

RUST INHIBITIVE PRIMER HS RESIN

This product appears in the following stock number(s):

2765R 2765R-5 2765U

Last revised: 09/12/02

Printed: 9/12/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Tradename:** RUST INHIBITIVE PRIMER HS RESIN**General use:** The following information pertains to the resin component of a two-component system. Once properly cured, this product is not hazardous.**Chemical family:** Epoxy resin solution**MANUFACTURER**ITW Philadelphia Resins
130 Commerce Dr.
Montgomeryville, PA 18936**EMERGENCY INFORMATION****Emergency telephone number**
(CHEMTREC): (800) 424-9300
Other Calls: (215) 855-8450**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Ethyl benzene		100414	< 5	100 ppm	100 ppm	100 ppm (Canada)
Propylene glycol monomethyl ether		107982	< 5	100 ppm	100 ppm	100 ppm (Canada)
Zinc oxide		1314132	< 5	5 mg/m ³	5 mg/m ³	10 mg/m ³ (Canada)
Xylene		1330207	1-10	100 ppm	100 ppm	100 ppm (Canada)
Carbon black		1333864	< 1	3.5 mg/m ³	3.5 mg/m ³	n/e
Crystalline silica		14808607	1-10	0.05 mg/m ³	10/(%Q+2) m	0.10 mg/m ³ (Canada)
Polymers of epoxy resin and bisphenol A		25036253	20-40	n/e	n/e	n/e
Bisphenol A diglycidyl ether resin	DGEBPA	25068386	10-20	n/e	n/e	n/e
Epichlorohydrin/Bisphenol A Adduct		25085998	< 5	n/e	n/e	n/e
Phenol, polymer with formaldehyde, glycidyl ether		28064144	1-10	n/e	n/e	n/e
Zinc phosphate		777990	1-5	n/e	n/e	n/e

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Blocked polyisocyanate		*	1-5	n/e	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: liquid with solvent odor.

WARNING! Flammable. Eye, skin and respiratory irritant. Potential skin sensitizer. May cause central nervous system effects.

Potential health effects

Primary routes of exposure: Skin contact Skin absorption Eye contact Inhalation Ingestion

Symptoms of acute overexposure:

Skin: Moderate irritant (redness, itching, burning, dryness, cracking). Contact at elevated temperatures can cause thermal burns. May cause skin sensitization (rashes, hives). Products may be absorbed through skin and causing health hazard.

Eyes: Moderate irritant (stinging, burning sensation, tearing, redness, swelling). Contact at elevated temperatures can cause thermal burns which may result in permanent damage or blindness.

Inhalation:

If the product is poorly ventilated, strongly heated or atomized, the vapor or mist can cause irritation of the respiratory tract (soreness of mouth/ throat, coughing and chest pain may result). May cause central nervous system depression (headaches, dizziness, nausea, drowsiness, weakness, fatigue, unconsciousness).

Ingestion:

May cause gastric distress (irritation of mouth/ throat, nausea, vomiting, diarrhea). May cause central nervous system depression and /or difficulty breathing. Liquid drawn into lungs during vomiting can cause severe damage.

Effects of chronic overexposure:

Skin contact may cause dermatitis. Chronic exposure to solvents above their TLV's may cause liver/kidney disorders. May cause nasal irritation, affect mucous tissue/ membrane dysfunction. The epoxy resins are potential skin sensitizers.

Carcinogenicity -- OSHA regulated: No

ACGIH: No

National Toxicology Program: Yes

International Agency for Research on Cancer: Yes

Cancer-suspect constituent(s): Silica and Carbon black

Medical conditions which may be aggravated by exposure:

Preexisting eye and skin disorders (e.g. eczema). Development of preexisting skin or lung allergy symptoms may increase.

Other effects:

Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and Central Nervous System damage. See Section 11.

4. FIRST AID MEASURES

First aid for eyes:

Flush eye with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water for at least 15 minutes. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

First aid for ingestion:

Do NOT induce vomiting. Rinse mouth out with water, then sip water to remove taste from mouth. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips (if sitting) or to the side (if lying down) to prevent aspiration. Get medical attention.

