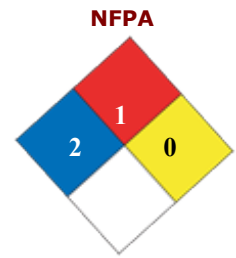




SECTION 1 - IDENTIFICATION

Product Name: Red Dye (for Hydraulic Oil)
Product Code: 44-2500
MSDS Manufacturer Number: 44-2500
Product Use/Restriction: Dye
Manufacturer Name: The Toro Company
Address: 8111 Lyndale Ave S
Bloomington,, Minnesota 55420
U.S.A.
General Phone Number: 1-952-888-8801
MSDS Creation Date: September 24, 2012
MSDS Revision Date: September 24, 2012
GHS Class: Skin Irritant, Category 2
Eye Irritant, Category 2
Specific Target Organ Toxicity, Category 3



HMIS	
Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	X

SECTION 2 - HAZARD(S) IDENTIFICATION

GHS Pictograms:



Signal Word: DANGER!
GHS Class: Skin Irritant, Category 2
Eye Irritant, Category 2
Specific Target Organ Toxicity, Category 3

Hazard Statements: May be fatal if swallowed and enters airways
Causes damage to organs through prolonged or repeated exposure
Causes eye irritation
Suspected of damaging fertility or the unborn child
May cause cancer
May cause long lasting harmful effects to aquatic life

Precautionary Statements: Do not breathe dust/fume/gas/mist/vapours/spray.
Do not eat, drink or smoke when using this product.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands thoroughly after handling.
Keep only in original container

Emergency Overview:	WARNING! Irritant. Inhalation of vapors or mists from this product may cause headache, nausea and irritation to the eyes, skin and respiratory system.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Causes eye irritation. Overexposure may cause eye watering or discomfort, redness and swelling.
Skin:	May cause skin irritation. May be harmful if absorbed through skin. Prolonged or repeated contact can result in defatting and drying of the skin, which may result in skin irritation and dermatitis (rash).
Inhalation:	Inhalation of vapors, mists or aerosols of the solution can cause respiratory irritation. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Signs/Symptoms:	Overexposure can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system. Central nervous system. Kidney.
Aggravation of Pre-Existing Conditions:	None generally recognized.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	50 - 60 %	265-156-6
C.I. Solvent Red 164	92257-31-3	40 - 50 %	209-529-3
Xylene	1330-20-7	<=0.9 %	601-022-00-9
Ethylbenzene	100-41-4	<=0.3 %	

SECTION 4 - FIRST AID MEASURES

Eye Contact:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact:	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Inhalation:	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Call a POISON CENTER or doctor/physician.
Ingestion:	IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	> 93 °C (> 199.40 °F)
Flash Point Method:	Setaflash Closed Cup.
Auto Ignition Temperature:	307.0 °C (585 °F) solvent
Lower Flammable/Explosive Limit:	Data not available.
Upper Flammable/Explosive Limit:	Data not available.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Unusual Fire Hazards:	Closed containers may rupture via pressure build-up when exposed to fire or extreme heat.
Hazardous Combustion Byproducts:	Oxides of carbon and other unknown organic compounds.

NFPA Ratings:

NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	0

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Use proper personal protective equipment as listed in section 8. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Keep spills and cleaning runoff out of municipal sewers, storm sewers, ditches, waterways, and open bodies of water.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry.
Methods for cleanup:	Eliminate all ignition sources including those beyond the immediate spill area. Floor may be slippery; use care to avoid falling. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Clean up spills immediately observing precautions in the protective equipment section. Avoid breathing vapor, aerosol or mist.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing. Vapors can be evolved when material is heated during processing operations. To reduce potential for static discharge, bond and ground containers when transferring material.
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Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Ground all metal containers during storage and handling. Keep away from direct sunlight.
Work Practices:	Handle in accordance with good industrial hygiene and safety practices. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, explosion-proof local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Hand Protection Description:	Chemical-resistant gloves should be worn whenever this material is handled. Neoprene or nitrile rubber gloves or protective clothing is recommended Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Follow good industrial hygiene practices when handling this material.

PPE Pictograms:



EXPOSURE GUIDELINES

Distillates (petroleum), hydrotreated light naphthenic :

Guideline ACGIH:	TLV-TWA: 5 mg/m ³ (Oil mist)
Guideline OSHA:	PEL-TWA: 5 mg/m ³ (Oil mist)

Xylene :

Guideline ACGIH:	TLV-TWA: 100 ppm TLV-STEL: 150 ppm
Guideline OSHA:	OSHA-TWA: 100 ppm

Ethylbenzene :

Guideline ACGIH:	TLV-TWA: 100 ppm TLV-STEL: 125 ppm
Guideline OSHA:	OSHA-TWA: 100 ppm

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State:	Liquid.
Color:	Red
Odor:	Petroleum odor.
Boiling Point:	204 - 327 °C (399 - 621 °F) solvent
Melting Point:	Data not available.
Specific Gravity:	0.94
Solubility:	Data not available.
Vapor Density:	Data not available.
Vapor Pressure:	Data not available.
Percent Volatile:	Data not available.
Evaporation Rate:	Data not available.
Evaporation Point:	Data not available.
pH:	Data not available.
Viscosity:	100 - 118 mPas
Flash Point:	> 93 °C (> 199.40 °F)
Flash Point Method:	Setaflash Closed Cup.
Auto Ignition Temperature:	307.0 °C (585 °F) solvent

