Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **C34114 D-DUR IRON RED**

Supplier - Manufacturer

Chemcraft International Inc.,
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Canada L1A 3Z3

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For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code	C34114
Synonym	D-DUR IRON RED
Chemical Name	Not applicable.
Chemical Family	Synthetic polymer in organic solvent. (Paint.)
Chemical Formula	Not applicable.
Material Uses	Coatings: Surface coatings and finishes.
Product Identification Number (PIN)	1263 PAINT

Section 2. Hazardous Ingredients

			Exposure Limits	
Name	**CAS #**	**% by Weight**	**LC_{50}/LD_{50}**	**TLV/PEL**
Ethylbenzene	100-41-4	5-10	ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	**ACGIH (Canada).** TWA: 100 ppm STEL: 125 ppm
Xylenes	1330-20-7	10-30	ORAL (LD50): Acute: 4300 mg/kg [Rat.].	**ACGIH (Canada, 1992).** TWA: 100 ppm STEL: 150 ppm TWA: 434 mg/m^3 STEL: 651 mg/m^3
p-Methyltoluene	106-42-3	0.1-1	ORAL (LD50): Acute: 4100 mg/kg [Rat.].	Not available.
n-Butyl acetate	123-86-4	5-10	ORAL (LD50): Acute: 14130 mg/kg [Rat]. 7100 mg/kg [Mouse]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit]. 8770 mg/kg [Guinea pig].	**OSHA (Canada).** TWA: 150 ppm STEL: 200 ppm **ACGIH (Canada, 2000).** TWA: 150 ppm STEL: 200 ppm
Ethyl Acetate	141-78-6	10-30	ORAL (LD50): Acute: 5600 mg/kg [Rat].	**OSHA (Canada).** TWA: 400 **ACGIH (Canada).** TWA: 400 ppm
Ethyl 3-ethoxy propionate	763-69-9	5-10	ORAL (LD50): Acute: 5001 mg/kg [Rat]. 4301 mg/kg [Rat]. DERMAL (LD50): Acute: 10000 mg/kg [Rabbit]. VAPOR (LC50): Acute: >1000 ppm 6 hour(s) [Rat].	Not available.
Propylene glycol monomethyl ether acetate	108-65-6	1-5	ORAL (LD50): Acute: 8532 mg/kg [Rat].	Not available.

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

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Section 3. Physical Data

Physical State and Appearance	Liquid.
Color	Not available. **Odor** Not available. **Taste** Not available.
Molecular Weight	Not applicable.
pH (1% soln/water)	Not applicable.
Boiling Point	The lowest known value is 77°C (170.6°F) (Acetic Acid, Ethyl Ester). Weighted average: 128.67°C (263.6°F)
Melting Point	May start to solidify at <-50°C (-58°F) based on data for: Propanoic acid, 3-ethoxy-, ethyl ester. Weighted average: -76.3°C (-105.3°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.97 (Water = 1)
Vapor Pressure	The highest known value is 9.7 kPa (73 mmHg) (at 20°C) (Acetic Acid, Ethyl Ester). Weighted average: 2.63 kPa (19.73 mmHg) (at 20°C)
Vapor Density	The highest known value is 5.03 (Air = 1) (Propanoic acid, 3-ethoxy-, ethyl ester). Weighted average: 3.82 (Air = 1)
Volatility	Not available.
Odor Threshold	The lowest known value is 0.04 ppm (Acetic Acid, Butyl Ester) Weighted average: 0.49 ppm
Water/Oil Dist. Coeff.	The product is much more soluble in octanol.
Ionicity (in Water)	Not available.
Dispersion Properties	Partially dispersed in methanol, diethyl ether. Is not dispersed in cold water, hot water. See solubility in methanol, diethyl ether, n-octanol, acetone.
Solubility	Easily soluble in methanol, diethyl ether, n-octanol, acetone. Insoluble in cold water, hot water.

Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames, sparks and static discharge, of heat.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back. (Benzene, dimethyl-)
Flash Points	The lowest known value is Closed cup: -1°C (30.2°F). (Tagliabue). Open cup: -0.5°C (31.1°F). (Tagliabue). (Acetic Acid, Ethyl Ester)
Flammable Limits	The greatest known range is LOWER: 1.3% UPPER: 13.1% (2-Propanol, 1-methoxy, acetate)
Auto-Ignition Temperature	The lowest known value is 377°C (710.6°F) (Propanoic acid, 3-ethoxy-, ethyl ester).
Products of Combustion	These products are carbon oxides (CO, CO2). Some metallic oxides.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Explosive in presence of open flames, sparks and static discharge.
Special Remarks on Explosion Hazards	Not available.

Section 5. Reactivity Data

Stability	The product is stable.
Decomposition products	Not available.
Conditions of Instability	Avoid contact with oxidizing agents. (Benzene, (1-methylethenyl)-)
Incompatibility with various substances	Reactive with oxidizing agents, alkalis. Slightly reactive to reactive with reducing agents, organic materials, metals, acids.
Corrosivity	Not available.

