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MSDS Number: 307  
 Revision Date: 2/13/2013  
 Supersedes Date: 9/24/2012

**MATERIAL SAFETY DATA SHEET**

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

**Product Name: RED INSULATING VARNISH**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product Type:	Coating	Emergency Contact:	Chemtrec
Product Name:	Red Insulating Varnish	Phone:	(800) 424-9300
Part Number(s):	10-9002-A 10-9002-A1G 10-9008-A		

HMIS CLASSIFICATION	National Fire Protection Association
Health Hazard: 2	(NFPA) Class: 1B
Chronic Health Hazard: *	
Flammability: 3	
Reactivity: 0	
PPI: Safety Glasses, Gloves	

**SECTION 2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Form : liquid  
 Colour : red  
 Odour : aromatic  
 Hazard Summary : HARMFUL BY INHALATION.  
 IRRITATING TO EYES AND SKIN.  
 FLAMMABLE.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR1910.1200)

**Potential Health Effects**

Eyes : Direct contact of product with eye may cause moderate irritation with corneal injury.  
 Direct contact with the product or exposure to vapors or mist may cause stinging, tearing and redness.



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#### SECTION 2. HAZARDS IDENTIFICATION (CONTINUED)

- Skin** : Can cause irritation which may include the following symptoms: reddening, swelling, rash, scaling or blistering. May be harmful if absorbed through skin. May produce central nervous system depression with headache and/or nausea.
- Ingestion** : Harmful if swallowed. May cause gastrointestinal irritation and central nervous system effects such as dizziness, drowsiness, and/or loss of coordination.
- Inhalation** : Breathing high concentrations of vapors or mist may cause upper respiratory tract irritation and may be associated with cardiac irregularities. May affect the brain or nervous system, causing dizziness, headache, or nausea. Repeated exposure to high concentrations may cause liver and/or kidney damage.
- Chronic Exposure** : Absorption of ingredients (solvents) by inhalation and/or repeated skin contact may cause injury to the liver/kidney. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.
- Aggravated Medical Condition** : Respiratory disorders  
Skin disorders  
Kidney disorders  
Liver disorders
- Primary Routes of Entry** : Inhalation  
Skin contact  
Skin absorption  
Eyes
- Target Organs** : Eyes  
Skin  
Respiratory Tract  
Kidney  
Liver



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### SECTION 2. HAZARDS IDENTIFICATION (CONTINUED)

#### Carcinogenicity:

IARC	Ethylbenzene	100-41-4
	Stoddard Solvent (Mineral spirits)	8052-41-3

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH	Ethylbenzene	100-41-4
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#### Environmental Effects

Environmental Effects : No information available.

### SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

#### Chemical nature

Modified Alkyd Resin Solution

#### Hazardous components

The specific chemical identity/weight percent of proprietary ingredient(s) is a trade secret

Component	CAS-No.	Weight percent
Xylene	1330-20-7	30.00 - 60.00
Iron oxide	1332-37-2	10.00 - 30.00
Ethylbenzene	100-41-4	5.00 - 10.00
Iron(III) oxide	1317-61-9	1.00 - 5.00
Stoddard Solvent (Mineral spirits)	8052-41-3	0.10 - 1.00



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### SECTION 4. FIRST AID MEASURES

#### First aid procedures

- Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Consult a physician.
- Skin contact : In case of contact, immediately flush skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash and thoroughly clean contaminated clothing and shoes before reuse. Consult a physician.
- Eye contact : In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician.
- Ingestion : If swallowed, consult a physician. This material (or its components) may present an aspiration hazard. Never give anything by mouth to an unconscious person.

#### Notes to physician

- Risks : No information available.

### SECTION 5. FIREFIGHTING MEASURES

#### Flammable properties

- Flash point : 15 °C (59 °F)  
Method: No information available.
- Lower explosion limit : 1.1 %(V)
- Upper explosion limit : 7.0 %(V)
- Suitable extinguishing media : Carbon dioxide (CO2)  
Foam  
Dry powder  
Water mist  
Water spray



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### Product Name: RED INSULATING VARNISH

#### SECTION 5. FIREFIGHTING MEASURES (CONTINUED)

- Unsuitable extinguishing media : Do NOT use water jet.
- Special protective equipment for firefighters : Wear a positive-pressure supplied-air respirator with full facepiece.  
Use personal protective equipment.
- Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.  
Cool containers / tanks with water spray.  
Flash back possible over considerable distance.  
The pressure in sealed containers can increase under the influence of heat.  
Cool closed containers exposed to fire with water spray.
- Hazardous decomposition products due to incomplete combustion : Carbon oxides  
nitrogen oxides (NOx)
- Further information : Remove ignition sources  
Immediately evacuate personnel to safe areas.  
Use a water spray to cool fully closed containers.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Remove all sources of ignition.  
Ensure adequate ventilation.  
Avoid breathing vapors.  
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Clean contaminated floors and objects thoroughly while observing environmental regulations.
- Methods for containment : Stop leak. Dike and contain spill.
- Methods for cleaning up : Absorb with inert absorbent material and dispose of in accordance with applicable regulations.
- Additional advice : Shut off source of spill if it can be done safely.  
Use non-sparking tools.



