



Material Safety Data Sheet
NitroDye, Solvent Based Concrete Dye

1. Product and Company Identification

Product Code	ND	Emergency Phone	CHEMTREC 800-424-9300
Product Name	NitroDye™	Business Phone	+(962-6) 487-4078
Manufacturer	Creative Concrete Concepts	Business Fax	+(962-6) 488-9133
Address	P.O. Box 925794		
City, Zip, Country	Amman, 11110 Jordan		
Last Updated	April 11, 2006		

2. Composition / Information on Ingredients

Chemical Name	CAS No.	ACGIH TLV	OSHA TWA
Acetone	67-64-1	500 ppm	500 ppm
Methanol	67-65-1	200 ppm	200 ppm
Toluene	108-88-3	50 ppm	50 ppm
Methyl ethyl ketone	78-93-3	200 ppm	200 ppm
Ethyl Acetate	141-78-6	400 ppm	400 ppm

3. Hazards Identification

Primary Routes of Exposure:
 Skin contact, eye contact, ingestion, and inhalation.

Effects of Acute Exposure

Eyes — Contact with eyes may cause irritation including burning, watering, and redness.

Skin — Contact may cause mild skin irritation including redness, burning, and drying and cracking of skin. Continued exposure may develop into dermatitis. Solvents can penetrate the skin and cause systematic effects similar to those under *Inhalation* symptoms.

Inhalation — High vapor concentrations are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, asthma, drowsiness, unconsciousness, and other central nervous system effects, and possibly death.

Ingestion — Swallowing even small amounts of this product could potentially cause blindness or death. Effects of sub lethal doses may be nausea, headache, abdominal pain, vomiting, and visual disturbances ranging from blurred vision to light sensitivity..

Chronic Health Effects

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as Solvent or Painter's Syndrome). Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal. Chronic exposure may also cause damage to the respiratory system, lungs, eyes, skin, gastrointestinal tract, liver, spleen and kidneys. Repeated skin contact may cause persistent irritation or dermatitis.

Medical Conditions Generally Aggravated by Exposure

Emphysema or bronchitis.

4. First Aid Measures

Emergency and First Aid Procedures:

Inhalation— Move affected individual to fresh air. If breathing is difficult, qualified personnel should administer oxygen. If breathing has stopped give artificial respiration. If respiratory symptoms develop or persist, seek medical attention.

Skin— Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If irritation develops and persists, seek medical attention.

Ingestion— SWALLOWING METHANOL IS POTENTIALLY LIFE THREATENING. Do not induce vomiting. Keep person warm, quiet and seek immediate medical attention. Onset of symptoms may be delayed for 18 to 24 hours. Aspiration of material into lungs can cause severe lung damage. VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

Eyes— Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. If symptoms persist, seek medical attention.

5. Fire Fighting Measures

Flash Point (Method Used):	64° F (TCC)
Autoignition temperature:	725° F (Methanol)
Flammable Limits in Air by Volume:	Lower 1.1%
	Upper 36%

Extinguishing Media:

Foam, CO₂, or dry chemical is recommended. Water spray is recommended to cool or protect exposed materials or structures.

Special Fire Fighting Procedure:

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment. Isolate danger area, keep unauthorized personnel out. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters. Carbon dioxide can displace oxygen, exercise caution when using CO₂ in confined areas.

Unusual Fire and Explosion Hazards:

Vapors may be ignited by heat, sparks, flames, or other sources of ignition. Vapors are heavier than air and may travel considerable distances to a source of ignition where they may cause a flashback or explosion. If container is not properly cooled, it can rupture in the presence of excessive heat.

6. Accidental Release Measures

Steps to Be Taken in Case Material is Released or Spilled:

Keep all sources of ignition and hot metal surfaces away from spill/release. Use explosion-proof non-sparking equipment. Stay upwind from area. Isolate danger and keep unauthorized personnel out. Stop source of release if possible with minimal risk. Wear appropriate protective equipment including respiratory protection. Prevent spill from entering sewers, storm drains, or any other unauthorized treatment drainage systems and natural waterways by diking ahead of the spill. Spilled material may be absorbed with an appropriate spill kit. Notify fire authorities and appropriate federal, state, and local agencies if required.

7. Handling and Storage

Handling Information:

Employees who come in contact with this material must be trained in accordance to 1910.1200 of the Hazard Communication Standard. Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Static charge can accumulate by flow or agitation. Ignition can occur by static discharge. The use of explosion proof equipment is recommended and may be required. The use of respiratory protection is advised when concentrations exceed any established exposure limits and in confined spaces. Use good industrial and personal hygiene practice, wash thoroughly after handling, and do not wear contaminated clothing.