Note to physician :

Eyes: stain for evidence of corneal injury.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:

Vapor forms explosive mixture with air.

Extinguishing media: Water Carbon dioxide Dry chemical Foam Alcohol foam**Flash Point (°F):** 80**Method:** PMCC**Explosive limits in air (percent) -- Lower:** n/d **Upper:** n/d**Special firefighting procedures:**

Firefighters should wear self-contained breathing apparatus to avoid inhalation of smoke or vapors. Water may be used to cool exposed containers.

Unusual fire and explosion hazards:

Containers exposed to intense heat from fires could rupture from vapor pressure buildup or from polymerization. Vapors are heavier than air and may travel to an ignition source and flash back. Burning liquid may float on water. Personnel in vicinity and downwind should be evacuated.

Hazardous products of combustion:

Fumes of Cl⁻, carbon monoxide, other products varying in composition and toxicity. If heated >248 F, TDI and carbodiimides may be generated.

6. ACCIDENTAL RELEASE MEASURES

Spill control:

Avoid personal contact. Evacuate area. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable material.

Cleanup:

Wear appropriate respirator and protective clothing. For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue. Small spills- take up with an absorbent material and place in appropriate containers for disposal.

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs. Use bonding/ grounding lines and non-sparking tools. Use non-sparking blowers and ventilation to remove potential explosive or toxic accumulations.

7. HANDLING AND STORAGE**Handling precautions:**

Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities.

Air dry and then launder contaminated clothing and protective gear before reuse. Close container after each use.

Ground/bond container when pouring. Keep away from heat, flame or sparks. Use non-sparking tools.

Storage:

Keep in a cool place, without direct exposure to sunlight. Keep container tightly closed and otherwise in accordance with NFPA and NEC codes. Maintain air space in storage containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation :**

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation).

Local exhaust may be required for confined areas (see OSHA 1910.146).

Other engineering controls :

Have emergency shower and eye wash available.

Personal protective equipment**Eye and face protection:**

Chemical goggles and full face shield.

Skin protection:

Chemical-resistant gloves and other gear as required to prevent skin contact.

Respiratory protection:

None needed in normal use with proper ventilation. In poorly ventilated areas use NIOSH approved organic vapor cartridge respirator for uncured resin, dust/particle respirator during grinding/sanding operations for cured resin; or fresh airline respirator as exposure levels dictate (see OSHA 1910.134).

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.39	Boiling point (°F):	n/d
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	n/d at 68 °F	Evaporation rate (butyl acetate = 1):	n/d
VOC (grams/liter):	n/d	Solubility in water:	slight
Percent volatile by volume:	n/d	pH (5% solution or slurry in water):	n/d
Percent solids by weight:	n/d		

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid :

Avoid heat (esp. localized heat sources-i.e. drum heaters), open flames and ignition sources. Sunlight or ultraviolet radiation. Inert gas blanketing. Oxidizing conditions.

Incompatible materials:

Strong Lewis or mineral acids, strong oxidizers, strong mineral & organic bases (esp. primary & secondary aliphatic amines). Strong reducers. Free radical initiators.

Hazardous products of decomposition:

Oxides of carbon; aldehydes, acids, Toluenediisocyanate (TDI), phenol derivatives and other organic substances may be formed during combustion or elevated temperature degradation.

Conditions under which hazardous polymerization may occur:

Heat is generated when resin is mixed with curing agents; Run-a-way cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): Not available.

Acute dermal effects: LD50 (rabbit): Not available.

Acute inhalation effects: LC50 (rat): Not available.

Exposure: 4 hours.

Carbon black (1 hr, rat) LC50=27,000 mg/m³

Eye irritation:

Not available.

Subchronic effects:

Not available.

Carcinogenicity, teratogenicity, and mutagenicity:

1) **MUTAGENICITY:** Liquid resins based on diglycidyl ether of Bisphenol A (DGEBA), have proved to be inactive when tested by in vivo mutagenicity assays. These resins have shown activity in in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.

2) **CARCINOGENICITY:** Recent 2-year bioassays in rats and mice exposed by the dermal route to DGEBA yielded no evidence of carcinogenicity to the skin or any other organs. This study clarifies prior equivocal results from a 2-year mouse skin painting study, which were suggestive, but not conclusive, for weak carcinogenic activity.