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Special Remarks on Reactivity	Incompatible with hydrogen fluoride. (Silica gel, pptd., cryst.-free)
Special Remarks on Corrosivity	Not available.

Section 6. Toxicological Properties

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 3500 mg/kg [Rat]. (Benzene, ethyl-). Acute dermal toxicity (LD50): 5000 mg/kg [Rabbit]. (Benzene, ethyl-). Acute toxicity of the vapor (LC50): >1000 ppm 6 hour(s) [Rat]. (Propanoic acid, 3-ethoxy-, ethyl ester).
Effects of Acute Exposure	Hazardous in case of skin contact (permeator), of eye contact (irritant), of inhalation (lung irritant). Slightly hazardous in case of ingestion.
Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: Classified 4 (Probably not for human.) by IARC, None. by OSHA [Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-]. Classified 4 (Probably not for human.) by IARC [Silica gel, pptd., cryst.-free]. Classified A4 (Not classifiable for human or animal.) by ACGIH [Benzene, 1,3-dimethyl-]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Acetic Acid, Ethyl Ester]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Propanoic acid, 3-ethoxy-, ethyl ester]. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Not available. The substance is toxic to blood, lungs, the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage.
Special Remarks on Toxicity to Animals	Formaldehyde has caused cancer in test animals at high concentrations (5-15 ppm). (Formaldehyde)
Special Remarks on Chronic Effects on Humans	Prolonged or repeated contact with skin can cause defatting and drying of the skin resulting in skin irritaion and dermatitis. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea and central nervous system depression. High level exposure to Xylene in laboratory animals, often at levels which are toxic to the mother, have affected the development of the fetus. The revelance of this to humans is not known. (Benzene, dimethyl-)
Special Remarks on Other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. (Benzene, dimethyl-)
Exposure Limits	Not available.

Section 7. Preventive Measures

Personal Protection	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis.
Storage	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
TDG Classification	3
PIN	1263 PAINT **PG:** III

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Special Provisions for Transport

Federal and State Regulations

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Benzene, ethyl-; Benzene, dimethyl-; Benzene, dimethyl-; Formaldehyde; Benzene, methyl-
California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Benzene
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Benzene; Benzene, methyl-
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Benzene; Formaldehyde
Illinois toxic substances disclosure to employee act: Benzene, ethyl-
New York release reporting list: Benzene, 1,3-dimethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
New York acutely hazardous substances: Benzene, ethyl-
Rhode Island RTK hazardous substances: Benzene, ethyl-; Acetic Acid, Ethyl Ester
Pennsylvania RTK: Silica gel, pptd., cryst.-free; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
Florida: Benzene, ethyl-; Benzene, 1,3-dimethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
Minnesota: Benzene, ethyl-; Silica gel, pptd., cryst.-free; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
Massachusetts RTK: Benzene, ethyl-; Silica gel, pptd., cryst.-free; Benzene, 1,3-dimethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
New Jersey: Benzene, ethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
TSCA 8(b) inventory: Benzene, ethyl-; Benzene, dimethyl-; Silica; Benzene, dimethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester; Formaldehyde; Benzene, methyl-
TSCA 5(e) substance consent order: Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
TSCA 8(d) H and S data reporting: Benzene, ethyl-
TSCA 12(b) annual export notification: Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
SARA 302/304/311/312 extremely hazardous substances: Formaldehyde
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Benzene, ethyl-: Fire Hazard, Immediate (Acute) Health Hazard; Benzene, dimethyl-: Fire Hazard, Immediate (Acute) Health Hazard; Benzene, dimethyl-: Fire Hazard, Immediate (Acute) Health Hazard; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester: Fire Hazard, Immediate (Acute) Health Hazard
SARA 313 toxic chemical notification and release reporting: Benzene, ethyl- 5.07002%; Benzene, dimethyl- 24.6166%; Benzene, dimethyl- 2.242%; Benzene, methyl- 0.628046%
CERCLA: Hazardous substances.: Benzene, ethyl-: 1000 lbs. (453.6 kg); Benzene, dimethyl-; Benzene, dimethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester; Benzene, methyl-;

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications

WHMIS (Canada)

Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
Class D-2A: Material causing other toxic effects (VERY TOXIC).
Class D-2B: Material causing other toxic effects (TOXIC).

HCS (U.S.A.)

Class: Highly toxic.
Class: Flammable liquid having a flash point lower than 37.8°C (100°F).
Class: Target organ effects.

Hazardous Material Information System (U.S.A.)

Health Hazard	*	2
Fire Hazard		3
Reactivity		0
Personal Protection		H

National Fire Protection Association (U.S.A.)

Health	2
Fire Hazard	3
Reactivity	0
Specific Hazard	

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Section 8. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact Wash with soap and water. Get medical attention if irritation develops.

Hazardous Skin Contact Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Hazardous Inhalation Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.

Ingestion Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Hazardous Ingestion Not available.

Section 9. Preparation Information

References -Manufacturers Material Safety Data Sheets.

Other Special Considerations Not available.

Related Information This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

Preparation Information

Validated by C.M. Kelly on 12/18/2002.

Verified by C.M. Kelly.

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