

Date: 06/19/2001

MATERIAL SAFETY DATA SHEET

PREPARED BY: Environmental, Health and Safety Department

MSDS PREPARATION DATE: 06/19/2001

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER U.S. PAINT CORPORATION
 ADDRESS 831 S. 21st Street
 St. Louis, MO 63103-3092
 INFORMATION 314-621-0525
 EMERGENCY CHEMTREC 800-424-9300 OR 703-527-3887
 TRADE NAME 545 EPOXY PRIMER GRAY BASE
 PRODUCT CODE D1001
 HMIS(R) Health= 3*, Flammability= 4, Reactivity= 1

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

1 MAGNESIUMSILICATEHYDRATE CAS# 14807-96-6 TALC HYDROUS MAGNESIUM SILICATE

Pct By Wt: 23.00

ACGIH TLV-TWA 2 MG/M3 (RESPIRABLE FRACTION OF DUST)
 ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 2 MG/M3 (RESPIRABLE FRACTION OF DUST)
 OSHA PEL-STEL NE OSHA PEL-CEILING NE
 SKIN DESIGNATION NO ODOR THRESHOLD NA
 LD50 (INGESTION) NA LC50 (INHALATION) NA
 AUTOIGNITION TEMP. NAP FLASH POINT NAP
 Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

2 POLYMERIC AMIDO AMINE

Pct By Wt: 13.00

ACGIH TLV-TWA NE ACGIH TLV-STEL/C NE
 OSHA PEL-TWA NE OSHA PEL-STEL NE
 OSHA PEL-CEILING NE SKIN DESIGNATION NE
 ODOR THRESHOLD NA LD50 (INGESTION) NA
 LC50 (INHALATION) NA AUTOIGNITION TEMP. NA
 FLASH POINT 16 C / 60 F SETAFLASH
 Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

3 2-PROPANOL CAS# 67-63-0 ISOPROPYL ALCOHOL

Pct By Wt: 8.00 Vapor Pressure: 33.000 MMHG @ 68F LEL: 2.0

ACGIH TLV-TWA	400 PPM	ACGIH TLV-STEL/C	500 PPM
SHA PEL-TWA	400 PPM	OSHA PEL-STEL	500 PPM
OSHA PEL-CEILING	NE	SKIN DESIGNATION	NO
ODOR THRESHOLD	200 PPM	LD50 (INGESTION)	5.8 G/KG (ORAL-RAT)
LC50 (INHALATION)	16,000 PPM/8H (RAT)	AUTOIGNITION TEMP.	456 C / 852 F
FLASH POINT	12 C / 53 F		

Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

4 BUTYL ETHANOATE CAS# 123-86-4 N-BUTYL ACETATE

Pct By Wt: 6.00 Vapor Pressure: 6.300 MMHG @ 68F LEL: 1.7

ACGIH TLV-TWA	150 PPM (PROPOSED)	ACGIH TLV-STEL/C	200 PPM (PROPOSED)
OSHA PEL-TWA	150 PPM	OSHA PEL-STEL	200 PPM
OSHA PEL-CEILING	NE	SKIN DESIGNATION	NO
ODOR THRESHOLD	NA	LD50 (INGESTION)	14.0 G/KG (ORAL-RAT)
LC50 (INHALATION)	2000 PPM/4H (RAT)	AUTOIGNITION TEMP.	370 C / 698 F
FLASH POINT	26 C / 78 F		

Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

5 2-BUTANONE CAS# 78-93-3 METHYL ETHYL KETONE

Pct By Wt: 5.00 Vapor Pressure: 70.000 MMHG @ 68F LEL: 1.8

ACGIH TLV-TWA	200 PPM	ACGIH TLV-STEL/C	300 PPM
OSHA PEL-TWA	200 PPM	OSHA PEL-STEL	300 PPM
OSHA PEL-CEILING	NE	SKIN DESIGNATION	NO
ODOR THRESHOLD	2.0 PPM	LD50 (INGESTION)	2.7 G/KG (ORAL-RAT)
LC50 (INHALATION)	23.5 G/M3/8H (IHL-RAT)	AUTOIGNITION TEMP.	516 C / 960 F
FLASH POINT	-6 C / 21 F		

Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

6 ALUMINUM SILICATE CAS# 1332-58-7 KAOLIN HYDROUS KAOLIN

Pct By Wt: 5.00

ACGIH TLV-TWA	2 MG/M3 (RESPIRABLE FRACTION OF DUST)		
ACGIH TLV-STEL/C	NE		
OSHA PEL-TWA	5 MG/M3 (RESPIRABLE DUST); 10 MG/M3 (TOTAL DUST)		
OSHA PEL-STEL	NE	OSHA PEL-CEILING	NE
SKIN DESIGNATION	NE	ODOR THRESHOLD	NA
LD50 (INGESTION)	NA	LC50 (INHALATION)	NA
AUTOIGNITION TEMP.	NAP	FLASH POINT	NAP

Other Limits: IARC-NO NTP-NO OSHA-NO

7 1-BUTANOL CAS# 71-36-3 N-BUTYL ALCOHOL

Pct By Wt: 4.00 Vapor Pressure: 4.400 MMHG @ 68F LEL: 1.4

ACGIH TLV-TWA NE
 ACGIH TLV-STEL/C 25 PPM CEILING (PROPOSED)
 OSHA PEL-TWA 100 PPM OSHA PEL-STEL NE
 OSHA PEL-CEILING NE SKIN DESIGNATION YES
 ODOR THRESHOLD NA LD50 (INGESTION) 2.4 G/KG (ORAL-RAT)
 LC50 (INHALATION) > 8520 PPM/6H AUTOIGNITION TEMP. 355 C / 670 F
 FLASH POINT 36 C / 97 F Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

8 2-ETHOXY ETHANOL CAS# 110-80-5 ETHYLENE GLYCOL MONOETHYL ETHER

Pct By Wt: 3.00 Vapor Pressure: 4.000 MMHG @ 68F LEL: 1.7

ACGIH TLV-TWA 5 PPM ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 200 PPM OSHA PEL-STEL NE
 OSHA PEL-CEILING NE SKIN DESIGNATION YES
 ODOR THRESHOLD NA LD50 (INGESTION) 3 G/KG (ORAL-RAT)
 LC50 (INHALATION) 1820 PPM/7H (MOUSE) AUTOIGNITION TEMP. NA
 FLASH POINT 43 C / 110 F Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

9 ZINC CAS# 7440-66-6 ZINC

Pct By Wt: 3.00

ACGIH TLV-TWA 10 MG/M3 (TOTAL DUST) ACGIH TLV-STEL/C NE
 OSHA PEL-TWA 5 MG/M3 (RESPIRABLE DUST); 10 MG/M3 (TOTAL DUST)
 OSHA PEL-STEL NE OSHA PEL-CEILING NE
 SKIN DESIGNATION NO ODOR THRESHOLD NA
 LD50 (INGESTION) NA LC50 (INHALATION) NA
 AUTOIGNITION TEMP. NA FLASH POINT NA
 Other Limits: IARC-NO NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

10 DIMETHYL BENZENE CAS# 1330-20-7 XYLENE

Pct By Wt: 1.00 Vapor Pressure: 5.100 MMHG @ 68F LEL: 1.1

ACGIH TLV-TWA 100 PPM ACGIH TLV-STEL/C 150 PPM
 OSHA PEL-TWA 100 PPM OSHA PEL-STEL 150 PPM
 OSHA PEL-CEILING NE SKIN DESIGNATION NO
 ODOR THRESHOLD 0.05 PPB LD50 (INGESTION) 4.3 G/KG (ORAL-RAT)
 LC50 (INHALATION) 5000 PPM/4H (RAT) AUTOIGNITION TEMP. 530 C / 986 F
 FLASH POINT 27 C / 80 F Other Limits: NTP-NO IARC-NO ACGIH-NO OSHA-NO

11 CRYSTALLINE SILICAS CRYSTALLINE SILICA (QUARTZ OR CRISTOBALITE) CAS# 14808-60-7 OR 14464-46-1

Pct By Wt: 0.41

ACGIH TLV-TWA 0.1 MG/M3 (QUARTZ); 0.05 MG/M3 (CRISTOBALITE)
 ACGIH TLV-STEL/C (ABOVE VALUES ARE FOR RESPIRABLE FRACTION OF DUST)
 OSHA PEL-TWA 0.1 MG/M3 (QUARTZ); 0.05 MG/M3 (CRISTOBALITE)
 OSHA PEL-STEL (ABOVE VALUES ARE FOR RESPIRABLE FRACTION OF DUST)
 OSHA PEL-CEILING NE SKIN DESIGNATION NO
 ODOR THRESHOLD NA LD50 (INGESTION) NA
 LC50 (INHALATION) NA AUTOIGNITION TEMP. NAP
 FLASH POINT NAP Other Limits: IARC-YES NTP-YES OSHA-NO ACGIH-NO NIOSH-YES