3) The International Agency for Research on Cancer (IARC) concluded that DGEBA is not classifiable as a carcinogen (IARC group 3), that is human and animal evidence of carcinogenicity is inadequate.

Xylene: Developmental toxicity studies showed embryo-lethal/toxic and teratogenic effects with maternal toxicity.

DBGDA: In a study, pregnant mice given 60 and 80 mg/kg/day by gavage had an increased incidence of malformed fetuses compared to the control groups.

Other chronic effects:

Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Studies have shown bisphenol A diglycidyl ether resin to cause allergic contact dermatitis. Component(s) of this material have been shown to effect immune system cells, liver, kidney, blood, cardiac sensitization, cataracts, hearing, and central nervous system in laboratory animal studies.

Xylene: Laboratory animals exposed to prolonged and repeated high doses of xylene by various routes have shown hearing loss and effects in liver, kidneys, lungs, spleen, heart, blood and adrenals. The effects of hearing loss on human hearing is uncertain.

Respirable crystalline quartz may cause chronic lung injury (silicosis). Acute or rapid silicosis may occur in a short period of time in heavy exposure in certain occupations such as sandblasters. Silicosis is a form of disabling pulmonary fibrosis which can be progressive and may lead to death. Pulmonary function may be reduced by inhalation of respirable crystalline silica. It may produce lung scarring which may lead to a progressive massive fibrosis, increasing susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Ethyl benzene	3500 mg/kg	17800 ppm	>4000 ppm
Propylene glycol monomethyl ether	5660 mg/kg	13000 mg/kg	n/d
Zinc oxide	n/d	n/d	n/d
Xylene	4300 mg/kg	>1700 mg/kg	5000 ppm
Carbon black	n/d	n/d	6750 mg/m ³
Crystalline silica	n/d	n/d	n/d
Polymers of epoxy resin and bisphenol A	11.4 g/kg	n/d	> 11,000 ppm
Bisphenol A diglycidyl ether resin	11.4 g/kg	>20 ml/kg	no deaths
Epichlorohydrin/Bisphenol A Adduct	n/d	n/d	n/d
Phenol, polymer with formaldehyde, glycidyl ether	> 5000 mg/kg	> 6000 mg/kg	> 1.7 mg/L
Zinc phosphate	n/d	n/d	n/d
Blocked polyisocyanate	n/d	n/d	n/d

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION**Ecotoxicity:**

Not available.

Mobility and persistence:

Not available.

Environmental fate:

Not available.

13. DISPOSAL CONSIDERATIONS**Please see also Section 15, Regulatory Information.****Waste management recommendations:**

If this resin becomes a waste, it would be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations. Do not dispose of in a landfill. Incineration is the preferred method of disposal. Empty containers still contain hazardous product residue (vapors and/or liquid). Follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition - DO NOT cut, drill, grind, or weld on or near container.

14. TRANSPORT INFORMATION**Proper shipping name:** Paint related material**Technical name :** N/A**Hazard class :** 3**UN number:** 1263**Packing group:** III**Emergency Response Guide no.:** 127**IMDG page number:** N/A**Other:****15. REGULATORY INFORMATION****U.S. Federal Regulations****TSCA:**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

D001

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Ethyl benzene	No	Yes	0.0	Required
Propylene glycol monomethyl ether	No	No	0.0	Not required
Zinc oxide	No	No	0.0	Not required
Xylene	No	Yes	100.0	Not required
Carbon black	No	No	0.0	Not required
Crystalline silica	No	No	0.0	Not required
Polymers of epoxy resin and bisphenol A	No	No	0.0	Not required
Bisphenol A diglycidyl ether resin	No	No	0.0	Not required
Epichlorohydrin/Bisphenol A Adduct	No	No	0.0	Not required
Phenol, polymer with formaldehyde, glycidyl ether	No	No	0.0	Not required
Zinc phosphate	No	No	0.0	Not required
Blocked polyisocyanate	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -- Fire hazard -

Canadian regulations

WHMIS hazard class(es): B2; D2B; D2A

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health	Flammability	Reactivity
	2*	3	1

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