nisus Corporation. ©2006 Nisus Corp.

Nisus Corporation • 100 Nisus Drive • Rockford, TN 37853
(800) 264-0870 • www.nisuscorp.com

Nisus
CORPORATION

The World's Leader in Borate Technology

MOLD-CARE™

Moldicide Concentrate

Active Ingredient:

Didecyl dimethyl ammonium chloride..... 80.0%

EPA Reg. No. 6836-212-64405

Inert Ingredients 20.0%

EPA Est. 64405-TN-1

Total 100.0%

KEEP OUT OF REACH OF CHILDREN DANGER

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed or inhaled. Harmful if absorbed through skin. Do not get in eyes, on skin or on clothing. Wear goggles or face shield, protective clothing and impervious gloves. Do not breathe dust, vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking and using tobacco.

Individuals who enter pressure treatment cylinders and other related equipment that are contaminated with the wood treatment solution (e.g. cylinders that are in operation or are not free of the treatment solution) must wear protective clothing including overalls, jacket, gloves and boots impervious to the wood treatment formulation. Federal, state and local confined space entry procedures must be followed.

Applicators must not eat or drink, or use tobacco products during those parts of the application process that may expose them to the wood treatment formulation (e.g., manually opening/closing cylinder doors, moving trams out of cylinders, mixing chemicals, handling freshly treated wood).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining protective equipment. If no such instructions exist for washables, use detergent and hot water. Keep and wash protective equipment separate from other laundry.

FIRST AID

If In Eyes: Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. **If On Skin Or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice. **If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. **If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wash waters.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

MOLD-CARE™ Moldicide Concentrate is a concentrated biocide for use as a wood preservative. When used as directed, MOLD-CARE™ Moldicide Concentrate will protect treated wood articles from the destructive attack of fungi, mold and mildew.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

MOLD-CARE™ Moldicide Concentrate can be used in combination with other EPA-registered organic and inorganic wood preservatives.

Mix **MOLD-CARE™ Moldicide Concentrate** and Bora-Care®, EPA Reg. No. 64405-1, in water and stir to give a solution of the desired concentration of components following the use directions of each label.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Do not store on side. Avoid creasing or impacting of side walls. **Pesticide Disposal:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these pesticides cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities by burning. If burned, stay out of smoke.



100 Nisus Drive
Rockford, TN 37853
800-264-0870
www.nisuscorp.com

MOLD-CARE™ and Nisus are trademarks or registered trademarks of Nisus Corporation.

MADE IN THE U.S.A.

MATERIAL SAFETY DATA SHEET**MOLD-CARE™ MOLDICIDE CONCENTRATE**

EPA Reg. No. 6836-212-64405

Health Emergencies: CHEMTREC® (800) 424-9300

SECTION I - PRODUCT IDENTIFICATION

Packaged and Distributed: Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
(800) 264-0870
Fax: (865) 577-5825

Product Trade Name: MOLD-CARE™ MOLDICIDE
CONCENTRATE

CAS No.: See Section 2 – CHEMICAL OR HAZARDOUS
COMPONENTS

Molecular Formula: Mixture

Chemical Name: (Active) N, N-Didecyl-N, N-dimethyl ammonium
chloride

**SECTION II – CHEMICAL OR HAZARDOUS
COMPONENTS**

Chemical Name: N, N-Didecyl-N, N-dimethylammonium chloride

CAS No.: 7173-51-5

Approx. Wt%: 80%

Exposure Limit: None Established

Chemical Name: Ethyl alcohol

CAS No.: 64-17-5

Approx. Wt%: 10%

Exposure Limit: OSHA-PEL 1000 ppm ACGIH- TWA 1000 ppm

Chemical Name: Water

CAS No.: 7732-18-5

Approx. Wt%: 10%

Exposure Limit: None Established

SECTION III – POTENTIAL HEALTH EFFECTS

Primary Routes of Entry: Skin Contact, Eye Contact, Inhalation

Effects of Overexposure: Based on available animal toxicity information for this material, it is anticipated that direct skin or eye contact will produce severe irritation and/or chemical burns with possible irreversible damage. May be fatal if ingested. Ingestion can cause immediate burning pain in the mouth, throat and abdomen; severe swelling of the larynx. Ingestion can cause skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions. Solvent vapors or mists of product may cause irritation of mucous membranes. Prolonged inhalation may produce drowsiness, lassitude and inability to concentrate.