Storage Information:

Keep containers tightly closed. Use and store material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post "No smoking or open flame" sign. Store only in approved containers. Keep away from incompatible materials (see section 10). Protect containers against physical damage. Indoor storage should meet OSHA standards and appropriate fire codes.

7. Handling and Storage... Continued

Other Precautions:

Empty containers retain residue, liquid and vapor, and may be dangerous. Do not cut, weld, pressurize, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause severe personal injury or death. All containers should be disposed of in an environmentally safe manner in accordance with all government regulations.

8. Exposure Controls and Personal Protection

Respiratory Protection:

Engineering or administrative controls should be implemented to reduce exposure. A NIOSH/MSHA approved respirator with an organic vapor cartridge should be used under conditions where airborne concentrations are expected to exceed exposure limits (See Section 2). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Ventilation:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

Protective Gloves:

Prevent prolonged or repeated contact by wearing gloves impervious to solvents and other appropriate protective clothing. Launder contaminated clothing before reuse.

Eye Protection:

Wear safety glasses to reduce eye contact potential. Chemical safety goggles (ANSI Z87.1 or approved equivalent) are appropriate if splashing is likely. Eye washes must be available where eye contact can occur.

Other Protective Clothing or Equipment:

A source of clean water should be available for flushing eyes and skin. Showers should be available if larger spills are possible.

Work/Hygienic Practices:

Efforts should be made to minimize contact and spills. Always wash hands before eating, drinking, or smoking. Clean up spills promptly. Follow OSHA and company guidelines.

9. Physical and Chemical Properties

Physical State:	Liquid	Color:	Clear, various colors
Odor:	Mild Solvent Odor	Solubility in Water:	Partially soluble
Specific Gravity (H₂O=1):	0.79-0.82	Vapor Density:	4.0@59°F
Boiling Range:	147° F	Evaporation Rate:	6.2 (nBuAc=1)
% Volatile:	< 85%	Coating VOC:	752 g/l (6.28 lb/gal)

10. Stability and Reactivity

Stability:	Stable	Hazardous Polymerization:	Will not occur
Conditions to Avoid:	All possible sources of ignition.	Materials to Avoid:	Strong oxidizing agents and reducing agents
Hazardous Decomposition or By-products:			Combustion may liberate toxic by-products such as carbon dioxide, carbon monoxide, various oxides of carbon and nitrogen.

11. Toxicological Information

Sensitization:

None known.

Carcinogenicity:

Not listed by IARC, NTP, ACGIH, or OSHA as a carcinogen.

Reproductive Toxicity:

Methanol is reported to cause birth defects in rats exposed to 20,000 ppm.

11. Toxicological Information... Continued.

Teratogenicity:

None.

Mutagenicity:

There is no data to indicate that any component present at greater than 0.1% will alter DNA.

12. Ecological Information

Environmental Data:

Although no information is available for this specific product mixture, individual components may by themselves may have ecological affects.

13. Disposal Considerations

Waste Disposal Method:

Follow personal protection procedures (Section VIII) when disposing of material. This product is considered a RCRA hazardous waste due to the characteristic(s) of D001 (ignitability). Waste is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.

Container contents should be completely used and containers empty prior to discarding. Container rinsate could be considered a RCRA hazardous waste and must be discarded in compliance with all applicable regulations. Larger empty containers, such as drums, should be returned to a professional drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

CCC cannot make specific recommendations for disposal in any particular locality. The user is cautioned to be thoroughly familiar with all applicable requirements before use. Without endorsement of any particular waste disposal company, CCC offers the following companies as possible resources for the disposal of industrial or hazardous waste:

Onyx Environmental 1-800-426-2382 Heritage Environmental 1-800-827-4374

Companies who dispose of hazardous waste may also be found on the Internet using "Hazardous Waste Disposal" as key search words.

14. Transportation Information

DOT Proper Shipping Name: Combustible liquid. Not regulated in containers 119 gallons (450 liters) or less, and ground travel. (For containers greater than 119 gallons, or air: PAINT, 3, UN1139, PGII)

15. Regulatory Information

Reportable Quantity:

ALL INGREDIENTS OF THIS PRODUCT ARE LISTED OR ARE EXCLUDED FROM LISTING ON THE U.S. TOXIC SUBSTANCES CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

This product does not contain a chemical(s) subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372) above de minimis concentrations..

State Specific Requirements:

State of California *Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)*; WARNING: This product contains one or more chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

WHMIS Classification:

Not Determined.

International Regulations:

Consult the regulations of the importing country.

16. Other Information

Before Using This Product:

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

16. Other Information... Continued.

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, CREATIVE CONCRETE CONCEPTS 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. CREATIVE CONCRETE CONCEPTS assumes no legal responsibility for use or reliance upon this data.