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### SECTION 7. HANDLING AND STORAGE

#### Handling

Handling : Keep closure tight and container upright to prevent leakage.  
Do not puncture, drag, or slide container.  
Container is not a pressure vessel.  
Never use pressure to empty.  
Avoid prolonged or repeated inhalation of spray mists and heated vapors.  
Avoid contact with or breathing of vapors during curing process.  
Avoid contact with skin.  
Do not get in eyes.

Advice on protection against fire and explosion : ATTENTION: Empty containers may retain hazardous residue and explosive vapors. Do not cut, puncture, or weld on or near this container until it has been thoroughly cleaned and all hazards have been removed.  
To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

#### Storage

Further information on storage conditions : Store only in well-ventilated areas.  
Store container out of sunlight and away from heat, sparks and flame.

Advice on common storage : Do not store above 49°C (120 °F).



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**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Xylene	1330-20-7	TWA	100 ppm	2007-01-01	ACGIH
		STEL	150 ppm	2007-01-01	ACGIH
		TWA	100 ppm 435 mg/m3	1997-08-04	OSHA P1
Ethylbenzene	100-41-4	TWA	100 ppm	2009-01-01	ACGIH
		TWA	20 ppm	2012-01-01	ACGIH
		TWA	100 ppm 435 mg/m3	1997-08-04	OSHA P1
		TWA	100 ppm 435 mg/m3	1989-01-19	OSHA P0
		STEL	125 ppm 545 mg/m3	1989-01-19	OSHA P0
		TWA	100 ppm	2007-01-01	ACGIH
Stoddard Solvent (Mineral spirits)	8052-41-3	TWA	100 ppm	2007-01-01	ACGIH
		TWA	500 ppm 2,900 mg/m3	1997-08-04	OSHA P1
		TWA	100 ppm 525 mg/m3	1989-01-19	OSHA P0



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**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONTINUED)**

**Engineering measures**

Engineering measures : Use with adequate ventilation.  
 All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)  
 This product contains a particulate(s) that is considered hazardous per OSHA (29 CFR 1910.1200) and is listed in Section III as a precautionary warning.  
 Under normal conditions of use, this product as supplied does not pose a health risk from particulate matter.  
 Physical degradation of the cured product (i.e. sanding, abrading, etc.) may pose a dust hazard.  
 Repeated inhalation of such dust may cause lung injury.

**Personal protective equipment**

Eye protection : Use safety eyewear designed to protect against splash of liquids.  
 Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection : Impervious gloves

Skin and body protection : Impervious clothing  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Wear an appropriate, properly-fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates that vapor/mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use.

Hygiene measures : Do not get in eyes.  
 Do not get on skin.  
 Avoid prolonged or repeated breathing of vapor.  
 Wash thoroughly after handling.





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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Colour	: red
Odour	: aromatic
Odor Threshold	: no data available
Flash point	: 15 °C (59 °F) Method: No information available.
Ignition temperature	: no data available
Lower explosion limit	: 1.1 %(V)
Upper explosion limit	: 7.0 %(V)
pH	: no data available
Freezing point	: no data available
Boiling point/boiling range	: 136 °C (277 °F)
Vapour pressure	: 6.7 hPa at 20 °C (68 °F)
Evaporation rate	: no data available
Density	: 1.06 g/cm <sup>3</sup> at 20 °C (68 °F) (1.013 hPa)
Bulk density	: 1,059 kg/m <sup>3</sup>
Partition coefficient: n-octanol/water	: no data available
Relative vapor density	: no data available

#### SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	: Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid	: Strong oxidizing agents Reducing agents
Hazardous decomposition products	: Carbon dioxide, carbon monoxide and toxic vapors. nitrogen oxides (NO <sub>x</sub> )
Chemical stability	: Stable



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### SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Component) : Component: 1330-20-7 Xylene  
LD50 rat  
Dose: 3,523 mg/kg

Component: 100-41-4 Ethylbenzene  
LD50 rat  
Dose: 3,500 mg/kg

Component: 8052-41-3 Stoddard Solvent (Mineral spirits)  
LD50 rat  
Dose: > 6,000 mg/kg

Acute dermal toxicity (Component) : Component: 1330-20-7 Xylene  
LD50 rabbit  
Dose: 1,700 mg/kg

Component: 100-41-4 Ethylbenzene  
LD50 rabbit  
Dose: 5,510 mg/kg

Component: 8052-41-3 Stoddard Solvent (Mineral spirits)  
LD50 rabbit  
Dose: > 3,000 mg/kg

Acute inhalation toxicity (Component) : Component: 1330-20-7 Xylene  
LC50 rat  
Dose: 5000 ppm  
Exposure time: 4 h

Component: 100-41-4 Ethylbenzene  
LC50  
no data available

Component: 8052-41-3 Stoddard Solvent (Mineral spirits)  
LC50 rat  
Dose: 5,500 mg/m3  
Exposure time: 4 h



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### Product Name: RED INSULATING VARNISH

#### SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

Skin irritation (Component) : Component: 1330-20-7 Xylene  
rabbit  
Result: Moderate skin irritation

Component: 100-41-4 Ethylbenzene  
rabbit  
Result: Moderate skin irritation

Component: 8052-41-3 Stoddard Solvent (Mineral spirits)  
rabbit  
Result: Moderate skin irritation

Eye irritation(Component) : Component: 1330-20-7 Xylene  
rabbit  
Result: Eye irritation

Component: 100-41-4 Ethylbenzene  
rabbit  
Result: Moderate eye irritation

Component: 8052-41-3 Stoddard Solvent (Mineral spirits)  
rabbit  
Result: Eye irritation

#### SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information (Product) : no data available

#### SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of in accordance with applicable Federal, State, and local regulations. Under the Resource Conservation and Recovery Act (RCRA) regulations, it is the responsibility of the product user to determine, at the time of disposal, whether a material should be classified as a hazardous waste. Consult your attorney or appropriate regulatory affairs officer for information on proper disposal.



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**SECTION 14. TRANSPORT INFORMATION**

<b>DOT</b>	UN Number	: 1263
	Proper shipping name	: Paint
	Class	: 3
	Packing group	: II
	Label	: ORM-D (CFR49 173-150) Exceptions for Class 3 : (flammable) and combusive liquids.
	Description	: Xylene Mixture
<b>IATA</b>	UN Number	: 1263
	Description of the goods	: Paint
	Class	: 3
	Packing group	: II
	ICAO-Labels	: 3
	Packing instruction (cargo aircraft)	: 364
	Packing instruction (passenger aircraft)	: 353
<b>IMDG</b>	UN Number	: UN 1263
	Description of the goods	: Paint
	Class	: 3
	Packing group	: II
	IMDG-Labels	: 3
	Marine Pollutant	: no
	Package Instruction (Limited quantity)	: Y341

**SECTION 15. REGULATORY INFORMATION**

**Emergency Planning Community Right-To-Know (EPCRA)**

**SARA 302 Components** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

If listed below, this product contains toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

<b>SARA 313 Components</b>	: Xylene	1330-20-7	42.1%
	: Ethylbenzene	100-41-4	5.6%



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**SECTION 15. REGULATORY INFORMATION (CONTINUED)**

**SARA 311/312 Hazards** : Acute Health Hazard  
 Chronic Health Hazard  
 Fire Hazard

**CERCLA Reportable Quantity** : 237 lbs Xylene 1330-20-7

**SARA 302 Reportable Quantity** : This material does not contain any components with a SARA 302 RQ.

**SARA 304 Reportable Quantity** : This material does not contain any components with a section 304 EHS RQ.

**Toxic Substances Control Act (TSCA)**

**TSCA Status** : We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720 30(h).

**Clean Air Act & Related Information**

**Non-volatile (Wt)** : 51.5 %  
 Method: Not available

Non-volatile information is not a specification.

**Hazardous Air Pollutants**

Xylene 1330-20-7  
 Ethylbenzene 100-41-4

If not listed above, this product does not contain HAPs at 1% or 0.1% or greater. Refer to Section 3 for HAP weight percentage.



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**SECTION 15. REGULATORY INFORMATION (CONTINUED)**

**Resource Conservation and Recovery Act**

**EPA Hazardous Waste Code(s)** : D001 Ignitable

**State Laws**

**Massachusetts Right To Know Components** : Xylene 1330-20-7  
 Ethylbenzene 100-41-4  
 Crystalline silica 14808-60-7

**Pennsylvania Right To Know Components** : Xylene 1330-20-7  
 Modified Alkyd Resin -  
 Iron oxide 1332-37-2  
 Ethylbenzene 100-41-4  
 Toluene 108-88-3

**New Jersey Right To Know Components** : Xylene 1330-20-7  
 Modified Alkyd Resin -  
 Iron oxide 1332-37-2  
 Ethylbenzene 100-41-4  
 Iron(III) oxide 1317-61-9

**New Jersey Trade Secret Registry Number for the product (NJ TSRN)** : NOT APPLICABLE

**California Prop. 65 Components** : WARNING! This product contains a chemical known to the State of California to cause cancer.  
 Ethylbenzene 100-41-4  
 Crystalline silica 14808-60-7  
 WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.  
 Toluene 108-88-3



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### SECTION 15. REGULATORY INFORMATION (CONTINUED)

#### Canadian Environmental Protection Act

Domestic Substances List

**DSL Status** : We certify that all of the components of this product are listed on the DSL.

**WHMIS Classification** : B2  
D2A  
D2B

### SECTION 16. OTHER INFORMATION

#### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

### SECTION 17. STATEMENT OF COMPLIANCE ON US SEC CONFLICT MINERALS REGULATIONS (DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT)

To the best of our knowledge and per the manufacturer's documented statement, this product complies with the US SEC Conflict Minerals regulations.

### SECTION 18. ADDITIONAL INFORMATION

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 implied, is made as to the accuracy, reliability or completeness of the information. Persons receiving 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 MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY GC ELECTRONICS.