

MATERIAL SAFETY DATA SHEET

True Color™ Yellow Antifreeze/Coolant Dye

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: M91045 Toxguard Yellow 1382

Chemical Name: Proprietary

Chemical Family: Proprietary

CAS Number: Blend

Company Identification

True Color™ Green Dye

by Toxguard Fluid Technologies

11942 Western Ave

Stanton, CA 90680

714-698-3400 (for questions)

Chemtrec, 800-424-9300 (for emergencies)

True Color System, Patent Pending

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

Chemical Name Amount CAS Number

DIETHYLENE GLYCOL > 1.0 % 111-46-6

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains materials that are acute, chronic hazards.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

This product contains Diethylene Glycol which may be fatal or cause serious health effects if swallowed. Repeated

skin exposure may result in absorption of harmful amounts. Massive contact with damaged skin or of material

sufficiently hot to burn skin may result in absorption of potentially lethal amounts.

HMIS Rating:

Health - 3

Flammability - 1

Reactivity - 0

Personal Protection Index - B

NFPA Rating:

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Health - 1

Flammability - 1

Reactivity - 0

POTENTIAL HEALTH EFFECTS

EYE:

May cause eye irritation.

SKIN:

DIETHYLENE GLYCOL: Prolonged or repeated exposure not likely to cause significant skin irritation. A single, prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Repeated skin exposure may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potentially lethal amounts.

INHALATION:

DIETHYLENE GLYCOL: At room temperature, exposures to vapors are minimal due to physical properties. Higher temperatures may generate vapor levels sufficient to cause adverse effects.

INGESTION:

DIETHYLENE GLYCOL: Oral toxicity is moderate in humans, even though tests with animals show a much lower level of toxicity. THE LETHAL DOSE IN HUMANS IS APPROXIMATELY 2 OUNCES, (65ml). Swallowing may also result in chronic health effects. May cause nausea and/or vomiting. Excessive exposure may cause central nervous system effects; cardiopulmonary effects, such as metabolic acidosis; and kidney failure.

CARCINOGENICITY INFORMATION:

DIETHYLENE GLYCOL: Based on data from long-term animal studies, diethylene glycol is not believed to pose a carcinogenic risk to man.

REPRODUCTIVE HAZARDS:

DIETHYLENE GLYCOL: Exposure to diethylene glycol has caused birth defects in laboratory animals only at doses toxic to the mother. Diethylene glycol has not interfered with reproduction in animal studies except at very high doses.

TARGET ORGAN:

DIETHYLENE GLYCOL: Repeated excessive exposures may cause severe kidney and also liver and gastrointestinal effects. Signs and symptoms of excessive exposure may be central nervous system effects. Signs and symptoms of excessive exposure may be nausea and/or vomiting. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects. Observations in animals include formation of bladder stones after repeated oral doses of diethylene glycol. Reports of kidney failure and death in burn patients suggest that diethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients or individuals with impaired renal function.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

Immediately flush eyes with plenty of water. Get medical attention if irritation develops or persists.

SKIN CONTACT FIRST AID:

Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Discard all contaminated articles, including shoes, belts, and other articles made of leather.

INHALATION FIRST AID:

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Remove to fresh air if effects occur. Contact a physician.

INGESTION FIRST AID:

Do not induce vomiting. Keep affected person warm and treat for shock.

DIETHYLENE GLYCOL: GET IMMEDIATE MEDICAL ATTENTION OR CONTACT A POISON CONTROL

CENTER. If several ounces of this material is inadvertently swallowed and medical advice is delayed, immediately give 3 - 4 ounces of hard liquor to the victim to drink. Reduce the amount proportionally, based on body weight.

MISCELLANEOUS:

DIETHYLENE GLYCOL: Poisoning may initially produce behavior changes, drowsiness, vomiting, diarrhea, thirst, and convulsions.

NOTES TO PHYSICIAN:

DIETHYLENE GLYCOL: Due to structural analogy and clinical data, this material may have a mechanism of

intoxication similar to ethylene glycol.

Consider the use of ethanol and hemodialysis when significant quantities have been consumed.

Consult standard literature for details.

4-Methyl pyrazole is an effective blocker of alcohol dehydrogenase and should be used in the treatment of diethylene intoxication, if available.

Signs and symptoms of diethylene glycol poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be monitored for 24 - 48 hours for signs of respiratory distress.

If lavage is performed, endotracheal and/or esophageal control is suggested. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

TCC Flash Point: 154.0 C (309.2 F)

Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: 2% %

UEL: 12.3 %

EXTINGUISHING MEDIA:

Water fog or fine spray. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic

foams (including AFFF) or protein foams may function, but much less effectively. Carbon dioxide and dry chemical.

Do not use direct water stream. May spread fire.

FIRE & EXPLOSION HAZARDS:

Diethylene glycol will ignite in air at 435 F. Hazardous combustion products may include and are not limited to carbon

monoxide, carbon dioxide, and trace amounts of aldehydes and organic acids.

FIRE FIGHTING INSTRUCTIONS:

Diethylene glycol or solutions of diethylene glycol and water can form flammable vapors with air if heated sufficiently.

Evacuate non-emergency personnel to a safe area. Isolate area and deny unnecessary entry. Wear full protective

clothing and positive pressure breathing apparatus. Burning liquids may be extinguished by dilution with water. Do

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not use direct water stream.

MISCELLANEOUS:

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive- pressure, self-contained breathing apparatus

(SCBA) and protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves). If protective

equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):

Evacuate non-emergency personnel to a safe area. PVC-coated rubber gloves and monogoggles or faceshield can be

used during cleanup of spill site.

