



MATERIAL SAFETY DATA SHEET

Last Updated August 4, 2011

1. Product and Company Identification

Product Name....Water-Based Concrete Dye

Manufacturer....Diamatic USA

Emergency Phone....866-295-5512

Address.....5220 Gaines Street

Business Phone.....866-295-5512

City, State, Zip....San Diego, CA 92110

Business Fax.....619-295-0754

Last Updated.....August 4, 2011

Health.....[2]

Flammability.....[1]

Reactivity.....[0]

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	WT%	OSHA-PEL	ACGIH-TLV	Recommended PEL
Glycol ether EP	2807-30-9	20-30%	Not established	Not established	Lowest possible exposure or zero with best PPE
Cr+3 (complexed in dye molecule)	7440-47-3	.1-1%	0.5mg/m3 TWA	0.5m/m3 TWA	Not Applicable
Propylene glycol ether DPM	34590-94-8	1-5%	100 pp, 600 mg/ m3 TWA STEL Not established	100 ppm 606 mg/m3 TWA 150 ppm 909 mg/m3 STEL	

Important Notice: Unprotected contact with ingredients listed in Section 2 may be hazardous based on OSHA 29 CFR 1910.1200 & related appendices. Components not listed are trade secrets, non-hazardous, or not reportable. This MSDS is to intend to odder full disclosure, but all component information is available to medical or emergency personnel. All hazards are based on contact exposure. Effects may be unpredictable and may vary from person to person due to individual reactions. Reducing or eliminating contact can reduce or eliminate risk. Use protective equipment and clothing in Section 8 to minimize or eliminate contact. Users are responsible for hazard determination and communication. Unless indicated otherwise, non-carcinogenic components are indicated within a 1-10% range, and investigated or potential carcinogens within a 0.1-1% range. HMIS ratings are based on data interpretation, and vary from company to company. They are intended only for quick, general identification of the degree of potential hazards. Hazards range from 0 (minimal) up to 4 (severe). Consult the National Paint & Coatings Association HMIS Manual for detailed information on ratings. To handle material safely, consider all information in this MSDS.



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3. HAZARDS IDENTIFICATION

Emergency Overview: Unprotected contact may cause severe eye irritation, moderate respiratory irritation, and mild skin irritation. Vapors may be harmful if inhaled.

Eye Contact: Depending on duration, unprotected contact may cause severe irritation, pain, burning, redness, swelling, change of vision, discoloration, watering, itching, stinging, possible injury to eyes, especially with heavy or prolonged contact or without immediate rinsing. Follow all supervisor and Personal Protection instructions in Section 8 of this SDS.

Skin Contact: Depending on degree of unprotected contact with product and individual sensitivity, may cause mild irritation to skin, redness, rash, itching, and other effects. Constant/repeated long-term contact with some powdered products may cause abrasion of skin or increase other effects. Some liquid components may be absorbed through unprotected skin causing or adding to the effects.

Inhalation: Contact by unprotected inhalation of vapors, aerosols, or dusts may cause moderate irritation or respiratory system headache, dizziness, cough, chest pain, shortness of breath, nausea, or other effects, Central Nervous System effects, or other symptoms. Heavy repeated or prolonged vapor inhalation may increase effects with reduced lung function, possible chest illness, lung injury; Solvent-containing liquids may give off vapors. In severe cases an accumulation of unventilated vapors, or vapors from high temperatures or heated processing may increase effects causing unconsciousness from overexposure.

Ingestion: Depending on amount swallowed, product may cause headache, gastrointestinal irritation, upset stomach, abdominal pain, nausea, vomiting, diarrhea, moderate irritation of mouth, throat, esophagus, stomach, entire gastrointestinal tract, mental sluggishness, confusion, fatigue, weakness, dizziness, drowsiness, faintness. High dose can cause severe irritation, loss of balance, other serious effects. (Material aspirated into lungs during vomiting IR A MEDICAL EMERGENCY and may injure lungs).

Medical Conditions Aggravated by Exposure: Improper protection allowing contact with vapors, mists, aerosols, splashes or dusts of product by inhalation, eye contact, skin contact or swallowing is expected to aggravate one or more pre-existing conditions: Impaired respiratory functions (asthma, bronchial diseases, etc.), skin disorders, Central Nervous System disorders, kidney or liver diseases, neurological diseases, eye disorders, or nerve or circulatory disorders. Avoid contact. Persons with any of the above-mentioned conditions should avoid working with chemicals.