Overexposure May Aggravate Existing Conditions:

No effects indicated.

Material Listed as Carcinogen by:

National Toxicology Program: No

I.A.R.C. Monographs: No

O.S.H.A.: No

SECTION IV – FIRST AID MEASURES

Skin Contact: Wash with plenty of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse.

Eye Contact: Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get immediate medical attention. If physician is not available, flush for an additional 15 minutes and then transport victim to medical care.

Inhalation: Remove from area to fresh air. Get immediate medical attention. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available.

Ingestion: Immediately give 3-4 glasses of milk (if unavailable, water). DO NOT induce vomiting. If vomiting does occur, give fluids again. Get immediate medical attention. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to an unconscious or convulsing person.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, as well as oxygen and measures to support breathing manually or mechanically may be needed.

SECTION V – FIRE AND EXPOSION INFORMATION

Flash Point: 107 °F Setaflash

Decomposition Temperature: Not Known

Self Ignition: Not Known

Lower Explosion Limit: Not Known

Upper Explosion Limit: Not Known

Extinguishing Media To Be Used: Carbon dioxide, Dry chemical, Alcohol foam, Water

Special Fire Fighting Procedures: Must wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.

Unusual Fire and Explosion Hazards: Products of combustion are toxic. Heated solvent vapors can travel to an ignition source and flash back.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Measures After Spillage / Leakage / Release: Danger-corrosive and combustible material. Remove all sources of ignition and ground all equipment before beginning cleanup. Floors may become slippery. Wear appropriate protective gear and NIOSH/MSHA approved respirator where mists or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred). Dike and contain spill with inert material (sand, earth, etc.). Transfer the solid and liquid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

SECTION VII – HANDLING AND STORAGE

Precautions for Storage and Handling: Maximum storage temperature: 140 °F. Store containers in compliance with the most recent NFPA Code (NFPA 30). Ground all containers prior to pouring. Keep containers closed until used. Do not contaminate drinking water, food or feed by storage or disposal.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.

Respiratory Protection: In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.

Protective Gloves: Use rubber or neoprene gloves to prevent skin contact.

Eye Protection: Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

Other Protective Equipment: Eye wash; safety shower; protective clothing (long sleeves, coveralls or other as appropriate), when needed, to prevent skin contact.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Color: Colorless to Pale Yellow
Odor: Ethanol-Like
Changes of Physical State
Freezing Point: 10 °C
Boiling Point: Not Known
Specific Gravity: 0.89 g/ml at 25 °C
Bulk Density: Not Applicable
Vapor Pressure: Not Known
Vapor Density (Air=1): Not Known
Max. Percent Volatile: 20%
Evaporation Rate (Butyl Acetate=1): Not Known
Viscosity: Not Known
Water Solubility: Soluble
pH-Value: 6.5 – 9 (10% active solution)

SECTION X – STABILITY AND REACTIVITY

Stability: Stable
Conditions to Avoid: None known

Hazardous Decomposition Products:
Thermal decomposition may produce toxic vapors/fumes of:
Hydrogen chloride, amines and other organic materials; and oxides of carbon and nitrogen.

Hazardous Polymerization: Will not occur.
Conditions to Avoid: None Known

Incompatibility (materials to avoid):
Strong oxidizing or reducing agents

SECTION XI – TOXICOLOGY INFORMATION

No toxicity information is available for this product. The toxicity information provided is for a similar product(s) and/ or component(s) of this product.

