

**Section 1: PRODUCT & COMPANY IDENTIFICATION**

Product Name: D/2 Biological Solution

*Exclusively Distributed By:*

**Cathedral Stone® Products, Inc.**

7266 Park Circle Drive

Hanover, MD 21076

Telephone: 410-782-9150

Fax: 410-782-9155

*Manufactured By:*

**Sunshine Makers, Inc.**

15922 Pacific Coast Highway

Huntington Harbour, CA 92649

Telephone: 800-228-0709

Fax: 562-592-3830

Emergency Phone: Chem-Tel 24-Hour Emergency Service: 800-225-3924

Use of Product D/2 Biological Solution is an easy-to-use liquid that aids in the removal of a broad spectrum of soils. It is designed for use on outdoor sculpture, monuments, decorative fountains, stone, brick, terra cotta, concrete, stucco, and other architectural surfaces.

**Section 2: HAZARDS IDENTIFICATION**

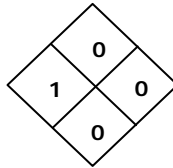
**D/2 Biological Solution is a colorless liquid with a very faint detergent-like odor. It is non-flammable, non-combustible, non-explosive, and non-reactive.**

**Hazard Rating (NFPA/HMIS)**

Health = 1\*                      Reactivity = 0

Fire = 0                              Special = 0

\* Mild eye irritant, non-mutagenic and non-carcinogenic



**Rating Scale**

0 = Minimal              1 = Slight              2 = Moderate  
3 = Serious              4 = Severe

**Eye Contact:** Eye Irritant.

**Skin Contact:** Prolonged skin contact with D/2 Biological Solution may irritate the skin. Repeated daily application to the skin without rinsing, or continuous contact of D/2 Biological Solution on the skin may lead to irritation.

**Ingestion:** Essentially non-toxic. May cause stomach or intestinal upset if swallowed.

**Inhalation:** No adverse effects expected under typical use conditions. Adequate ventilation should be present when using D/2 Biological Solution over a prolonged period of time. Open windows or ventilate via fan or other air-moving equipment if necessary. Mucous membranes may become irritated by concentrate mist.

**Carcinogens:** No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

**Medical Conditions:** No medical conditions are known to be aggravated by exposure to D/2 Biological Solution.

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredients</u>	<u>CAS Number</u>	<u>OSHA PEL ACGIH TLV</u>
Surfactants	Proprietary	None established
Wetting Agents	Proprietary	None established
Buffers	Proprietary	None established

**Section 4: FIRST AID MEASURES**

**If in Eyes:** Immediately rinse the eye with large quantities of cool water; if present, contact lenses should be removed after 5 minutes of rinsing; continue rinsing 10-15 minutes more. Both upper and lower lids should be lifted to facilitate thorough rinsing.

**If on Skin:** Minimal effects, if any, from diluted product; rinse skin with water, rinse shoes and launder clothing before reuse. - Reversible reddening may occur in some dermal-sensitive users; thoroughly rinse area.

**If Inhaled:** Use in well-ventilated area, or use adequate protection from inhaling mist during spray applications. Prolonged exposure of workers to concentrate-mist during spray application may cause mild irritation of nasal passages or throat. If this happens, relocate workers to fresh air.

**If Ingested:** Give several glasses of milk or water to dilute; do not induce vomiting. If stomach upset occurs, consult physician.

**Section 5: FIRE FIGHTING MEASURES**

Extinguishing Media: Not flammable/non-explosive. No special procedures required.

Special Fire Fighting Procedures: None required.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Avoid contact with eyes. Do not rub eyes with hands during cleanup. No special precautions for dermal contact are needed. Wash hands thoroughly after cleaning up spill or leak.

**Procedure to follow in case of spill or leak:** Evacuate area. Identify source of leak or spill and contain with sand, earth, or containment bin. Then proceed to clean up spill or leak.

**Method for cleaning up:** Recover all usable material. Residual may be removed by wipe or wet mope. Rinse area with plenty of water and mop to sanitary sewer.

**Section 7: HANDLING AND STORAGE**

No special handling is required. Keep in a closed plastic container. Store at ambient temperature. Avoid contact with eyes. Wash hands thoroughly after handling. **This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations.**

This material does not meet the definition of a hazardous material according to 49 CFR, ICAO, IMDG and the UN Orange Book.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Precautionary measures: No special requirements under normal use conditions.

Exposure Limits: The D/2 Biological Solution formulation presents no health hazards to the user, other than mild eye irritancy.

