



MATERIAL SAFETY DATA SHEET

Date: January 3, 2004

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Rust Inhibiting Primer
Item Number: RG-100
Chemical Name:
Comparable Products: Unicoat Red Zinc Chromate Primer
Company Information: STS Coatings, Inc.
347 Hwy 289
Comfort, TX 78013
Emergency Phone: CHEMTREC 800-424-9300
General Information: 830-995-5177

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS NO.	EXPOSURE LIMITS		VAPOR PRESSURE		% by Weight
		OSHA PEL	ACGIH TLV	mm Hg	@ Temp	
Mineral Spirits	64742-88-7	100 PPM	100 PPM	2.0	68F	25.0
Ethylbenzene	100-41-4	100 PPM	100 PPM	7.1		0.6
Xylene	1330-20-7	100 PPM	100 PPM	5.9		3.0
Talc	14807-96-6	2 mg/m3 as Resp. Dust both OSHA & ACGIH		n.a.		10.0
Chromium Zinc Oxide	50922-29-7	N.A.	0.01 mg/m3	n.a.		5.0

Note: The above components and their percentages are provided for health and safety purposes ONLY. This document should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Appearance and odor: Viscous liquid with solvent odor.

WARNING STATEMENTS: CHRONIC OVEREXPOSURE OF COMPONENTS, has been found to cause the following effects in laboratory animals: anemia, liver abnormalities, kidney damage, eye damage. Overexposure to lead chromate may cause neurological, kidney, and reproductive effects and anemia.

POTENTIAL HEALTH EFFECTS:

Likely routes of exposure: Inhalation, skin contact

EYE CONTACT: Eye contact from vapors can cause irritation.

SKIN CONTACT: Prolonged or repeated contact can cause mild irritation, defatting, and dermatitis.

INHALATION: Excessive inhalation of vapors can cause nasal & respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness and asphyxiation.

INGESTION: Swallowing can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into the lungs, due to vomiting, can cause chemical pneumonitis, which can be fatal.

4. FIRST AID MEASURES

IF IN EYES: Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. Get medical attention.

IF ON SKIN: Thoroughly wash exposed area with soap and water. Remove contaminated clothing.

IF INHALED: If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. Keep person warm and quiet and get medical attention.

IF INGESTED: **DO NOT** induce vomiting – aspiration hazard. If spontaneous vomiting occurs, be sure to keep victim's head below hips to avoid aspiration of vomit into lungs, monitor for breathing difficulty. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT: 79°F

METHOD USED: SETAFLASH

FLAMMABLE LIMITS IN AIR BY VOLUME – LOWER: 1.0% **UPPER:** 7.0

RED LABEL – FLAMMABLE, FLASH BELOW 100°F



EXTINGUISHING MEDIA: Carbon Dioxide, Foam, Dry Chemical.

SPECIAL FIREFIGHTING PROCEDURES: At higher temperature pressure build up in sealed containers. As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool containers exposed to fire to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapor is heavier than air and can travel to a source of ignition and flash back. 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. DO NOT PRESSUREIZE, 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.

6. ACCIDENTAL RELEASE MEASURES

If your facility or operation has an "oil or hazardous substance contingency plan", activate the procedure. Take immediate steps to stop and contain the spill.

Shut off all sources of ignition.

Keep people away.

Recover free product with sorbents, vermiculite or other suitable absorbents.

Minimize skin contact and avoid breathing vapors.

Ventilate confined spaces.

Keep product out of sewers and waterways by diking or impounding.

Advise authorities if product has entered sewers, waterways or extensive land areas.

Assure conformity with all applicable government regulations.

Place in appropriate containers for disposal according to state, local or federal regulations.

7. HANDLING AND STORAGE

HANDLING: CONTENTS ARE FLAMMABLE. Use only in area provided with appropriate ventilation. Keep away from heat, sparks, and open flame during use and until all vapors are gone. Keep area ventilated. Do not smoke. Extinguish all flames, pilot lights, and heaters. Turn off stoves, electric tools and appliances, and any other sources of ignition. Keep out of reach of children. Take precautionary measures against static discharges. Ground and bound containers when transferring material. Consult NFPA Code.

STORAGE: DOL Storage Class IC.

Keep container tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Use safety glasses with unperforated sideshields.

SKIN PROTECTION: Use apron to avoid contamination of clothing. Wear protective gloves to prevent prolonged contact with skin.