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Oxidising materials, strong acids, chlorine
Special Decomposition Products:	No known hazardous decomposition products

SECTION 11 - TOXICOLOGICAL INFORMATION

Distillates (petroleum), hydrotreated light naphthenic :

Skin:	Skin - Rabbit Standard Draize test.: 500 mg - [severe](RTECS)
Ingestion:	Oral - rat LD: >5 gm/kg - [Details of toxic effects not reported other than lethal dose value] (RTECS)

Carcinogenicity: Suspect Carcinogen If Dimethyl sulfoxide (DMSO) content is greater than 3%

C.I. Solvent Red 164 :

RTECS Number: TS7750000

Inhalation: Inhalation - Rat LC : >500 mg/m³ [Details of toxic effects not reported other than lethal dose value]
Inhalation - Rat TClO : 43 mg/m³/17W [Cardiac - EKG changes not diagnostic of specified effects Kidney/Ureter/Bladder - Other changes in urine composition Nutritional and Gross Metabolic - Changes in potassium]

Ingestion: Oral - Rat LD50 : 1870 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Mouse LD50 : 2570 mg/kg [Details of toxic effects not reported other than lethal dose value]

Xylene :

RTECS Number: ZE2100000

Eye: Eye - Rabbit; Standard Draize test. : 87 mg; mild.
Eye - Rabbit; Standard Draize test. : 5 mg/24H; severe. (RTECS)

Skin: Skin - Rabbit; Standard Draize test. : 100%; Moderate.
Skin - Rabbit; Standard Draize test. : 500 mg/24H; Moderate. (RTECS)

Inhalation: Inhalation - Rat LC50: 5000 ppm/4H; Details of toxic effects not reported other than lethal dose value (RTECS)

Ingestion: Ingestion - Rat LD50: 4300 mg/kg; Liver - Other changes Kidney, Ureter, Bladder - Other changes
Ingestion - Mouse LD50: 2119 mg/kg; Details of toxic effects not reported other than lethal dose value (RTECS)

Carcinogenicity: IARC: Group 3: Unclassifiable as to carcinogenicity to humans.

Ethylbenzene :

RTECS Number: DA0700000

Eye: Eye - Rabbit; Standard Draize test. : 500 mg; severe. (RTECS)

Skin: Skin - Rabbit; Open irritation test: 15 mg/24H; mild . (RTECS)

Inhalation: Inhalation - Rat LC50: 55000 mg/m³/2H; Details of toxic effects not reported other than lethal dose value . (RTECS)

Ingestion: Ingestion - Rat LD50: 3500 mg/kg; Liver - Other changes Kidney, Ureter, Bladder - Other changes . (RTECS)

Carcinogenicity: IARC: Group 2B: Possibly carcinogenic to humans.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

Environmental Fate: No environmental information found for this product.

Xylene :

Effect of Material On Aquatic Life: Toxicity to fish LC50 Rainbow trout (*Oncorhynchus mykiss*) 96 h 13.5 mg/l
Toxicity to aquatic invertebrates EC50 *Daphnia magna* 150 mg/l

Ethylbenzene :

Effect of Material On Aquatic Life: Toxicity to fish LC50 Rainbow trout (*Oncorhynchus mykiss*) 96 h 4.2 mg/l
Toxicity to algae EC50 Algae (*Selenastrum capricornutum*) 72 h 4.6 mg/l
Toxicity to aquatic invertebrates EC50 *Daphnia magna* 48 h 2.1 mg/l

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name: Not Regulated.

DOT UN Number: Not Regulated.

SECTION 15 - REGULATORY INFORMATION

Risk Phrases: R36/37/38 Irritating to eyes, respiratory system and skin.
R22 Harmful if swallowed.

Safety Phrase: S20 When using do not eat or drink.
S24/25 Avoid contact with skin and eyes.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Distillates (petroleum), hydrotreated light naphthenic :

TSCA Inventory Status: Listed
New Jersey: No Data
Massachusetts: No Data
Pennsylvania: No Data
Canada DSL: Listed
EC Number: 265-156-6

C.I. Solvent Red 164 :

TSCA Inventory Status: Listed
Canada DSL: Listed
Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1329(390)
EC Number: 209-529-3

Xylene :

TSCA Inventory Status: Listed
SARA: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
State Regulations: Listed in the New Jersey State Right to Know List.
Listed in the Pennsylvania State Hazardous Substances List.
Canada DSL: Listed

EC Number: 601-022-00-9

Ethylbenzene:

TSCA Inventory Status: Listed

SARA: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

State Regulations: Listed in the New Jersey State Right to Know List.
Listed in the Pennsylvania State Hazardous Substances List.

Canada DSL: Listed

SECTION 16 - ADDITIONAL INFORMATION

Label Hazard Warning: May be fatal if swallowed and enters airways
Causes damage to organs through prolonged or repeated exposure
Causes eye irritation
Suspected of damaging fertility or the unborn child
May cause cancer
May cause long lasting harmful effects to aquatic life

Label Precautions: Do not breathe dust/fume/gas/mist/vapours/spray.
Do not eat, drink or smoke when using this product.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands thoroughly after handling.
Keep only in original container

HMIS Health Hazard: 2

HMIS Fire Hazard: 1

HMIS Reactivity: 0

HMIS Personal Protection: X

MSDS Creation Date: September 24, 2012

MSDS Revision Date: September 24, 2012

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