Acute (80% active solution):

Oral LD₅₀: rat: 450 mg/kg
412 mg/kg (male); 292 mg/kg (female)
Dermal LD₅₀: rabbit: 3342 mg/kg
4300 mg/kg (two tests)
Eye Irritation: rabbit: Extreme irritation that did not clear by day 7 post dose.
Skin Irritation: rabbit: Severe irritation that did not clear by day 7 post dose.

Acute (0.2% active solution):

Skin Sensitization: guinea pig: Not a sensitizer

Acute (50% active solution):

Skin corrosively: rabbit: Corrosive

Chronic (50% active solution):

Not mutagenic. Not clastogenic with or without metabolic activation. No evidence of chromosomal damage in the bone marrow of rats treated with 600 mg/kg. No statistically significant teratogenic effects observed with administration of doses from 10 to 50 mg/kg during day 6 through 15 of gestation (rat and rabbit).

SECTION XII – DISPOSAL CONSIDERATIONS

DISPOSAL

Dispose of in compliance with all Federal, state and local laws and regulations. Incineration is the preferred method.

Container Disposal: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR ADDITIONAL REGULATORY INFORMATION AND TOXICOLOGY INFORMATION CONTACT NISUS CORPORATION.

"The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof."



100 Nisus Drive • Rockford, TN 37853
(800) 264-0870 www.nisuscop.com

BORA-CARE®

Termiticide, Insecticide and Fungicide Concentrate

For Both Interior and Exterior Prevention and Control of:
Wood Destroying Beetles • Decay Fungi

For Both Interior and Exterior Use

For use in and around Homes, Apartments, Garages, Museums, Public and Private Institutions, Schools, Hotels, Hospitals, Kennels, Stables, Farm Buildings, Trucks, Trailers, Warehouses and Non-Food Areas of Supermarkets, Restaurants and Food Processing Plants.

Keep Out of Reach of Children

CAUTION

Active Ingredient:

Disodium Octaborate Tetrahydrate ($\text{Na}_2\text{B}_8\text{O}_{13}\cdot 4\text{H}_2\text{O}$).....40%

Other Ingredients60%

Total100%

EPA Reg. No. 64405-1

EPA Est. 64405-TN-1

U.S. Patent Nos. 5,104,664, 5,460,816, 5,645,828, 6,630,174, 6,426,095

For Mold Control, mix entire contents of Mold-Care™ and Bora-Care® with 5 gallons of water.

PRECAUTIONARY STATEMENTS

Hazards To Humans & Domestic Animals

CAUTION: Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Thoroughly wash with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to intertidal areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

FIRST AID

Borate Pesticide

If on Skin or Clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Immediately rinse skin with plenty of water for 15-20 minutes.
If in Eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

NOTICE

Read and understand the entire label before using.

Use only according to label directions.

Before buying or using this product, read **Warranty Limitations and Disclaimer** statement found elsewhere on this label. If terms are unacceptable, return unopened package to seller for full refund of purchase price. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under **Warranty Limitations and Disclaimer**.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry (preferably locked) storage area inaccessible to children and pets. Do not freeze. **Container Disposal: If empty:** Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

I. MIXING INSTRUCTIONS

Bora-Care® is a concentrate that **must** be diluted with clean water before use. The use of warm or hot water, if available, and an impeller-type mixer that can be used with an electric drill aids the dilution process.

For mold control, mix 1 pint of **Mold-Care™ Moldicide Concentrate** with 1 gallon of **Bora-Care®** in 5 gallons of water following the procedures below:

A. Hand Sprayers: Mix in a clean container and stir the solution until completely uniform. Always mix in a separate container then add the solution to a spray tank. Mixing **Bora-Care®** solutions directly in a spray tank can block hoses and nozzles.

B. Hand Volume Pumping Systems: Add all of the dilution water to tank, start recirculator, then slowly add **Bora-Care®** and **Mold-Care™ Moldicide Concentrate** concentrates. Mix until uniform.

The solution will remain stable for up to 30 days. Do not leave unused solution under pressure or in tank overnight. Clean and/or flush equipment and lines with water after use.