RESPIRATORY PROTECTION: Respiratory protection is not generally required for this product when ventilation is adequate. However, if personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

VENTILATION: Use with adequate ventilation. Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

This coating may contain materials classified as nuisance particulates (listed "as dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead.

Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in

STS Material Safety Data Sheet

Material: Rust Inhibiting Primer

Item No.: RG-100

Page 2 of 4

Created on 9/20/2007 10:32 AM

¹ Hazard Ratings: least = 0 slight = 1 moderate = 2 high = 3 extreme = 4 Based upon NPCA guidelines



children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

When sanding, wirebrushing, abrading, burning or welding the dried film, wear a particular respirator approved by NIOSH/MSHA for protection against non-volatile materials in Section 2. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Note: All pigments, fillers, fibers, and extenders in this product are totally encapsulated and do not pose a respirable dust hazard during installation and use of this product.

Components referred to herein, may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H ₂ O = 1):	1.35	EVAPORATION RATE:	Slower than Ether
APPEARANCE:	Viscous Liquid	COATING VOC:	4.09 lb/gal (490 G/L)
BOILING POINT (F):	281 - 395°F	138 - 201°C	ODOR: solvent
VAPOR DENSITY:	Heavier than air	SOLUBILITY IN WATER: N.A.	
VOLATILE VOLUME:	50%		
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)			
	3.29 lb/gal	394 g/l	Less Water and Federally Exempt Solvents
	3.29 lb/gal	394 g/l	Emitted VOC

NOTE: These physical data are typical values based on material testing, but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10. STABILITY AND REACTIVITY

STABILITY: stable

CONDITIONS TO AVOID: Isolate from heat, electrical equipment, sparks and open flame. Keep containers tightly closed.

MATERIALS TO AVOID: none known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, and oxides of metals in Section 2.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Chromates are listed by IARC and NTP. Studies have associated exposure to Chromium VI compounds with an increased risk of respiratory cancer.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and reproductive systems.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TOXICOLOGY DATA

CAS. NO.	INGREDIENT	LC50	RAT	4 HR	N.A.
64742-88-7	Mineral Spirits	LD50	RAT		N.A.
100-41-4	Ethylbenzene	LC50	RAT	4 HR	N.A.
		LD50	RAT		3500 mg/kg
1330-20-7	Xylene	LC50	RAT	4 HR	5000 ppm
		LD50	RAT		4300 mg/kg
14807-96-6	Talc	LC50	RAT	4 HR	Not available

STS Material Safety Data Sheet

Material: Rust Inhibiting Primer

Item No.: RG-100

Page 3 of 4

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		LD50	RAT		Not available
50922-29-7	Chromium Zinc Oxide	LC50	RAT	4 HR	Not available
		LD50	RAT		Not available

12. ECOTOXICOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability and extractability to determine the applicable EPA hazardous waste numbers. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with all applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

No data available.

15. REGULATORY INFORMATION

SARA HAZARD NOTIFICATION:

Hazardous Categories Under Title III Rules (40 CFR 372.65C):
Section 313 Toxic Chemical(s):

<u>CAS NO.</u>	<u>Component</u>	<u>% by weight</u>	<u>% by Element</u>
100-41-4	Ethylbenzene	0.6	n.a.
1330-20-7	Xylene	3.0	n.a.
	Chromium compound	5.0	1.4
	Zinc compound	5.0	1.8

CA Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

TSCA CERTIFICATION – All chemicals in this product are listed, or are exempt from listing, on the TSCA inventory.

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The information and recommendations contained herein are to the best of STS Coatings, Inc. knowledge and belief, accurate and reliable as of the date issued. STS Coatings, Inc.. Does not warrant or guarantee their accuracy or reliability, and STS Coatings, Inc.. Shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the users consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. It is also the users responsibility to make certain that it is relying up on the most recent, updated, information and recommendations available from STS Coatings, Inc..

The Environmental Information included as well as the Hazardous Material Identification System (HMIS) and National Fire Protection Association (NFPA) ratings, have been included by STS Coatings, Inc. in order to provide additional health and hazard classification information. The ratings recommended are based up on the criteria supplied by the developers of these rating systems, together with STS Coatings, Inc.'s interpretation of the available data.

For Other Product Information Contact:

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rgt@roofguardiantech.com

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