12 PHENYLETHANE CAS# 100-41-4 ETHYL BENZENE

Pct By Wt: 0.33 Vapor Pressure: 10.000 MMHG @ 68F LEL: 1.2

ACGIH TLV-TWA 100 PPM ACGIH TLV-STEL/C 125 PPM
 OSHA PEL-TWA 100 PPM OSHA PEL-STEL 125 PPM
 OSHA PEL-CEILING NE SKIN DESIGNATION NO
 ODOR THRESHOLD NA LD50 (INGESTION) 3500 MG/KG (ORAL-RAT)
 LC50 (INHALATION) 50/G/M3/2H AUTOIGNITION TEMP. 468 C / 810 F
 FLASH POINT 15 C / 59 F Other Limits: IARC-YES NTP-NO OSHA-NO ACGIH-NO NIOSH-NO

This product contains one or more reported carcinogens or suspect/experimental carcinogens which are noted IARC, NTP, OSHA, ACGIH or NIOSH in the Other Limits column. This product contains one or more Hazardous Air Pollutants (HAPs) which are regulated under Section 112 of the Clean Air Act.

This product contains one or more reported mutagens or suspect/experimental mutagens. This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding or grinding. Airborne nuisance particulates have an ACGIH TLV for Total Dust of 10 mg/M3. This product contains one or more reported reproductive toxins or suspect/ experimental reproductive toxins.

This product contains one or more reported teratogens or suspect/ experimental teratogens.

IMPORTANT! This product may be blended with other products prior to use. Read all warnings and precautions on the MSDSs and labels of all products being blended as the combination may contain the hazards of each component.

SECTION 3 – HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:

EYES: Can cause moderate irritation, redness, tearing, and blurred vision. Can cause severe injury — damage reversible. Can cause burns.

SKIN: Prolonged or repeated contact can cause moderate irritation, defatting, and dermatitis. Material is readily absorbed through the skin in toxic amounts. Sensitizer – Can cause allergic skin reaction which may be severe in certain individuals. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INHALATION: May cause irritation of the mucous membranes, cough, discomfort, rapid or difficult breathing or shortness of breath. Sensitizer – may cause allergic respiratory reaction. Can cause CNS effects including fatigue, weakness, headache, dizziness, nausea, vomiting, unconsciousness, coma, respiratory failure and death. Respiratory systems associated with pre-existing lung disorders (e.g., asthma-like conditions) may be aggravated by exposure to this material. Mildly toxic by inhalation. Prolonged exposure can cause hearing impairment.

INGESTION: Single dose oral toxicity is low. Can cause irritation of the digestive tract, nausea, vomiting and diarrhea. May cause signs of nervous system depression including drowsiness, dizziness, loss of coordination, fatigue, headache, nausea and vomiting. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

POTENTIAL CHRONIC HEALTH EFFECTS: – Prolonged and repeated breathing of vapors, spray mist and/or sanding dust over a period of years may cause diseases of the lungs. – Prolonged overexposure to crystalline silica by inhalation may cause delayed lung injury/disease (silicosis). – Reports have associated repeated and prolonged occupational overexposure to solvents with brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. – Overexposure can cause fibrosis (silicosis): Symptoms can include coughing, difficulty breathing, tightness of chest, hemorrhage, and wheezing. – This product or its components produces fetotoxic and/or teratogenic effects when absorbed through the skin. Pregnant women should use caution when handling. – Long term excessive exposures may cause talcosis, a pulmonary fibrosis with shortness of breath, chronic cough and respiratory-assisted heart failure. Prolonged exposure to talc can produce a mild symptomatic pneumoconiosis. –

The adverse chronic health effects associated with crystalline silica include silicosis, cancer, scleroderma and tuberculosis. **CARCINOGENICITY:** – Contains Crystalline Silica which can cause cancer based on animal data. (Risk of cancer depends on duration and level of exposure to dust from sanding surfaces or spray mist.) – Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. IARC has classified ethylbenzene as a possible human carcinogen.