II. GENERAL INFORMATION

Bora-Care® is an innovative termiticide, insecticide and fungicide that provides long term protection against: Brown Rot (including dry rot), White Rot, Wood Decay, Molds and Other Fungi
Powderpost Beetles: *Lyctidae, Bostrichidae*
Anobiid Beetles: *Anobiidae*
Old House Borers, Longhorn Beetles: *Cerambycidae, Hylotrupes*

Bora-Care® may be used on all cellulosic materials including wood, plywood, particle board, paper, oriented strand board (OSB), cardboard and wood composite structural components.

For tracking purposes (to make it easier to see where **Bora-Care®** solutions have been applied) an appropriate marker dye or pigment may be added to the solution when diluting **Bora-Care®** with water. Refer to the dye or pigment product label for recommended amount to add to the **Bora-Care®** solution.

Use soap and water to clean up tools.

III. PREVENTATIVE AND/OR PRETREATMENT FOR WHOLE HOUSE PROTECTION

Perform pretreatment at a point during the construction process when the greatest access to all wood members is available. Normally this is at the "dried-in" stage of construction when all structural wood and sheathing is in place, yet prior to installation of insulation, mechanical systems, electrical wiring, etc.

Treat wood in all plumbing, electrical and ductwork areas where they penetrate walls or floors. Treat all base plates and studs on interior and exterior walls, especially those surrounding any high moisture areas such as bathrooms, kitchens and laundry rooms. For buildings built on slabs, treat all wood in contact with the slab, all interior and exterior wall studs and wall sheathing material. In attics, treat all wood including ceiling joists, trusses, top plates, rafters and roof decking. Be sure that all sill plates and wood contacting garages and porches are treated.

In areas where access is limited to one (1) or two (2) sides of a wood member, apply two (2) coats of solution to the exposed surfaces. Wait at least 20 minutes between applications.

Treat all exterior wood including siding, fascias, soffits, eaves, roofing, porches, decks and railings (refer to Section V for complete exterior application information).

IV. PREVENTATIVE TREATMENT FOR POWDERPOST BEETLES

Apply two coats of solution to all wood surfaces to the point of wetness using a brush, spray or mist. Wait at least 20 minutes between applications.

V. TREATMENT OF EXTERIOR WOOD SURFACES LESS THAN TWO INCHES THICK SUCH AS DECKS, SHEDS, SIDING AND FENCES

Apply only to bare wood or to wood surfaces where an intact water repellent or finish is not present. If necessary, remove paint or finish prior to application. Apply to the point of wetness one (1) coat of solution to all wood surfaces. Apply two (2) coats of solution to heavily infested areas and to those surfaces where access is limited to one (1) or two (2) sides of wood members. Do not apply in rain or snow. Do not expose treated exterior wood surfaces to rain or snow for at least 48 hours after treatment. If inclement weather is expected, protect exterior treated surfaces with a plastic tarp.

For wood in contact with the ground or soil, see Section VII.

A. Finishing and Maintaining Treated Surfaces: For long-term protection, exterior wood surfaces that have been treated with **Bora-Care**[®] solutions will require a topcoating with a water-resistant finish such as paint or exterior stain. Apply the finish or topcoat within six (6) weeks of treatment. It is important to allow **Bora-Care**[®] treated wood to completely dry (at least 48 hours) before applying any protective topcoat. Coat a small section of treated wood with the finish to be used and check for compatibility prior to complete application.

VI. DIP TREATING LOGS AND LUMBER

Prepare a dip treating solution by following the mixing instructions in Section I. This will result in a stable solution containing 9% active boron. Sticker bundled wood to ensure the solution covers all wood surfaces. Submerge logs and/or lumber in the solution for at least one (1) minute or until all entrapped air has escaped. Protect treated wood from rain or snow for at least 24 hours after treatment.

VII. TREATMENT OF WOOD IN CONTACT WITH THE GROUND

A **Bora-Care**[®] treatment to wood in contact with the ground or soil has a limited lifespan and will require periodic reapplication. Protection may be extended with the use of products such as **Jecta**[®] **Diffusible Boracide**.