INITIAL CONTAINMENT:

Do not allow material to enter soil or surface water. Keep spills and cleaning runoff out of municipal sewers and open

bodies of water.

LARGE SPILLS PROCEDURE:

Large spillage should be dammed-off and pumped into containers. Treat or dispose of waste material in accordance

with all local, state/provincial, and national requirements.

SMALL SPILLS PROCEDURE:

Clean up area by absorbent material. Treat or dispose of waste material in accordance with all local, state/provincial,

and national requirements.

7. HANDLING AND STORAGE

RECOMMENDED STORAGE TEMPERATURE

Minimum: 5 C (41.0 F)

Maximum: 50 C (122.0 F)

SHELF LIFE: (in original, sealed containers)

6 months @ 5 C

HANDLING (PERSONNEL):

Avoid breathing spray mists if generated. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing.

Remove contaminated clothing and wash before reuse.

HANDLING (PHYSICAL ASPECTS):

Product on surfaces can cause slippery conditions.

STORAGE PRECAUTIONS:

Keep away from food and drinking water. Keep container closed when not in use.

SPECIAL SENSITIVITY:

MUST MIX WELL BEFORE EACH USE. KEEP FROM FREEZING.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this

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product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EYE / FACE PROTECTION REQUIREMENTS:

Chemical goggles are recommended to avoid contact with eyes.

SKIN PROTECTION REQUIREMENTS:

Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation.

Use protective

clothing impervious to this material. Wash hands thoroughly after handling. Soiled work clothing should be laundered

or dry-cleaned. If hands are cut or scratched, use gloves impervious to this material even for brief exposures. When

handling hot material, protect skin from thermal burns as well as from skin absorption.

RESPIRATORY PROTECTION REQUIREMENTS:

Atmospheric levels should be maintained below the exposure guideline. Under normal use conditions, with adequate

ventilation, no special handling equipment is required. If handling at elevated temperatures without sufficient

ventilation, use an approved air-purifying respirator.

MISCELLANEOUS:

Use good personal hygiene practices; limit exposure to product whenever possible to minimize clean-up.

EXPOSURE GUIDELINES:

No Information Available.

MISCELLANEOUS:

DIETHYLENE GLYCOL: American Industrial Hygiene Association (AIHA) Workplace Exposure Level

Environmental, (WEEL) is 50 ppm, total; 10 mg/m³.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid

COLOR: Dark Yellow

ODOR: No odor

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY: 1.09 (Water = 1)

PH: Not established

MISCELLANEOUS:

VOC content: < 28% by weight.

10. STABILITY AND REACTIVITY

STABILITY:

This compound is stable at ambient conditions.

POLYMERIZATION:

Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS:

Avoid contact with strong oxidizing agents. Incompatible or can react with acids, bases, oxidizers.

DECOMPOSITION:

Decomposition will not occur if handled and stored properly. Hazardous combustion products may include and are not limited to: carbon monoxide, carbon dioxide, trace amounts of aldehydes, alcohols, ethers and organic acids.

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11. TOXICOLOGICAL INFORMATION

Diethylene Glycol

Test Code: Oral LD50

Species: Rat

Results: 20,750 mg/kg.

Test Code: Skin Irritation

Results: Prolonged or repeated exposure not likely to cause significant skin irritation.

Test Code: Skin Irritation

Description:

Results: Prolonged or repeated exposure not likely to cause significant skin irritation.

Test Code: Human Studies

Results: Lethal dose approximately 2 ounces, (65 ml)

12. ECOLOGICAL INFORMATION

Diethylene Glycol

Test Code: EC50

Species: Daphnia Magna

Results: 49000 mg/liter

Test Code: EC50

Species: Mussel

Results: 331 mg/liter

Test Code: LC50

Species: Rainbow Trout (*Oncorhynchus mykiss*)

Results: > 1000 mg/liter

Test Code: LC50

Species: Goldfish (*Carassius auratus*)

Results: > 5000 mg/liter

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Do not dump into any sewers, on the ground, or into any body of water. Treat or dispose of waste material in

accordance with all local, state/provincial, and national requirements.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL: M91045 Toxguard Yellow 1382

D.O.T. SHIPPING NAME: Not Regulated

D.O.T. HAZARD CLASS: Non-Hazardous

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15. REGULATORY INFORMATION

MISCELLANEOUS INFORMATION:

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic

Substance Control Act (TSCA).

This material or all of its components are listed (or considered as having been notified) on the European Inventory of

Existing Chemical Substances (EINECS).

CALIFORNIA PROPOSITION 65: This material contains chemicals known to the State of California to cause cancer:

1,4 Dioxane, CAS # 123-91-1, < 0.05 ppm.

CALIFORNIA PROPOSITION 65: This material contains chemicals known to the State of California to cause birth

defects or other reproductive harm: Ethylene Glycol monomethyl ether, CAS # 109-86-4, < 0.005 ppm.

This material or all of its components are listed on the Canadian Domestic Substances List (DSL).

SARA Title III - Section 313

M91045 Toxguard Yellow 1382 (BLEND) -- n/a

Massachusetts Substance List

Diethylene Glycol (111-46-6)

NJ Right to Know List

Diethylene Glycol (111-46-6)

PA Hazardous Substance List

Diethylene Glycol (111-46-6)

16. OTHER INFORMATION

REASON FOR ISSUE: New information available

PREPARED BY: John Russell

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END OF MSDS

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