TARGET ORGANS: Overexposure to this material or its components has been suggested as a cause of the following effects in laboratory animals and/or humans, and may aggravate pre-existing disorders of these organs in humans: Anemia, Birth defects which may include: fetotoxicity, embryotoxicity, infertility and fetal malformations. Blood disorders, Brain damage, Cardiac abnormality, Eye damage, Kidney damage, Ingestion may produce liver, kidney and blood forming organ damage. Liver abnormalities, Lung damage, Menstrual and fertility disorders, Nervous system damage, Skin damage, Spleen damage, Testicular damage, Respiratory system, Central nervous system (CNS), Peripheral nervous system (PNS)

SECTION 4 – FIRST AID MEASURES

PRIMARY ROUTE(S) OF ENTRY (X) SKIN (X) BREATHING (X) SWALLOWING

IF IN EYES: Flush eyes with water for at least 15 minutes while holding eyelids apart; Seek medical attention.

IF ON SKIN: Remove contaminated clothing and flush contaminated skin with large amounts of water. If skin is damaged or if symptoms persist seek medical attention. Launder clothing before reuse.

IF INHALED: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; Keep person warm and quiet. If individual is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

IF SWALLOWED: DO NOT induce vomiting unless directed to do so by medical personnel. Aspiration of material into lungs can cause chemical pneumonitis which may be fatal. If individual is drowsy or unconscious, place on their side with head down. Seek medical attention. If possible, do not leave individual unattended.

SECTION 5 – FIRE FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES OF THE CHEMICAL: (Unless otherwise noted, data are derived from ingredients existing in this formula at concentrations of 1% by weight or greater, i.e., the flashpoint given is the lowest flashpoint of the ingredients listed in section 2.)

Flashpoint : 51.0 F –(10.5 C)

Explosion Level : Low – 1.1 High – 15.6

Flammability Limits : Lower – –N/A Higher – –N/A

Auto-ignition Temperature : –N/A øF

EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires; alcohol-type aqueous film-forming foam or water spray for large fires. Water may be ineffective but should be used to cool fire-exposed structures and vessels.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from heat, sparks, and flame. Do not smoke. Extinguish all pilot lights and turn off all sources of ignition, including heaters, fans and other non-explosion proof electrical equipment, during use and until all vapors are gone. Vapors may ignite explosively. Vapors may spread long distances and beyond closed doors. Prevent build up of vapors by maintaining a continuous flow of fresh air.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT: Self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode. In case of fire, use Dry chemical, Foam, CO₂ or other approved method for treating a Class B fire. Summon professional firefighters. During a fire, toxic gases and smoke are irritants present from decomposition/combustion. Closed container may explode when exposed to extreme heat.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid on inert material such as paper, vermiculite, floor absorbent, and transfer to hood.

LARGE SPILL: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, contain area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be absorbed with inert material such as sand, clay, earth, or floor absorbent, and shoveled into containers, with non-sparking tools. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify the proper authorities as required that a spill has occurred.

SECTION 7 – HANDLING AND STORAGE

HANDLING: SENSITIVITY TO STATIC DISCHARGE – Grounding/Bonding required

STORAGE: Keep container tight and upright to prevent leakage. Keep container closed when not in use. Do not store above 49 C/120 F. Do not transfer contents to bottles or unlabeled containers. Protect from freezing. Containers of this material may be hazardous when emptied because they retain product residues (vapor, liquid, and/or solid). When empty, may contain explosive vapors. Do not cut, puncture or weld on or near this container. All hazard precautions given in this data sheet must be observed for empty containers.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION/VENTILATION: Use only with adequate ventilation. Maintain continuous flow of fresh air. Do not breathe vapors, spray mists, or sanding dusts. Use air purifying respirators fitted with organic vapor/HEPA cartridges only if air monitoring of the work area demonstrates solvent and particulate levels do not exceed the respirator Maximum Use Concentration. Use only properly fitted NIOSH approved respirators. Follow respirator manufacturer's directions for use. Engineering or administrative controls should be implemented to reduce exposure. Paint spray booths, local exhaust, and general exhaust systems are advisable to minimize exposure.