VIII. APPLICATION RATES

Table A – Dimensional Lumber

Lumber Size (Inches)	1 Gallon of Diluted Bora-Care® Will Treat Up To	Minimum Amount of Diluted Bora-Care® To Treat 1000 Lineal Feet
1 x 4	1,200 Lineal Feet	0.8 Gal.
1 x 12	400	2.6
2 x 4	600	1.6
2 x 6	400	2.6
2 x 8	308	3.2
2 x 10	240	4.2
2 x 12	200	5.0
4 x 4	300	3.4
4 x 6	200	5.0
4 x 8	150	6.8
4 x 12	100	10.0
6 x 6	133	7.6
6 x 8	100	10.0
6 x 10	80	12.6
6 x 12	68	15.0

Table B – Panels, Siding and Plywood

Thickness (Inches)	1 Gallon of Diluted Bora-Care® Will Treat Up To	Minimum Amount of Diluted Bora-Care® To Treat 1000 Square Feet
1/4	1,600 sq. ft.	0.6 Gal.
3/8	1,067	1.0
1/2	800	1.2
3/4	533	1.8
1	400	2.6

Note: The numbers listed above are based on an application rate of one (1) gallon of **Bora-Care®** solution to 400 board feet of wood.

Warranty Limitations and Disclaimer

Because of varying conditions affecting use and application, manufacturer warns buyer that these may impair or vary the results or effects of the use of this product. In any event, complete prevention of decay or insect infestation is not guaranteed. Neither the manufacturer nor seller shall be liable in respect to any injury or damage suffered by reason of the use of this product for a purpose not indicated by the label or when used contrary to the directions or instructions hereon or with respect to breach of any warranty not expressly specified herein. Buyer accepts this material subject to these terms and assumes all risk of usage and handling except when used or handled in accordance with this label.

It is not intended that this product be used to practice any applicable patent, whether mentioned or not, without procurement of a license, if necessary, from the owner, following investigation by the user.



100 Nisus Drive • Rockford, TN 37853
(800) 264-0870 • www.nisuscorp.com

Bora-Care® and Jecta® are registered trademarks of Nisus Corporation
Made in the U.S.A.

MATERIAL SAFETY DATA SHEET

BORA-CARE[®]

Health Emergencies: CHEMTREC[®] (800) 424-9300

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
(800) 264-0870 Fax: (865) 577-5825
Product Trade Name: **BORA-CARE[®]**
EPA Registration No. 64405-1
Chemical Family: Glycol borate solution
Formula: Proprietary Mixture
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
(Note this is a raw material and there is no free ethylene glycol present)

SECTION III - PHYSICAL DATA

Appearance: Clear viscous liquid
Specific Gravity: 1.38 g/ml
% Volatile: 36% by weight by TGA (as water)
Vapor Pressure: Negligible (<0.1)
Boiling Point: Above 212° F Odor: None
pH: 50% aqueous solution 6.9 - 7.1
% Solubility in Water: 100%

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 to 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. Preexisting kidney disorders may be aggravated by exposure to this material.

Acute oral LD₅₀ - greater than 5 gm/kg body weight (Sprague-Dawley male and female rats).

Acute dermal LD₅₀ - greater than 2 gm/kg body weight (New Zealand Albino male and female rabbits).

Acute inhalation LC₅₀ - greater than 5 mg/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

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

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 from 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.

INGESTION: 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 than 1 – 2 tablespoons for an 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.

NOTE TO PHYSICIAN: Treat for exposure to glycols. Contains borates. Monitor electrolytes.

SECTION VI - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: 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: Not known.

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

FIRE AND EXPLOSION HAZARDS: This material will not readily ignite.

FIRE FIGHTING PROCEDURES: Avoid inhaling smoke.

The use of a SCBA is recommended for fire fighters.

Water 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: Use safety glasses, goggles or face shield.

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 - SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS: 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.