Skin Sensitization: Not known to cause skin sensitization. With careful handling and when good chemical hygiene procedures are followed, harmful effects are not expected. As a precaution against unforeseen or unexpected sensitivity or possible allergic reactions, follow ALL Personal Protection instructions in Section 8 of this SDS.

Respiratory Sensitization: Not known to cause respiratory sensitization. With careful handling and good chemical hygiene procedures being followed, no harmful effects are expected. As a precaution against unforeseen or unexpected sensitivity or possible allergic reactions, follow ALL Personal Protection instructions in Section 8 of this SDS. All PPE must be cleaned and maintained after each shift. All exposures should be avoided. Individuals known to be, or suspected to be sensitive to chemical exposure should not work with chemicals.

Special Warnings: None for this material

Unusual Health Hazards: PROLONGED OR REPEATED UNPROTECTED SKIN CONTACT with product can cause drying out of skin, INFLAMMATION, SEVERE IRRITATION, or BLISTERING (after several hours). Repeated absorption of Glycol Ether EP in sufficient quantity may cause anemia, kidney damage, and blood turning urine dark brown or black.



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Supplemental Hazard Information: Overexposure or ingestion of Glycol ether EP can cause Central Nervous System depression. Glycol ether EP: Chronic exposure may cause blood abnormalities.

Chemical Name	CAS No.	WT%	IARC	NTP	OSHA	NIOSH	ASGIH
Cr+3 (Complexed in dye molecule)	7440-47-3	.1-1%	Group 3 Unclassifiable on human carcinogenicity	NONE	NONE	NONE	NONE

4. FIRST AND MEASURES

Eye Contact: Immediately rinse with flowing water for at least 15 minutes while holding eyelids open. Get immediate medical attention, as a precaution. Have a copy of this Safety Data Sheet available.

Skin Contact: Immediately remove contaminated clothing. Wash affected area with soap and rinse with plenty of water. Get medical attention, as a precaution. Have a copy of this Safety Data Sheet available.

Inhalation: Immediately move person to fresh air. If breathing is difficult give oxygen, call 911, calm the individual. If not breathing, call 911, give artificial respiration (CPR) until medical help arrives. Have this Safety Data Sheet available.

Ingestion: Do not induce vomiting unless directed to do so by a doctor or by other emergency medical personnel. Forced vomiting of certain chemicals may cause aspiration and lung damage. Have this Safety Data Sheet available.

5. FIRE FIGHTING MEASURES

Auto-ignition Temperature: Not applicable

LEL: Not applicable

UEL: Not applicable

Unusual hazards: None expected

Other Hazards: None known

Types of Extinguishers: CO₂, dry chemical, foam, water fog or spray depending on type of fire

Fire Fighting Directions: Wear self-contained breathing equipment and fire-proof clothing. Use water spray to cool fire exposed containers if they cannot be safely moved.

6. ACCIDENTAL RELEASE MEASURES

Special Precautions: None known. Follow general precautions shown below.

Reporting: Check the applicable RQs in Section 15

Static Discharges: IMPORTANT - FOR DYES CONTAINING FLAMMABLE SOLVENTS (Check section 3 for ingredients, section 5 or 9 for flash point, section 14 for transport classification). IF FLAMMABLE, GUARD AGAINST FIRE AND EXPLOSION: Take precautionary measures against static discharges when cleaning up leaks or spills of combustibles, flammables and powders. Containers should be properly grounded with metal straps, cables or other appropriate means to relieve static electricity build-up or generation. IMPORTANT: When using, mixing, filling, or otherwise dispensing any types of solvents, do not allow buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums, pails, and all other containers should be completely sealed when not in use. Flammable vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

Environmental Protection: Immediately dike liquid spills with inert absorbent material (sand, "Oil Dry" or other commercially available spill absorbent) to contain and soak up liquid. Prevent material from entering floor drains, sewers, or any bodies of water. For powder spills, use sweeping compound, sawdust, or other appropriate material to contain dust. If possible, recover any uncontaminated materials to re-use.

Protective equipment and clothing: Wear all proper personal protective equipment and clothing to care for spill situation. See section 8 of this Safety Data Sheet.



