GC Electronics 1801 Morgan Street

Rockford, IL 61102 Phone: (815) 968-9661 Fax: (815) 968-9731 www.gcelectronics.com

Product Name: Red-X Corona Dope MSDS Number: 137 Revision Date: 9/16/09 Supersedes Date: 8/1/06

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200.

Product Type:	Coating	Emergency Contact:	Chemtrec
Product Name:	Red-X Corona Dope	Phone (24 hours):	(800) 424-9300
Part Number(s):	10-5002		

Section 1 - Identification of Product

Trade Name: Synthite ER-41 Product Description: Air Dry Polyurethane Varnish

HMIS Ratings:		Least	0	
Health	2	Slight	1	
Flammability	3	Moderate	2	
Reactivity	0	High	3	
Personal Protection	N/E	Extreme	4	
		Gloves and saf	ety glasses	В

Section 2 - Hazardous Ingredients Exposure Limits Hazardous Components CAS # **OSHA** ACGIH ACGIH Wt % TLV (TWA) PEL TLV(STEL) *Xylene 1330-20-7 100ppm (TWA) 100ppm 150ppm 30 - 50 *Ethyl Benzene 100ppm (TWA) 100ppm 7 - 15 100-41-4 125ppm

*Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and 40CFR372.

Warning: This product contains a chemical, known to the State of California to cause birth defects or other reproductive harm.

This product is supplied in compliance with TSCA reporting requirements..

Section 3 - Physical Data

Boiling Range:280 °F to 290 °FSpecific Gravity (H2O=1)0.95 -1.08Vapor Pressure:no dataEvaporation Rate: (N-Butyl acetate=1)0.47 Butyl Acetate% Volatile by Volume:40 - 65%Solubility in Water:NegligiblePhysical State/Appearance/Color:Red Liquid

Product Name: Red-X Corona Dope

MSDS Number: 137 Revision Date: 9/16/09 Supersedes Date: 8/1/06

GC Electronics 1801 Morgan Street Rockford, IL 61102 Phone: (815) 968-9661 Fax: (815) 968-9731 www.gcelectronics.com

Viscosity, cps: Molecular Weight:

pH: Odor: Decomposition Temperature: Vapor Density: Freezing Point:

200 – 350 Mixture

N/A Aromatic odor no data no data

Section 4 - Fire & Explosion Hazard Data	
Flash Point:	81 °F (27°C)
Method Used:	ASTM D-56
Flammable Limits:	Lower: 1.0% for Xylene Upper: 7.0% for Xylene
Extinguishing Media:	In the event of a fire involving this material, alone or in combination with other materials, use dry chemicals, carbon dioxide, alcohol foam extinguishing media or any class B extinguishing agent.
Hazardous Combustion Byproducts:	Oxides of carbon and oxides of nitrogen, fumes and smoke.
Special Fire Fighting Procedures:	This material is flammable and may be ignited by heat, sparks, flame or static electricity. Use self-contained breathing apparatus and protective clothing.
Fire:	Flammable liquid. Closed containers may rupture when exposed to extreme heat. Air oxidation of this product may cause it to spontaneously combust. To avoid spontaneous combustion, prevent residue build up and soak soiled rags, spray both filter and overspray in a closed water filled metal container. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Explosion:	Vapors can form an explosive mixture with air. Vapor can travel to a source of ignition such as a spark or flame and flash back.
Fire Fighting Instructions:	Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire). Use water spray to cool fire- exposed containers. DO NOT extinguish a fire resulting from the flow of this flammable liquid until the flow of liquid is effectively shut off. Explosive vapor-air mixture could form after the initial fire is extinguished. Use water spray to disperse vapors if a spill or leak has not ignited. Water runoff can cause environmental damage. Dike and collect water used to fight fire. See Sections 7 and 9 for disposal considerations.
Protective Equipment:	Wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

Product Name: Red-X Corona Dope

MSDS Number: 137 Revision Date: 9/16/09 Supersedes Date: 8/1/06

Rockford, IL 61102 Phone: (815) 968-9661 (815) 968-9731 Fax: www.gcelectronics.com **Emergency Overview:** Route of Exposure:

GC Electronics

1801 Morgan Street

Potential Health Effects: Eye Contact: Skin Contact:

Skin Absorption: Inhalation:

Ingestion:

Chronic Health Effects:

Target Organs:

First Aid Measures: Eye Contact:

Skin Contact:

Inhalation:

