



Pretty. Tough. Paint.

MATERIAL SAFETY DATA SHEET

Master Coating Technologies
2740 31st Avenue South
Minneapolis, MN 55406
612-722-8808

Medical & Transport Emergency Contact:
Infotrac: 1-800-535-5053

MSDS Date: 07-02-2004

Supersedes: All Previous

Trade Name: **Scuffmaster Premium-Coat 200**
Chemical Family: Urethane/Acrylic Dispersion
CAS Number: Mixture

Synonyms: PC200, 7201, 7202, 7203, 7204, 7205
DOT Classification: Not Regulated

Physical Data

Boiling Range (F): 212° (Water)
Freezing Point (F): 32° (Water)
Vapor Density (Air=1): <1
Vapor Pressure (mmHg @ 68° F): 17
Evaporation Rate (Butyl Acetate = 1): 1 (Water)
VOC: 142 g/L (EPA Method 24)

Solubility in Water: Dilutable
Specific Gravity: 1.0-1.4
% Volatile by Weight: 39.9
pH Information: 9.0-10.0
Appearance & Odor: Liquid, colors, latex odor

Hazardous Ingredients

	<u>Percent</u>	<u>PPM</u>	<u>MG/M3</u>	<u>CAS NUMBER</u>
Propylene Glycol	1-2	400		57-55-6
Ester Alcohol	5	Not Established		25265-77-4

This paint mixture contains titanium dioxide and/or other pigments classified by ACGIH as "nuisance dusts." Exposures to spray mist or sanding dust should be controlled to below 10mg/m3 through usage of NIOSH/MSHA TC23C or equivalent approved dust filter respirators. Follow respirator manufacturer's directions for use.

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

NONE above de minimis concentrations.

HMIS RATING: Health=1 Flammability=0 Reactivity=0

*User should determine appropriate personal protective equipment based on use conditions.

Fire & Explosion Hazard Data

Flash Point: Not determined (aqueous system)
LEL: Not determined (aqueous system)
UEL: Not determined (aqueous system)

Fire Extinguishing Media:

Non-flammable (aqueous emulsion)
If water evaporates, remaining material can burn.
Use all-purpose foam for large fires, and CO₂ or dry chemical media for small fires.

Special Fire Fighting Procedures: Use breathing apparatus when fighting enclosed fires.

Unusual Fire and Explosion Hazards: Products will not burn but may spatter if temperature exceeds boiling point of water. Dried solids can burn, giving off oxides and carbon.

Reactivity Data

This product is stable under normal (ambient) conditions, and hazardous polymerization will not occur.

Hazardous Decomposition Products: Combustion of dried film may produce carbon dioxide and carbon monoxide.

Conditions or Materials to Avoid: None

Health Hazard Data

Effects of Acute Over Exposure:

Inhalation: Trace component, residual monomer, and other organics may be irritating to eyes, skin, mucous membranes, respiratory tract and may produce symptoms of headache and nausea in poorly ventilated areas.

Ingestion: Irritating to gastrointestinal tract, abdominal pain, and diarrhea.

Skin Contact: Prolonged contact can cause transient reddening of the skin.

Eye contact: Direct contact may be irritating to eyes.

Effects of Repeated Overexposure: This paint mixture as provided shows no evidence of chronic effects from available information.

EMERGENCY FIRST AID PROCEDURES

Eye contact: Immediately flush eyes for 15 minutes occasionally lifting eyelids. If victim wears contact lenses, remove lenses and continue rinsing. Clean lenses before reusing. If irritation continues, consult physician.

Skin contact: Wash effected area thoroughly with mild soap and water. If irritation develops and persists, consult a physician.

Inhalation: Move to fresh air if necessary. If irritation persists, consult a physician. If victim is not breathing, artificial respiration should be administered by qualified personnel. Seek immediate medical attention.

Ingestion: If swallowed, give lots of water, and induce vomiting. If necessary consult a physician.

Spill or Leak Procedures

Spills: Major spills should be collected for disposal. Minor spills may be flushed to sewer if permitted by local, state, and federal regulations.

Waste Disposal: Incinerate or bury in suitable landfills where permitted by appropriate government regulations.

Special Protection Information

Respiratory Protection: Use appropriate MAHA/NIOSH approved respirator in areas with poor ventilation and when exposed to spray mists or sanding dusts.

Ventilation: General room ventilation is expected to be satisfactory. Use local exhaust if needed for mist or vapor.

Protective Gloves: Wear gloves impervious to water and soap.

Eye Protection: Wear goggles if spraying and available eye bath.

Disclaimer

See Last Page



Pretty. Tough. Paint.

