MATERIAL SAFETY DATA SHEET

Product Name: RED-X CORONA DOPE

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Type: Coating  
Product Name: RED-X CORONA DOPE  
Part Number(s): 10-5002  
Emergency Contact: Chemtrec  
Phone: (800) 424-9300

HMIS RATINGS:  
Health: 2  
Flammability: 3  
Reactivity: 0  
Personal Protection: N/E

NFPA RATINGS:  
Health: 2  
Flammability: 3  
Instability: 0  
Other: None

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>% Weight</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>30-50</td>
<td>100 ppm</td>
<td>100 ppm (TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA)</td>
<td>150 ppm (STEL)</td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td>7-15</td>
<td>100 ppm</td>
<td>100 ppm (TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA)</td>
<td>125 ppm (STEL)</td>
</tr>
</tbody>
</table>
SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview:
   Flammable. Irritant.
Applies to All Ingredients:
Route of Exposure:
   Eyes, Skin, Inhalation, and Ingestion.
Potential Health Effects:
   Eye Contact:
      Can cause severe irritation, redness, tearing.
   Skin Contact:
      Can cause irritation. Prolonged and repeated exposures can cause defatting and drying.
   Skin Absorption:
      Harmful if absorbed through the skin.
   Inhalation:
      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.
   Ingestion:
      May be harmful if ingested in large amounts. Aspiration of material into lungs can cause lung inflammation and/or damage.

Chronic Health Effects:
   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.

Target Organs:
   Liver, Kidney, CNS, eyes, skin, Respiratory System, and digestive tract
SECTION 4: FIRST AID MEASURES

Eye Contact:
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.

Skin Contact:
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.

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Keep warm. Get immediate medical attention.

Ingestion:
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 5: FIRE FIGHTING MEASURES

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 booth 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.

Flash Point:
81°F (27°C)
MATERIAL SAFETY DATA SHEET

Product Name: RED-X CORONA DOPE

SECTION 5: FIRE FIGHTING MEASURES (CONTINUED)

Upper Flammable or Explosive Limit:
7% for Xylene

Lower Flammable or Explosive Limit:
1% for Xylene

Auto Ignition Temperature:
Not Established

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.

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 Section 13 for disposal considerations.

Protective Equipment:
Wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

NFPA
Health: 2
Flammability: 3
Instability: 0
Other: NONE
SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:
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 15 for applicable CERCLA reportable quantities.

SECTION 7: HANDLING and STORAGE

Handling:
This product should be handled only 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, or properly disposed of.

Storage:
Store in a cool, dry, well ventilated area away from sources 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.

Hygiene Practices:
Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.
SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:
Use appropriate engineering control 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:
Wear suitable protective clothing to prevent contact with skin.

Hand Protection Description:
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.

Respiratory Protection:
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 Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use.

Other Protective:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Liquid
Color: Red
Odor: Aromatic
pH: No data.
Decomposition Temperature: No data.
Vapor Pressure: No data.
Vapor Density: No data.
Boiling Point: No data.
Freezing Point: No data.
Solubility in Water: Negligible
Specific Gravity: 0.95-1.08
Percent Volatile: 40-65%
Viscosity: 200-350 cps
Molecular Weight: Mixture
Flashpoint: 81°F (27°C)
Auto Ignition Temp: Not Established
Upper Flammable Explosive Limit: 7% for Xylene
Lower Flammable Explosive Limit: 1% for Xylene

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:
Stable at normal temperatures and storage conditions.
Conditions to Avoid:
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
Hazardous Polymerization:
Will not occur.
Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide and hydrocarbons
SECTION 11: 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)
  Inhalation - human TCLo: 100 ppm/8H (RTECS)
Carcinogenicity:
  IARC-2B Carcinogen - Possibly Carcinogenic to Humans
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 LD$_{50}$: 2624 uL/kg

SECTION 11: TOXICOLOGICAL INFORMATION CONTINUED ON NEXT PAGE
SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

Xylene:
Eye Effect:
   Eye - rabbit: 5 mg/24H; severe irritation
   Eye - rabbit: 87 mg; mild irritation (RTECS)
Skin Effects:
   Skin - rabbit LD$_{50}$: >1700 mg/kg data for xylene (RTECS)
Ingestion Effects:
   Oral - rat LD$_{50}$: 4300 mg/kg (RTECS)
Inhalation Effects:
   Inhalation - rat LC$_{50}$: 5000 ppm/4H (RTECS)
   Inhalation - human TCLo: 200 ppm (RTECS)
Carcinogenicity:
   IARC-3 Carcinogen - Unclassifiable as to Carcinogenicity in Humans
Mutagenicity:
   Mutation data reported (Sax)
Reproductive Toxicity:
   Reproductive effects (RTECS)
Irritation:
   Skin - rabbit: 100%; moderate irritation
Other Toxicological Information:
   Intraperitoneal - rat LD$_{50}$: 2459 mg/kg
   Subcutaneous - rat LD$_{50}$: 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).
MATERIAL SAFETY DATA SHEET

Product Name: RED-X CORONA DOPE

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
Xylene: LC_{50} (fathead minnow), 42 mg / l / 96 hr; 46 mg / l / 1 hr at 18-22 deg. C, in a static bioassay, LD_{50} (goldfish), 13 mg / l / 24 hr, LC_{50} (rainbow trout), 13.5 mg / l / 96 hr

SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Paint
DOT UN Number: UN1263 (CFR 49 173-150) Exception for Class 3 (flammable) and combustible liquid.

DOT Hazard Class: 3
DOT Packing Group: III
Label Required: Flammable Liquid
1801 Morgan Street  
Rockford, IL 61102  
Phone: (815) 968-9661  
Fax: (815) 968-9731  
www.gcelectronics.com

MSDS Number: 137  
Revision Date: 5/31/2012  
Supersedes Date: 9/16/2009

MATERIAL SAFETY DATA SHEET

Product Name: RED-X CORONA DOPE

SECTION 15: REGULATORY INFORMATION

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:  
  Acute: Yes  
  Chronic: Yes  
  Fire: Yes  
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):  
  100 pounds (45.4 kg)  
Section 312 Hazard Category:  
  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.

SECTION 16: ADDITIONAL INFORMATION

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