Ingestion:

Flammable. Irritant. Eyes, skin, inhalation, and ingestion

Can cause severe irritation, redness, tearing. Can cause irritation. Prolonged and repeated exposures can cause defatting and drying. Harmful if absorbed through the skin. Inhalation of vapors or aerosol can cause nasal and respiratory tract irritation., High concentrations may result in severe irritation, liver and kidney damage. Symptoms of exposure include headaches, dizziness, drowsiness and other central nervous system effects. May be harmful if ingested in large amounts. Aspiration of material into lungs can cause lung inflammation and/or damage. Chronic exposure may cause damage to the central nervous system and may result in permanent brain damage. Symptoms include loss of memory, loss of judgment, and loss of coordination. Prolonged or repeated exposure may cause liver and kidney damage. Female workers over-exposed to xylene experienced menstrual disorders and complications with pregnancy. Liver, kidney, CNS, eyes, skin, respiratory system, and digestive tract. Immediately flush eyes with plenty of water for at least 20 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention if irritation persists, or symptoms of overexposure become apparent. Immediately wash skin with plenty of water and soap for at least 20 minutes, while removing contaminated clothing and shoes. Get medical attention especially if irritation develops, persists, or symptoms of overexposure become apparent. Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Keep warm. Get immediate medical attention. If swallowed, call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed by medical personnel. Get medical attention. Section 6 - Reactivity Data Stable at normal temperatures and storage conditions. Flames, heat, sparks, and high temperatures and pressures. Oxidizing conditions. Storage conditions above 80°F. Incompatibilities with Other Materials: Oxidizers such as peroxides, chlorates, and permanganates Will not occur.

Carbon monoxide, carbon dioxide and hydrocarbons

Hazardous Polymerization: Hazardous Decomposition Products:

Chemical Stability:

Conditions to Avoid:

1801 Morgan Street Rockford, IL 61102 Phone: (815) 968-9661 Fax: (815) 968-9731 www.gcelectronics.com

Section 7 - Spill or Leak Procedures	
Waste Disposal Method:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines, by a licensed disposal company.
This product is regulated under RCRA and	d CERCLA.
Hazardous Waste 40 CFR 261: Hazardous Waste No.: Hazardous Substance Superfund: Spill Cleanup Measures:	Yes U239 Yes RQ (lb): 1000 Remove all sources of ignition. Absorb spill with dry inert material (e.g., dry sand or earth), then place in a chemical waste container. Clean up spills immediately observing precautions in the protective equipment section.
Environmental Precautions:	Contain liquid to prevent contamination of soil, surface water or ground water. Avoid runoff into storm sewers and ditches, which lead to waterways. Do not flush to sewer.
Spill/Release Reporting:	Immediately notify authorities of any reportable spill as may be required pursuant to regulations. See Section 10 for applicable CERCLA reportable quantities.
Sec	ction 8 - Special Protection Information
Engineering Controls:	Use appropriate engineering controls such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended and/or regulated exposure limits. 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.
Skin Protection Description: Hand Protection Description:	Wear suitable protective clothing to prevent contact with skin. Wear appropriate protective gloves such as neoprene or viton. Consult glove manufacturers for glove permeability data.
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.
Protective Clothing/Body Protection:	If splashing is likely, wear impervious clothing and boots to prevent repeated or prolonged skin contact. Consult your supplier of personal protective equipment for additional instructions on proper usage.

1801 Morgan Street Rockford, IL 61102 Phone: (815) 968-9661 Fax: (815) 968-9731 www.gcelectronics.com	MSDS Number: 137 Revision Date: 9/16/09 Supersedes Date: 8/1/06
Respiratory Protection: Other Protective:	A NIOSH approved air-purifying respirator with an appropriate 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 to airborne concentrations that are typically within 10 times the exposure limit. 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. A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z288.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
	Section 9 – Special Precautions
	Section 9 – Special Precautions
Handling:	This product should be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue (liquid and./or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Containers may explode and cause injury or death. Empty drums or containers should be completely drained, properly bunged and promptly returned to a drum reconditioner,
Storage:	or properly disposed of. Store in a cool, dry, well-ventilated area away from source of heat and incompatible substances. Keep container tightly closed when not in use. Store at temperatures below 80°F (27°C). Consult manufacturer for shelf life.
Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if

Section 10 - Regulatory Information

applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines, by a licensed disposal company.