MATERIAL SAFETY DATA SHEET

Master Coating Technologies
2740 31st Avenue South
Minneapolis, MN 55406
612-722-8808

Medical & Transport Emergency Contact:
Infotrac: 1-800-535-5053

MSDS Date: 07-02-2004

Supersedes: All Previous

Product Identification

Trade Name: **Scuffmaster Armor-Coat 1200**
Chemical Family: Urethane/Pigment Dispersion
CAS Number: Mixture

Synonyms: AC1200, 7241, 7242, 7243, 7244, 7245
DOT Classification: Not Regulated

Physical Data

Boiling Range (F): 212° (Water)
Freezing Point (F): 32° (Water)
Vapor Density (Air=1): <1
Vapor Pressure (mmHg @ 68° F): 17
Evaporation Rate (Butyl Acetate = 1): 1 (Water)
VOC: 39 g/L (EPA Method 24)

Solubility in Water: Dilutable
Specific Gravity: 1.1-1.3
% Volatile by Weight: 35.6
pH Information: 9.0-10.0
Appearance & Odor: Liquid, colors, latex odor

Hazardous Ingredients

	<u>Percent</u>	<u>PPM</u>	<u>MG/M3</u>	<u>CAS NUMBER</u>
Ester Alcohol	1-2	Not Established		25265-77-4

This paint mixture contains titanium dioxide and/or other pigments classified by ACGIH as "nuisance dusts." Exposures to spray mist or sanding dust should be controlled to below 10mg/m3 through usage of NIOSH/MSHA TC23C or equivalent approved dust filter respirators. Follow respirator manufacturer's directions for use.

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CRF 372.

NONE above de minimis concentrations.

HMIS RATING: Health=1 Flammability=0 Reactivity=0

*User should determine appropriate personal protective equipment based on use conditions.

Fire & Explosion Hazard Data

Flash Point: Not determined (aqueous system)
LEL: Not determined (aqueous system)
UEL: Not determined (aqueous system)

Fire Extinguishing Media:

Non-flammable (aqueous emulsion)
If water evaporates, remaining materiel can burn.
Use all-purpose foam for large fires, and CO₂ or dry chemical media for small fires.

Special Fire Fighting Procedures: Use breathing apparatus when fighting enclosed fires.

Unusual Fire and Explosion Hazards: Products will not burn but may spatter if temperature exceeds boiling point of water. Dried solids can burn, giving off oxides and carbon.

Reactivity Data

This product is stable under normal (ambient) conditions and hazardous polymerization will not occur.

Hazardous Decomposition Products: Combustion of dried film may produce carbon dioxide and carbon monoxide.

Conditions or Materials to Avoid: None

Health Hazard Data

Effects of Acute Over Exposure:

Inhalation: Trace component, residual monomer, and other organics may be irritating to eyes, skin, mucous membranes, respiratory tract and may produce symptoms of headache and nausea in poorly ventilated areas.

Ingestion: Irritating to gastrointestinal tract, abdominal pain, and diarrhea.

Skin Contact: Prolonged contact can cause transient reddening of the skin.

Eye contact: Direct contact may be irritating to eyes.

Effects of Repeated Overexposure: This paint mixture as provided shows no evidence of chronic effects from available information.

EMERGENCY FIRST AID PROCEDURES

Eye contact: Immediately flush eyes for 15 minutes occasionally lifting eyelids. If victim wears contact lenses, remove lenses and continue rinsing. Clean lenses before reusing. If irritation continues, consult physician.

Skin contact: Wash effected area thoroughly with mild soap and water. If irritation develops and persists, consult a physician.

Inhalation: Move to fresh air if necessary. If irritation persists, consult a physician. If victim is not breathing, artificial respiration should be administered by qualified personnel. Seek immediate medical attention.

Ingestion: If swallowed, give lots of water, and induce vomiting. If necessary consult a physician.

Spill or Leak Procedures

Spills: Major spills should be collected for disposal. Minor spills may be flushed to sewer if permitted by local, state, and federal regulations.

Waste Disposal: Incinerate or bury in suitable landfills where permitted by appropriate government regulations.

Special Protection Information

Respiratory Protection: Use appropriate MAHA/NIOSH approved respirator in areas with poor ventilation and when exposed to spray mists or sanding dusts.

Ventilation: General room ventilation is expected to be satisfactory. Use local exhaust if needed for mist or vapor.

Protective Gloves: Wear gloves impervious to water and soap.

Eye Protection: Wear goggles if spraying and available eye bath.

Disclaimer

See Last Page



Pretty. Tough. Paint.