"The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof. "



100 Nisus Drive, Rockford, TN 37853
(800) 264-0870 www.nisuscorp.com



MATERIAL SAFETY DATA SHEET**MOLD-CARE™ MOLDICIDE CONCENTRATE**

EPA Reg. No. 6836-212-64405

Health Emergencies: CHEMTREC® (800) 424-9300

SECTION I - PRODUCT IDENTIFICATION

Packaged and Distributed: Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
(800) 264-0870
Fax: (865) 577-5825

Product Trade Name: MOLD-CARE™ MOLDICIDE
CONCENTRATE

CAS No. : See Section 2 – CHEMICAL OR HAZARDOUS
COMPONENTS

Molecular Formula: Mixture

Chemical Name: (Active) N,N-Didecyl-N,N-dimethylammonium
chloride

SECTION II – CHEMICAL OR HAZARDOUS COMPONENTS

Chemical Name: N,N-Didecyl-N,N-dimethylammonium chloride

CAS No.: 7173-51-5

Approx. Wt%: 80%

Exposure Limit: None Established

Chemical Name: Ethyl alcohol

CAS No.: 64-17-5

Approx. Wt%: 10%

Exposure Limit: OSHA-PEL 1000 ppm ACGIH- TWA 1000 ppm

Chemical Name: Water

CAS No.: 7732-18-5

Approx. Wt%: 10%

Exposure Limit: None Established

SECTION III – POTENTIAL HEALTH EFFECTS

Primary Routes Of Entry: Skin Contact, Eye Contact, Inhalation

Effects of Overexposure: Based on available animal toxicity information for this material, it is anticipated that direct skin or eye contact will produce severe irritation and/or chemical burns with possible irreversible damage. May be fatal if ingested. Ingestion can cause immediate burning pain in the mouth, throat and abdomen; severe swelling of the larynx. Ingestion can cause skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions. Solvent vapors or mists of product may cause irritation of mucous membranes. Prolonged inhalation may produce drowsiness, lassitude and inability to concentrate.

Overexposure May Aggravate Existing Conditions:

No effects indicated.

Material Listed as Carcinogen by:

National Toxicology Program: No

I.A.R.C. Monographs: No

O.S.H.A.: No

SECTION IV – FIRST AID MEASURES

Skin Contact: Wash with plenty of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse.

Eye Contact: Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get immediate medical attention. If physician is not available, flush for an additional 15 minutes and then transport victim to medical care.

Inhalation: Remove from area to fresh air. Get immediate medical attention. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available.

Ingestion: Immediately give 3-4 glasses of milk (if unavailable, water). DO NOT induce vomiting. If vomiting does occur, give fluids again. Get immediate medical attention. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to an unconscious or convulsing person.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, as well as oxygen and measures to support breathing manually or mechanically may be needed.

SECTION V – FIRE AND EXPOSION INFORMATION

Flash Point: 107 °F Setaflash

Decomposition Temperature: Not Known

Self Ignition: Not Known

Lower Explosion Limit: Not Known

Upper Explosion Limit: Not Known

Extinguishing Media To Be Used: Carbon dioxide, Dry chemical, Alcohol foam, Water

Special Fire Fighting Procedures: Must wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.

Unusual Fire and Explosion Hazards: Products of combustion are toxic. Heated solvent vapors can travel to an ignition source and flash back.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Measures After Spillage / Leakage / Release: Danger-corrosive and combustible material. Remove all sources of ignition and ground all equipment before beginning cleanup. Floors may become slippery. Wear appropriate protective gear and NIOSH/MSHA approved respirator where mists or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred). Dike and contain spill with inert material (sand, earth, etc.). Transfer the solid and liquid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

SECTION VII – HANDLING AND STORAGE

Precautions for Storage and Handling: Maximum storage temperature: 140 °F. Store containers in compliance with the most recent NFPA Code (NFPA 30). Ground all containers prior to pouring. Keep containers closed until used. Do not contaminate drinking water, food or feed by storage or disposal.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.

Respiratory Protection: In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.

Protective Gloves: Use rubber or neoprene gloves to prevent skin contact.