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Clean up: After containing liquid spill by diking and soaking up with inert absorbent material, place in labeled container to be sealed for proper and regulated disposal. Only the slightest residue should remain. Try to save uncontaminated material for reuse whenever possible. For powders, use sweeping compound to minimize dust and pick up as much product as possible. Do not allow liquids to seep into drains, sewers, lakes, rivers, etc. Check Sections 1 and 2 for dye description or type. Solvent dye residue may be cleaned by scrubbing with detergent, depending on type. Do not add water to water-soluble dyes. Dye is concentrated. This will increase amount of color to remove. All cleaning or scrubbing liquids used should be absorbed and placed in labeled containers for correct disposal. Absorbent material containing solvents may release combustible or flammable vapors and should be handled accordingly, properly labeled and disposed. Check Sections 2, 5, 13 & 15 for applicable instructions and regulations.

7. HANDLING AND STORAGE

Warnings and Precautions: No special precautions anticipated. Wear all PPE in section 8 as a precaution, and avoid physical contact with material.

Personal Protection: Wear ALL proper personal protective equipment as outlined in section 8 of this SDS.

WATER-BASED PRODUCTS: DO NOT ALLOW TO FREEZE.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Note: Selecting protective equipment & clothing: When choosing personal protective equipment and clothing, consider each worker's environment, all chemicals being handled, temperature, ventilation, and all other conditions. Determination of the level of protection needed for the eyes, skin and respiratory system under working conditions is the responsibility of the product end-user or shift supervisor. SDS Sections 2, 3, 8 and 11 should be consulted.

Eye protection: As a precaution, wear indirectly vented, splash-proof chemical safety goggles. When handling liquids, wear splash-proof goggles under a clear face-shield. Face shield is not to be used without these goggles. The type or extent of protection needed should be determined by the product end-user or shift supervisor.

Skin Protection: Always wear impervious, chemical-resistant synthetic or rubber gloves. Check with manufacturer for best glove for the material being handled. Wear good quality long sleeved work shirt, coveralls, and a rubber or plastic apron. Wash hands after handling and before eating, drinking or using restroom. Shower after each shift. Clean contaminated but reusable protective equipment and clothing before reusing and wearing again. Discard contaminated disposable gloves and clothing. The type or extent of protection needed should be determined by the product end-user or shift supervisor.

Respiratory Protection: Depending on type of material handled and processing conditions, the appropriate NIOSH approved air-purifying organic vapor/mist respirator or dust respirator (with proper pre-filters if required) should be worn as a precaution when any inhalation contact with product is possible. A properly selected, disposable NIOSH approved air-purifying mask may be acceptable (Check with the mask manufacturer). After each shift or when equipment becomes contaminated, clean the respirator and replace filters in compliance with 29 CFR 1910.134. Discard disposables as often as required. The type or extent of protection needed should be determined by the product end-user, shift supervisor or other appropriate on-site manager.

Eye Washes and Other Protection: Eye wash stations and drench showers should be located within 100 feet or 10-second walk of the work area per ANSI standard Z358.1-1990.

Ventilation: Local exhaust or other appropriate ventilation should be used to maintain exposure limits below specified amounts recommended by OSHA, NIOSH, or ACGIH and to draw spray, aerosol, vapors, or dusts away from workers and prevent routine inhalation. At least 10 air changes per hour are recommended for good room ventilation. **IMPORTANT - GUARD AGAINST FIRE AND EXPLOSION:** When using, mixing, filling, or otherwise dispensing any types of solvents, do not allow buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums and all other containers should be



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completely sealed when not in use. Vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

Chemical Name	CAS No.	WT%	NIOSH-REL	NIOSH-IDLH	OTHER OEL'S
Glycol ether EP	2807-30-9	20-30%	Not established	Not established	20 pp, TWA for skin. 60 ppm STEL for skin
Cr+3 (complexed in dye molecule)	7440-47-3	.1/1%	0.5mg/m3 TWA	Not established	Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: 200°F
pH: Not established
% Water Content: 30% - 65%
% Total Solids / Non-Volatiles: <20%
% Total VOC: 54.00
% Solvents: 25% - 30%
% Other Components: Undisclosed
Boiling Point: Not established
Appearance: Brown liquid
Odor: Mild ether
Freezing/Melting Point: Not established
Lbs. per gallon: 9.10
Specific Gravity (Liquid): 1.09
Vapor Pressure: Not established
Solubility: Water soluble. Test in specific applications and systems.
Other Properties: No further data
 All Data shown above are typical values, not specifications.