MATERIAL SAFETY DATA SHEET

SECTION 1: COMPANY AND PRODUCT IDENTIFICATION

Master Coating Technologies, Inc.
2740 31st Avenue South
Minneapolis, MN 55406
612-722-8808

Medical & Transport Emergency Contact:
Infotrac: 800-535-5053

Issue Date: 07-02-2004

Supersedes: All Previous

Trade Name: Masterlink

Read the entire MSDS for a complete hazard assessment.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS*

<u>CAS Number</u>	<u>% Conc⁺</u>	<u>Ingredient Name</u>
064265-57-2	99.7	Polyfunctional aziridine
000108-01-0	0.3	N,n-Dimethyl ethanolamine
000075-55-8	<0.5 ppm	Propyleneimine

*Ingredients not precisely identified are either proprietary or nonhazardous. Values are not product specifications.

+ Percent concentration by weight.

SECTION 3: HAZARDS IDENTIFICATION*

*As defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. See Sections 8 and 11 for exposure guidelines and toxicology information.

IMPORTANT: While the following effects are associated with this product and are required to be included on the MSDS by the US OSHA Hazard Communications Standard, they are not expected effects during the foreseeable use of this product in 2% concentration as used in Scuffmaster coatings. As used in Scuffmaster coatings, this product shows GREATLY REDUCED hazards, including reduced potential for eye and skin irritation. However, it is still prudent to minimize contact with eyes and skin, as well as to avoid inhalation of coating mist containing this product.

EMERGENCY OVERVIEW

PALE YELLOW LIQUID. MILD AMINE ODOR. RESPIRATORY IRRITANT. EYE CORROSIVE. CORROSIVE TO THE GASTROINTESTINAL TRACT. MODERATE SKIN IRRITANT. RESPIRATORY SENSITIZER. SKIN SENSITIZER.

POTENTIAL HEALTH HAZARDS

- Eye: This product contains a component(s) that is eye corrosive based on animal studies.
- Skin: This product contains a component(s) that is a moderate skin irritant based on animal studies. This product is likely to induce skin sensitization in humans. A component in this product is a known animal skin sensitizer.
- Inhalation: Vapors and/or aerosols of this material will probably irritate mucous membranes, eyes, nose, and respiratory passages. This material may induce respiratory allergy/sensitization. Symptoms include: Cough, tightness in chest, and/or asthmatic wheezing.
- Ingestion: In humans, irritation or chemical burns of the mouth, pharynx, esophagus, and stomach can develop following ingestion of this material. Injury may be severe and cause death. The acute oral toxicity of this material is between 500 and 5000 mg/kg. Relative to other materials, this material is classified as slightly toxic by ingestion. See Section 11 for additional information.

SECTION 4: FIRST AID MEASURES

- Eyes: Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention as soon as possible. Oils or ointments should not be used at this time. Continue the flushing for an additional 15 minutes if a physician is not immediately available.



Pretty. Tough. Paint.

Skin: Wash off of skin with plenty of soap and water. If redness, itching or burning sensation develops, get medical attention. Wash contaminated clothing and footwear before reuse.

Ingestion: DO NOT INDUCE VOMITING. Give one–two glasses of water and refer to medical personnel or take direction from either a physician or a poison control center. Never give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth–to–mouth. If breathing is labored, give oxygen. Consult medical personnel.

Note to Physician: Mucosal injury following ingestion of this potentially corrosive material contraindicates the induction of vomiting. Medical personnel should evaluate persons with chronic pulmonary disease before those workers handle this product.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties:

Flash Point: > 200°F, 93°C Method: Penske–Martin Closed Tester Upper Flammability Limit (UFL): No Data
Lower Flammability Limit (LFL): No Data Autoignition Temperature: No Data

Products of combustion: Combustion products: Oxides of carbon and nitrogen.

Extinguishing media: Water fog, foam, carbon dioxide, dry chemical, halogenated agents.

Fire fighting instructions: Wear self–contained breathing apparatus with full face piece and protective clothing.

Unusual fire and explosion hazards: Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill procedures: Wear skin, eye, and respiratory protection during cleanup. Contain spill. Soak up material with absorbent and shovel into a chemical waste container. Decontaminate with 1% acetic acid solution or one part white vinegar to four parts water.

SECTION 7: HANDLING AND STORAGE

Handling: Open large containers in well–ventilated areas to avoid exposure to residual propyleneimine that may have collected in the headspace. Avoid breathing vapors or aerosols. Prevent skin and eye contact. A sensitized individual should not be exposed to the product that caused the sensitization.

Storage: Keep container tightly sealed. Store in a cool, well ventilated area away from heat, sources of ignition, direct sunlight, and acidic materials, anhydrides and strong oxidizers. Avoid contamination with acidic materials, heat, direct sunlight, ultraviolet radiation, strong oxidizing conditions or freezing conditions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines: No ACGIH TLV or OSHA PEL assigned to this product. Minimize exposure in accordance with good hygiene practice.