Eye protection: Caution, including reasonable eye protection, should always be used to avoid eye contact where splashing may occur, such as during spray applications.

Respiratory Protection: No special precautions required.

Ventilation: No special ventilation is required during normal use.

Skin protection: No special precautions required; rinse completely from skin after contact.

General hygiene conditions: There are no known hazards associated with this material when used as recommended. The following general hygiene considerations are recognized as common good industrial hygiene practices:

- Avoid breathing vapor or mist.
- Avoid contact with eyes.
- Wash thoroughly after handling and before eating, drinking, or smoking.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear Liquid	<b>Freezing Point:</b>	-9 °C (16 °F)
<b>Odor:</b>	Very faint detergent-like odor	<b>Boiling Point:</b>	98°C (209°F)
<b>pH:</b>	9.5	<b>Specific Gravity:</b>	1.011
<b>Evaporation Rate:</b>	0.4 (butyl acetate = 1)	<b>Vapor Pressure:</b>	20.7 mm Hg
<b>Water Solubility:</b>	100%	<b>Vapor Density:</b>	1.3 (air = 1)

**Section 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials to Avoid: **Contains ammoniated compounds – do not mix with bleach, tub & tile cleaner, mold/mildew removers, or chlorinated compounds.**

Hazardous Decomposition Products: None expected

**Section 11: TOXICOLOGICAL INFORMATION**

Toxicity Data: Available from relevant laboratory testing of ingredients or similar mixtures.

Acute Toxicity:	Oral LD <sub>50</sub> : >2.0 g/kg body weight	Dermal LD <sub>50</sub> : Not estimated
Eye Irritation:	With or without rinsing with water, the irritation scores in rabbits at 24 hours did not exceed 17 (mild irritant) on a scale of 110 (extremely irritating); all scores were normal at seven days.	
Dermal Irritation:	In a standard test on rabbits, mild irritation was found at 72 hours; well-defined reddening was observed at 7 and 14 days after exposure.	
Dermal Sensitization:	No allergic reactions occurred in guinea pigs treated with D/2 Biological Solution.	
Carcinogenicity:	D/2 Biological Solution contains no carcinogenic compounds as defined by the National Toxicology Program (NTP), the international Agency for Research on Carcinogens (IARC), or the Occupational Health and Safety Administration (OSHA).	

**Section 12: ECOLOGICAL INFORMATION**

Biodegradability:	All components are inherently biodegradable.
Ecotoxicity:	Not Tested.

**Section 13: DISPOSAL CONSIDERATIONS**

Unused Product:	* Dilute with water 1:10 (1 part D/2 Biological Solution to 10 parts water) and dispose by sanitary sewer.
Used Product:	*Used product may be hazardous depending on the cleaning application and resulting contaminants.
Empty Containers:	*Triple-rinse with water and offer for recycling if available. Otherwise, dispose as non-hazardous waste.

\*Dispose of used or unused product, and empty containers in accordance with the local, State, Provincial, and Federal regulations for your location. Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

**Section 14: TRANSPORT INFORMATION**

IATA Proper Shipping Name: Detergent solution

Hazard Class: Non hazardous

**Section 15: REGULATORY INFORMATION**

**\*Reportable components:** None. The U.S. Environmental Protection Agency (EPA) has determined that propylene glycol ethers are not included within the listed category "glycol ethers" under either EPCRA §313 Toxic Release Inventory or Clean Air Act §112 Hazardous Air Pollutants (both lists include only ethylene glycol ethers). Nor are propylene glycol ethers included in the various EPA Resource Conservation and Recovery Act, and Clean Water Act lists, nor the California Proposition 65 lists.

All components are listed on: EINECS and TSCA Inventory

No components listed under: Clean Air Act Section 112

RCRA Status: Not a hazardous waste.

CERCLA Status: No components listed

TSCA TRI Reporting: Not required / Not listed

CA PROP. 65 Status: No components listed

**Section 16: OTHER INFORMATION****For Safety Information, Sales Applications and Availability contact:**

CATHEDRAL STONE® PRODUCTS, INC.  
7266 Park Circle Drive, Hanover, MD 21076

Telephone: 410-782-9150 Fax: 410-782-9155

**DISCLAIMER:** All information appearing herein is based upon data obtained by the manufacturer and recognized technical sources. Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of this information, Sunshine Makers, Inc. or its distributors extends no warranties, makes no representations and assumes no responsibility as to the suitability of such information for application to purchaser's intended purposes or for consequences of its use.