Transportation Information:

GC Electronics

This information was extracted from Material Safety Data Sheets from our raw material suppliers and is believed to be correct as of the date hereof.

Product Name: Red-X Corona Dope

Product Name: Red-X Corona Dope MSDS Number: 137

MSDS Number: 137 Revision Date: 9/16/09 Supersedes Date: 8/1/06

DOT Description:

Proper Shipping Name: Packing group: UN#: Hazard class:	Paint III UN1263 (CFR 49 173-150) Exception for Class 3 (flammable) and combustible liquid. 3
Label required:	Flammable liquid
-	
All Components:	
TSCA 8(b):	Inventory Status Listed or Exempt
Ethyl Benzene : Section 302 Extremely Hazardous	
Substances (RQ):	1000 pounds (454 kg)
Section 312 Hazard Category:	N/
Acute:	Yes
Chronic: Fire:	Yes Yes
The.	105
State:	Ethyl benzene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, and Massachusetts.
Xylene:	
Section 302 Extremely Hazardous	
Substances (RQ): Section 312 Hazard Category:	100 pounds (45.4 kg)
Acute:	Yes
Chronic:	Yes
Fire:	Yes
State:	Xylene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, and Massachusetts
Se	ction 11 - Other Information
Toxicological Information	
Ethyl Benzene:	
Eye Effect:	Eye – rabbit: 500 mg; severe irritation (RTECS)
Skin Effects:	No data reported in the cited references as of the revision date.
Ingestion Effects:	Oral – rat LD ₅₀ : 3500 mg/kg (RTECS)
Inhalation Effects:	Inhalation – rat LCLo: 4000 ppm/4H (RTECS)

GC Electronics Product Name: Red-X Corona Dope MSDS Number: 137 1801 Morgan Street Rockford, IL 61102 Revision Date: 9/16/09 Phone: (815) 968-9661 Supersedes Date: 8/1/06 (815) 968-9731 Fax: www.gcelectronics.com Inhalation – human TCLo: 100 ppm/8H (RTECS) IARC - 2B Carcinogen - Possibly Carcinogenic to Humans Carcinogenicity: Mutagenicity: Human mutation data reported (RTECS) Reproductive Toxicity: Reproductive effects (RTECS) Irritation: Skin – rabbit: 15 mg/24H; open; mild irritation (RTECS) Other Toxicological Information: Intraperitoneal - mouse LD₅₀. 2624 uL/kg Xylene: Eye Effect: Eye – rabbit: 5 mg/24H; severe irritation Eye - rabbit: 87 mg; mild irritation (RTECS) Skin – rabbit LD_{50:} >1700 mg/kg data for xylene (RTECS) Skin Effects: Oral - rat LD_{50: 4300 mg/kg (RTECS)} **Ingestion Effects:** Inhalation - rat LC50: 5000 ppm/4H (RTECS) Inhalation Effects: Inhalation – human TCLo: 200 ppm (RTECS) IARC-3 Carcinogen - Unclassifiable as to Carcinogenicity in humans Carcinogenicity: Mutagenicity: Mutation data reported (RTECS) Reproductive Toxicity: Reproductive effects (RTECS) Skin - rabbit: 100%; moderate irritation Irritation: Other Toxicological Information: Intraperitoneal – rat LC50: 2459 mg/kg Subcutaneous - rat LC50: 1700 mg/kg Additives: Acute Health Effects: The primary hazard of these components is skin and eye irritation. Carcinogenicity: Contains trace amounts (less than 0.1% by weight) cobalt, which is considered a group 2B possible human carcinogen. Contains approximately 3.0% methyl ethyl ketoxime, which is considered to be carcinogenic by RTECS criteria (rat, liver tumors). **Ecological Information:** Ecotoxicity: Xylene: LC50 (fathead minnow), 42 mg/1/96 hr; 46 mg 1/1 hr at 18-22 deg. C, in a static bioassay, LD50 (goldfish), 13 mg/1/24 hr, LC50 (rainbow trout), 13.5 mg/1/96 hr

Disclaimer

GC Electronics believes that the information contained herein is accurate and reliable as of the date of this material safety data sheet, but no representation guarantee or warranty, express or implies, is made as to the accuracy, reliability, or completeness of the information. Persons receiving this information are encouraged to make their own determination as to the information's suitability and completeness for their particular application. NO INFORMATION CONTAINED HEREIN CONSTITUTES A PRODUCT WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANT ABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY GC ELECTRONICS.