

MATERIAL SAFETY DATA SHEET

PREPARED BY: Environmental, Health and Safety Department
MSDS PREPARATION DATE: 12-17-98

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER ADDRESS
U.S. PAINT CORPORATION
831 S. 21st Street
St. Louis, MO 63103-3092

INFORMATION
314-621-0525

EMERGENCY
CHEMTREC 800-424-9300 OR 703-527-3887

PRODUCT CLASS
MODIFIED POLYESTER RESIN

TRADE NAME
ALUMIGRIP® LINEAR POLYURETHANE TOPCOAT - GLOSS

PRODUCT CODE
G & H LINES - LEAD FREE

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

WEIGHT %	ACGIH TLV/TWA (PPM)	OSHA PEL/TWA (PPM)	OSHA PEL/STEL (PPM)	SKIN DESIGN. (PPM)	NATION	LD ₅₀ (g/kg)	INHALATION LC ₅₀ (PPM/hr)	VAPOR PRESSURE (mm Hg @20°C)
COMMON NAME								
DIISOBUTYL KETONE								
2-4	25	NE	NE	NE	NO	5.8(2)	NA	1.7
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE								
18-27	5	NE	100	NE	YES	2.9(2)	NA	2.0
XYLENE								
1-7	100	150	100	150	NE	4.3(2)	5000/4	5.1
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE								
3-20	100	NE	NE	NE	NO	8.5(2)	NA	3.7

NA - Not Available
(1) - Acute Oral LD50, Rabbit
(2) - Acute Oral LD50, Rat
(3) - Dermal LD50, Rabbit
(4) - Dermal LD50, Rat

This substance is classified as a Hazardous Air Pollutant (HAP).

This product contains no chemicals listed in the NTP Annual Report on Carcinogens, the IARC Monographs, listed by ACGIH, MSDH or regulated as a carcinogen by OSHA.

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.

SECTION 3 - HAZARDS IDENTIFICATION

POTENTIAL ACUTE HEALTH EFFECTS:
EYES
May cause moderate irritation, redness, tearing, and blurred vision. May cause burns.

SKIN
Prolonged or repeated contact can cause moderate irritation, defatting, and dermatitis. Material is readily absorbed through the skin in toxic amounts. Skin contact of high concentrations of vapor may cause irritation and toxic effects, including CNS depression, lung, liver and kidney injury. Symptoms include headache, nausea, vomiting and dizziness. This product has produced fetotoxic and teratogenic effects in laboratory animals when inhaled or absorbed through the skin. Pregnant women should avoid exposure to this product. 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

Can cause nasal and respiratory tract irritation. Can cause CNS effects including fatigue, weakness, headache, dizziness, nausea, vomiting, unconsciousness, coma, respiratory failure and death. Prolonged exposure can cause hearing impairment.

INGESTION

Can cause irritation of the digestive tract, nausea, vomiting and diarrhea. 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.
- Heavy extended industrial exposure to the dust of barium sulfate may produce a benign pneumoconiosis, termed baritosis.
- Chronic overexposure to iron oxide fumes or dusts has been associated with x-ray changes of the lungs, however, it does not result in illness. Changes are due to a benign lung condition called siderosis or iron pigmentation.
- 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.

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: Reproductive system abnormalities, Anemia, Birth defects which may include: fetotoxicity, embryotoxicity, infertility and fetal malformations, Blood disorders, Cardiac abnormality, Eye damage, Kidney damage, Liver abnormalities, Lung damage, Menstrual and fertility disorders, Skin damage, Spleen damage, Testicular damage, Respiratory system, Gastrointestinal (GI) tract, Central nervous system (CNS).

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.)
Flammability Classification: 1C DOT: FLAMMABLE LIQUID
Flashpoint: 27 °C
Explosion Level: Low
Explosion Range: 80.00 °F - 700 °F
Flammability Limits: Lower - N/A
Auto-ignition Temperature: 370 °C

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

CLEAN-UP:

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

VENTILATION/RESPIRATORY PROTECTION

Use only with adequate ventilation. Maintain continuous flow of fresh air. Do not breathe vapors, spray mists, or sanding dusts. Wear appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor and particulate levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Engineering or administrative controls should be implemented to reduce exposure. Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

PERSONAL PROTECTIVE EQUIPMENT

Do not get in eyes, on skin, or on clothing. Use solvent resistant safety eyewear with splash guards. Solvent impermeable gloves, clothing and boots should be worn to prevent skin contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance	.....	-N/A	Odor	.....	-N/A
Physical State	.....	LIQUID	pH	.....	-N/A
Vapor Density	.....	-N/A	Freezing Point	.....	-N/A
Boiling Range	.....	137-173 °C or 278-343.00 °F	Melting Point	.....	-N/A
Water Solubility	.....	-N/A	Viscosity	.....	-N/A
Specific Gravity	.....	1.05-1.37	% Volatile by Weight	.....	34-56
Formula Weight per Volume	.....	8.74-13.84 lb/gal	% Volatile by Volume	.....	49-62
VOC	.....	460-584 g/l or 3.84-4.87 lbs./gal.	Coef of Water-Oil Distribution	.....	-N/A
Evaporation Rate	.....	.0000 In-Butyl Acetate = 1			

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID AND INCOMPATIBILITIES

Acids, Performic acid, Aluminum, Alkalis, Bromine pentafluoride, Calcium hypochlorite, Hydrazine, Oxidizing agents, Phosphorous.

HAZARDOUS DECOMPOSITION PRODUCTS (Including Thermal Decomposition)

Carbon dioxide and carbon monoxide, Chlorides, Toxic fumes, Various hydrocarbons, Hydrogen chloride, Nitrogen oxides, Toxic fumes of sulfur oxides.

POLYMERIZATION

Will NOT occur.

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: III
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:

XYLENE XYLOL CAS# 1330-20-7 PCT BY WT: 1-7

ETHYLENE GLYCOL MONOETHYL ETHER ACETATE CAS# 111-15-9 PCT BY WT: 18-27

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.

SECTION 16 - OTHER INFORMATION

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.

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.

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 except as expressly warranted or represented in U.S. Paint's published LIMITED WARRANTY.

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.