Engineering controls: Use permitted ventilation adequate to maintain safe levels. Provide general dilution of local exhaust ventilation to remove solid airborne particles of overspray during spray application and to remove decomposition products during welding or flame cutting on surfaces coated with this product.

PROTECTIVE EQUIPMENT

IMPORTANT: While the following effects are associated with this product and are required to be included on the MSDS by the US OSHA Hazard Communications Standard, they are not expected effects during the foreseeable use of this product in 2% concentration as used in Scuffmaster coatings. As used in Scuffmaster coatings, this product shows GREATLY REDUCED hazards, including reduced potential for eye and skin irritation. However, it is still prudent to avoid inhalation of coating mist containing this product, as well as to minimize contact with eyes and skin.



Pretty. Tough. Paint.

Respiratory protection: If needed, use NIOSH certified respirator for organic vapors, mists and fumes. Any person who may be exposed to this material in the form of an aerosol or mist from spray operations shall, at a minimum, wear a National Institute for Occupational Safety and Health-approved, category 21c respirator, excluding single use or disposable types, in accordance with 30 CFR 11.130 Subpart K. The respirator shall be equipped with high efficiency particulate filters for maximum protection, unless an air-supplied respirator is selected. Use of this respirator shall be according to Occupational Safety and Health Administration and Mine Safety and Health Administration Regulations at 29 CFR 1910.134 and 30 CFR 11, respectively. If a full-face type respirator is selected and worn, the chemical safety goggles requirement is waived during spray operations.

Protective clothing: Take all precautions to prevent skin contact. Use gloves, arm covers and apron determined to be impervious under the conditions of use. Additional protection, such as full body suit and boots, may be required depending on conditions. Remove contaminated clothing and wash before rewearing. Wash separately from other laundry.

Eye protection: Chemical tight goggles and full face shield.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Solubility in Water: Dispersible
Appearance: Pale yellow	Solubility in Other: No Data
Odor: Mild amine	Octanol/Water Partition Coefficient: No Data
Odor Threshold: No Data	pH: No Data Basic
Boiling Point: No Data	Specific Gravity: 1.07
Decomposition Temperature: No Data	Bulk Density: No Data
Melting Point: No Data	% Volatile by Volume: 1
Vapor Pressure (mm Hg at 20°C): No Data	VOC (%): 0.50
Vapor Density (air = 1): > 1.0	Viscosity: No Data

SECTION 10: STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions. Unstable at elevated temperatures and pressures, or may react with water or acids with some release of energy, but not violently.

Conditions to avoid: Avoid contamination with acidic materials, heat, direct sunlight, ultraviolet radiation, strong oxidizing conditions and freezing conditions.

Incompatibility: Acidic materials, anhydrides and strong oxidizers.

Hazardous polymerization: May occur if mixed with acidic materials.

Hazardous decomposition products: Oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Regulated carcinogen(s): This product contains no components present at concentrations equal to or greater than 0.1% listed by IARC, OSHA, NTP or ACGIH as a carcinogen.

Mutagenicity: Polyfunctional aziridine: Positive mutagenicity activity has been reported on the aziridine compounds. (However, mutagenicity is negative at 2% concentration used in Scuffmaster coating applications.)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No Data

Environmental fate: No Data

Other: No Data

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal method: Discarded product is not a hazardous waste under RCRA, but may be regulated by other jurisdictions. Incinerate in approved facility. Do not incinerate in closed containers. Dilute with clean, low viscosity fuel. Untreated material should not be released to the environment.

Container disposal: Empty container retains potentially hazardous residue. Observe all hazard precautions. May contain corrosive material. Do not distribute, make available, furnish or reuse empty container except



Pretty. Tough. Paint.

for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

SECTION 14: TRANSPORT INFORMATION

Not regulated by the US DOT.

SECTION 15: REGULATORY INFORMATION

TSCA (Toxic Substances Control Act): All ingredients are on the TSCA Chemical Substances Inventory.

SARA Title III (Emergency Planning and Community Right-To-Know Act): 313 Reportable ingredients: This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

California Proposition 65: WARNING. This product contains a chemical known to the State of California to cause cancer.

PRODUCT USE: Resins for coatings applications

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

WHMIS Classifications: Class D, Division 2A, Very Toxic. Class D, Division 2B, Toxic.

SECTION 16: OTHER INFORMATION

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.*

NFPA Rating:

Health:	3
Fire:	1
Reactivity:	1
Special:	No Data

HMIS Rating:

Health:	3	Chronic Effect
Fire:	1	
Reactivity:	1	

**Personal Protection: No Data

*This information is intended solely for the use of individuals trained in the particular hazard rating system.

**See appropriate MSDS section.

DISCLAIMER

The information in this MSDS was obtained from sources we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding its accuracy or completeness. The conditions of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.