10. STABILITY AND REACTIVITY

Stability: Product is expected to be stable under normal, ambient (controlled) conditions concerning heat, moisture, pressure, fire and ignition hazards, and ventilation. Contact with incompatible or reactive materials may cause hazardous reactions in some products if indicated. Check information below.

Hazardous Polymerization: Product will not undergo polymerization.

Conditions to Avoid: All fire & ignition hazards, heat & incompatible materials.

Incompatible Materials: Strong oxidizers, acids, alkalis

Hazardous Decomposition Products: Oxides of carbon, nitrogen, sulfur

Possible Hazard Reactions: None known

11. TOXICOLOGICAL INFORMATION

Component	Eye Effect	Skin Effect	Skin Sens	Resp Sens	Oral LC50	Inh LC50	Mutagen	Other Tox Data	Other Info
Glycol ether EP	Severe irritant	Mild irritant	No Data	No Data	3089 mg/kg (Rat)	No Data	No Data	Repeated absorption in sufficient quantity may cause anemia, kidney damage.	Repeated absorption in sufficient quantity may cause blood in urine turning it dark brown or black
Cr+3 (Complexed in dye molecule)	Expected to irritate	Expected to irritate	No Data	No Data	No Data	No Data	No Data	No Data	Possible allergic skin reaction, dermatitis respiratory effects in individuals



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12. ECOLOGICAL INFORMATION

Component AOX Aquatic Tox BOD Biodeg. COD Ecotoxicity Sewage Other Test Data Other Info

*** No Data ***

13. DISPOSAL CONSIDERATIONS

Reuse of materials: Reclaim all uncontaminated material to reuse, recycle or otherwise rework whenever possible.

Contain - Do not release: Do not release into sewers, water systems, ground systems or ecosystems without proper authorization.

Disposal Methods: Incinerate, treat, or bury (landfill), after sampling and testing, at facility approved by applicable federal, state, and local authorities.

Empty Containers: Empty containers may contain residue and/or vapors and should not be reused unless professionally cleaned and reconditioned. Crush if not cleaned, to prevent reuse.

Applicable Regulations: See Section 15 if regulated

Special Instructions: See Section 15 if regulated

14. TRANSPORT INFORMATION

DOT Regulations:

Notes/Special Precautions: Not regulated. PROTECT FROM FREEZING. Label accordingly

IATA Regulations (Air):

Notes/Special Precautions: Not regulated. PROTECT FROM FREEZING. Label accordingly

IMDG / IMO Regulations (Water):

Notes/Special Precautions: Not regulated. PROTECT FROM FREEZING. Label accordingly

15. REGULATORY INFORMATION

FEDERAL AND STATE LISTS

Chemical Name	CAS No.	WT %	Regulatory List
Glycol ether EP	2807-30-9	25 -30%	SOCMI Chemical
Cr+3 (Complexed in dye molecule)	7440-47-3	.1 -1 %	CERCLA, CWA, RCRA: D007, SARA 313: 0.1%, States: DE, MA, MN, NJ, NY

SARA 311/312 Hazard Categories:

Immediate / Acute Health Hazard: YES

Chronic / Delayed Hazard: YES

Fire Hazard: NO

Sudden Release of Pressure Hazard: NO

Reactivity Hazard: NO

GLOBAL CHEMICAL REGISTRATION LISTINGS:

AICS (Australia): Components listed

DSL (Canada): Components listed

ECL (Korea): Components listed

EINECS (Europe): Components listed

ENCS (Japan): Not all components listed

IECSC (China): Components listed

NZIoC (New Zealand): Components listed

PICCS (Phillippines): Components listed

TSCA (US):Components listed

EU Reach: Keystone has taken all relative steps to ensure REACH-Compliance. Please contact us with any REACH-Related questions.



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OTHER LISTINGS: Other national or regional registrations not yet determined.

Additional Info: For additional international, federal or state regulatory compliance information not shown: Call 312-666-2015.

16. OTHER INFORMATION

IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure.

This MSDS has been prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200). To the best of our knowledge, the information contained herein is accurate and the information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change, BRICKFORM makes no warranty, either expressed or implied with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. The data on this sheet is related only to this specific material. It may not be valid for this material if used in combination with any other materials. It is the user's responsibility to determine suitability and completeness of this information with regards to a particular use. Additional information may be necessary or helpful for specific conditions and circumstances of use. Unknown hazards may exist and this material should be used with caution. BRICKFORM assumes no legal responsibility for use or reliance upon this data.