PERSONAL PROTECTIVE EQUIPMENT: Use protective equipment to prevent contact with eyes, skin, or clothing. Use solvent resistant safety eyewear with splash guards. Protective garments such as nylon or Tyvek(R) coveralls typically used to protect from light overspray, splatters, etc. Saranex 23-P(R) coveralls recommended for messy applications. Nitrile or natural rubber gloves typically used to protect from minor contact. For prolonged contact, neoprene gloves are better and butyl are best.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance : -N/A Odor : -N/A
 Physical State : LIQUID pH : -N/A
 Vapor Density : 4.00
 Boiling Range : Lower – 175.0 F 79.4 C Higher – 288.0 F 142.2 C
 Freezing Point : -N/A °F Melting Point : -N/A °F
 Water Solubility : -N/A Specific Gravity : 1.475
 Formula Weight per Volume : 12.2768 LB/GL
 VOC : 3.526 lbs./gal. or 423 g/l Evaporation Rate : .000 (n-Butyl Acetate = 1)
 Viscosity : -N/A % Volatile by Weight : 28.7360
 % Volatile by Volume : 50.9244 Coeff of Water-Oil Distribution : -N/A

SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID AND INCOMPATIBILITIES: A reaction accompanied by large heat release occurs when the product, is mixed with acids. Heat generated may be sufficient to cause, vigorous boiling creating a hazard due to splashing or spattering of, hot material, Strong mineral acids, Hydrofluoric acid, Aluminum, Alkalis, Alkanolamines, Aldehydes, Amines, Ammonia, Caustics, Chlorine, Chlorinated compounds, Cleaning solutions, such as chromerge (sulfuric acid/dichromate) and, aqua regia, Halogenated hydrocarbons, Isocyanates, Oxidizing agents, Ethylene oxide, This product will dissolve some plastics, rubber, and coatings, Acetaldehyde.

HAZARDOUS DECOMPOSITION PRODUCTS (Including Thermal Decomposition): Carbon dioxide and carbon monoxide, Toxic fumes, Various hydrocarbons, Nitrogen oxides, Acrid smoke.

POLYMERIZATION: – Will NOT occur. – Contamination with strong acids, bases, epoxy resins or isocyanates can cause polymerization.

STABILITY: – Stable under ordinary conditions of use and storage.

SECTION 11 – TOXICOLOGICAL INFORMATION

No additional toxicological data available. Please refer to Sections 2 & 3.

SECTION 12 – ECOLOGICAL INFORMATION

No ecological data available for this product.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations. Do not incinerate closed containers.

SECTION 14 – TRANSPORT INFORMATION

DOT Hazard Class: 3 DOT Packing Group: II
DOT Label: Flammable Liquid DOT Shipping Name: Paint
DOT Placard: Flammable UN/NA Number: 1263

SECTION 15 – REGULATORY INFORMATION

FEDERAL REGULATIONS:

SARA 313 INFORMATION This product contains the following substances 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:

ETHYL BENZENE CAS# 100-41-4 PCT BY WT: .3280
ZINC CAS# 7440-66-6 PCT BY WT: 2.8910
XYLENE CAS# 1330-20-7 PCT BY WT: 1.3410
ETHYLENE GLYCOL MONOETHYL ETHER CAS# 110-80-5 PCT BY WT: 3.1810
N-BUTYL ALCOHOL CAS# 71-36-3 PCT BY WT: 4.0950
METHYL ETHYL KETONE CAS# 78-93-3 PCT BY WT: 5.4110

STATE REGULATIONS: PER CALIFORNIA'S PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause birth defects or other reproductive harm. STATE REGULATIONS: PER CALIFORNIA'S PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer.

SECTION 16 – OTHER INFORMATION

FOR INDUSTRIAL USE ONLY: This product is for use by professional, trained personnel using proper equipment, and is not intended for sale to, or use by, the general public.

NON-WARRANTY: Any recommendation of U.S. Paint contained herein covering use, utilization, chemical or physical properties and other qualities of the products sold is believed reliable; however, U.S. Paint makes no warranty or representation with respect thereto. Use or application of any U.S. Paint product is at the discretion of the Buyer without liability or obligation whatsoever of U.S. Paint.

THE INFORMATION CONTAINED HEREIN IS INFORMATION RECEIVED FROM OUR RAW MATERIAL SUPPLIERS AND OTHER SOURCES AND IS BELIEVED TO BE RELIABLE. THIS DATA IS NOT TO BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH U.S. PAINT CORPORATION ASSUMES LEGAL RESPONSIBILITY.