Eye Protection: Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

Other Protective Equipment: Eye wash; safety shower; protective clothing (long sleeves, coveralls or other as appropriate), when needed, to prevent skin contact.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Color: Colorless to Pale Yellow
Odor: Ethanol-Like
Changes of Physical State
Freezing Point: 10 °C
Boiling Point: Not Known
Specific Gravity: 0.89 g/ml at 25 °C
Bulk Density: Not Applicable
Vapor Pressure: Not Known
Vapor Density (Air=1): Not Known
Max. Percent Volatile: 20%
Evaporation Rate (Butyl Acetate=1): Not Known
Viscosity: Not Known
Water Solubility: Soluble
pH-Value: 6.5 – 9 (10% active solution)

SECTION X – STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: None known

Hazardous Decomposition Products:

Thermal decomposition may produce toxic vapors/fumes of:

Hydrogen chloride, amines and other organic materials; and oxides of carbon and nitrogen.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None Known

Incompatibility (materials to avoid):

Strong oxidizing or reducing agents

SECTION XI – TOXICOLOGY INFORMATION

No toxicity information is available for this product. The toxicity information provided is for a similar product(s) and/or component(s) of this product.

Acute (80% active solution):

Oral LD₅₀: rat: 450 mg/kg
412 mg/kg (male); 292 mg/kg (female)

Dermal LD₅₀: rabbit: 3342 mg/kg
4300 mg/kg (two tests)

Eye Irritation: rabbit: Extreme irritation that did not clear by day 7 post dose.

Skin Irritation: rabbit: Severe irritation that did not clear by day 7 post dose.

Acute (0.2% active solution):

Skin Sensitization: guinea pig: Not a sensitizer

Acute (50% active solution):

Skin Corrosivity: rabbit: Corrosive

Chronic (50% active solution):

Not mutagenic. Not clastogenic with or without metabolic activation. No evidence of chromosomal damage in the bone marrow of rats treated with 600 mg/kg. No statistically significant teratogenic effects observed with administration of doses from 10 to 50 mg/kg during day 6 through 15 of gestation (rat and rabbit).

SECTION XII – DISPOSAL CONSIDERATIONS

DISPOSAL

Dispose of in compliance with all Federal, state and local laws and regulations. Incineration is the preferred method.

Container Disposal: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR ADDITIONAL REGULATORY INFORMATION AND TOXICOLOGY INFORMATION CONTACT NISUS CORPORATION.

"The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof."



100 Nisus Drive, Rockford, IN 3/853
(800) 264-0870 www.nisuscorp.com

MATERIAL SAFETY DATA SHEET

BORA-CARE®

Health Emergencies: CHEMTREC® (800) 424-9300

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
(800) 264-0870 Fax: (865) 577-5825

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
pH: 50% aqueous solution 6.9 - 7.1	% Solubility in Water: 100%

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 to 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. Preexisting kidney disorders may be aggravated by exposure to this material.

Acute oral LD₅₀ - greater than 5 gm/kg body weight (Sprague-Dawley male and female rats).

Acute dermal LD₅₀ - greater than 2 gm/kg body weight (New Zealand Albino male and female rabbits).

Acute inhalation LC₅₀ - greater than 5 mg/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

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

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 from 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.

SECTION V - EMERGENCY AND FIRST AID PROCEDURES

(Cont.)

INGESTION: 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 than 1 - 2 tablespoons for an 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.

NOTE TO PHYSICIAN: Treat for exposure to glycols. Contains borates. Monitor electrolytes.

SECTION VI - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: 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: Not known.

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

FIRE AND EXPLOSION HAZARDS: This material will not readily ignite.

FIRE FIGHTING PROCEDURES: Avoid inhaling smoke. The use of a SCBA is recommended for fire fighters. Water 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: Use safety glasses, goggles or face shield.

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 - SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS: 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.

"The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof."



100 Nisus Drive, Rockford, TN 37853
(800) 264-0870
www.nisuscorp.com