

9411 Corsair Road Frankfort IL 60423 US 800.552.0299 Phone 815.464.5650 Fax Revised March 18th, 2009

EMERGENCY PHONE (800) 255-3924 MATERIAL SAFETY DATA SHEET

MP55550 PART A (RESIN)

HMIS HEALTH 2 FLAMMABILITY 3 REACTIVITY 2
NFPA HEALTH 2 FIRE HAZARD 3 REACTIVITY 2

1. Chemical Product

Product Name: MP55550 PART A (RESIN)

2. Identity of Ingredients

Ingredients	CAS No.	OSHA PEL	ACGIH TLV	Other Limits	%Composition
Methyl Methacrylate	80-62-6	100ppm	50ppm	100ppm (Canada)	45-75
p(BD/MMA/STY)	25053-09-2	N.E.	N.E.	N.E.	10-20
Methacrylic Acid	79-41-4	20ppm	20ppm	None	1-10

3. Hazards Identification

Appearance, form, odor: Off-white paste with fragrant odor

WARNING! Flammable. Eye, skin, and respiratory irritant. Skin sensitizer. Harmful if inhaled or absorbed through skin. Chronic overexposure may cause liver and kidney effects.

Primary routes of exposure: Skin contact, skin absorption, eye contact, inhalation

Symptoms of acute overexposure: May cause skin irritation and sensitization. May be absorbed through the skin. Liquid and vapors cause moderate eye irritation. May cause corneal damage. High concentrations are irritating to the respiratory tract. May cause dizziness, headache, anesthetic effects, unconsciousness. Ingestion causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Effects of chronic overexposure: Prolonged exposure may lead to kidney, lung, and liver damage; not likely to cause cancer. Not believed to represent a carcinogenic or mutagenic hazard. May cause dermatitis and/or numbness/prickling of the skin. Repeated or prolonged inhalation exposure may cause asthma. May effect the central and/or peripheral nervous systems.

Carcinogenicity: OSHA regulated: No

ACGIH: No

NTP: No

IARC: No

Medical conditions which may be aggravated by exposure: Eye disease, skin disorders and allergies, asthma and lung disorders. Other effects: Developmental toxicity observed in animal tests, but only at levels toxic to the mother. Reported to impair human olfactory function.

4. First aid measures

Eye contact: Flush with clean water for at least 15 minutes while holding eyelids open. Get immediate medical attention.

Skin contact: Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash skin with warm soap and water. Consult a physician if irritation develops.

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

Ingestion: Do NOT induce vomiting. Rinse mouth out with water, then sip 2 glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get medical attention.

MATERIAL SAFETY DATA SHEET MP55550 PART A (RESIN)

5. Fire fighting measures

General fire and explosion characteristics: Vapor forms explosive mixture with air.

Extinguishing media: Carbon dioxide, dry chemical, foam

Flash point: 50°F

Explosive limits in air: Lower=1.7% Upper=12.5%

Special firefighting procedures: Approach from upwind. Wear SCBA and full bunker gear. Cool tanks with water spray. Fight fire from a distance as heat may rupture tanks.

Unusual fire and explosion hazards: Sealed containers at elevated temperatures may rupture due to polymerization. Vapors are heavier than air and may travel to ignition sources and flash back. Burning liquid may float on water. Personnel in vicinity and downwind should be evacuated.

Hazardous products of combustion: Carbon monoxide and other unknown toxic and corrosive compounds.

6. Accidental release measures

Spill control: Avoid contact. Evacuate area. Eliminate ignition sources. Ventilate area.

Containment: Dike, contain, and absorb with clay, sand, or other suitable non-combustible material.

Cleanup: For large spills, pump to storage/salvage vessels. Soak up residue with clay, sand, or other suitable non-combustible material and dispose of properly (RCRA hazardous waste). Add inhibitor as contaminated monomer may polymerize.

Special procedures: Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Spills on porous surfaces can contaminate groundwater. Use bonding/grounding lines and non-sparking tools.

7. Handling and storage

Handling precautions: Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Wash 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 awaay from heat, flame or sparks. Use non-sparking tools.

Storage: Keep in a cool place, without direct exposure to sunlight. Keep containers closed and in accordance with NFPA regulations. Maintain air space in storage containers, inhibitor requires oxygen contact to function. Vapors are uninhibited and may form polymers in vents or flame arrestors, resulting in blockage of vents.

8. Exposure controls / personal protection

Ventilation: Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

Other engineering controls: Have emergency eye wash and safety shower present.

Eye and face protection: Wear safety glasses. Wear coverall chemical splash goggles and face shield when eye and face contact is possible.

Skin protection: Chemical-resistant gloves (i.e. butyl) and other gear as required to prevent skin contact.

Respiratory protection: A NIOSH/MSHA air purifying respirator with an organic vapor cartridge may be permissible as exposure levels dictate. However, use a positive pressure air supplied respirator if there is any potential for uncontrolled release, or unknown exposure levels.

9. Physical and chemical properties

 Specific gravity:
 0.96
 Boiling point:
 213°F

 Melting point:
 -54°F
 Vapor density:
 >1

 Vapor pressure:
 28mmHg@68°F
 Evaporation rate:
 3

VOC: <50 g/L (mixed)

10. Stability and reactivity

This material is chemically stable. Hazardous polymerization may occur.

Conditions to avoid: Heat, sparks, open flames and other ignition sources. UV light. Inerting. Oxygen-free atmospheres. Corrosion of storage containers. Material can soften paint and rubber.

Incompatible materials: Oxidizers, reducers, acids, bases, azo-compounds, catalytic metals, halogens, free radical initiators, oxygen scavengers.

Hazardous products of decomposition: Carbon monoxide, carbon dioxide and smoke (unknown toxic and corrosive compounds). Conditions under which hazardous polymerization may occur: Excessive heat/aging, storage in the absence of inhibitor, oxygen-free atmospheres, UV light (sunlight), and inadvertant addition of catalyst.

MATERIAL SAFETY DATA SHEET MP55550 PART A (RESIN)

11. Toxicological information

Acute oral effects: LD50 (rat): > 2000 mg/kg estimate; toxicity exposed near LD50 includes blood in the urine and liver changes.

Acute dermal effects: LD50 (rabbit): > 1700 mg/kg estimate; dermatitis

Acute inhalation effects: LC50 (rat): Not available; toxicity at 8-100 times TLV from respiratory and gastrointestinal irritation, lung damage, nervous system effects and blood in urine.

Eye irritation: Not available

Carcinogenicity, teratogenicity, and mutagenicity: Possible reproductive hazard based on animal data.

Other chronic effects: Long term exposure to vapors caused inflammation of the nasal cavity, changes in nasal sensory cells and decreased body weight.

12. Ecological information

Ecotoxicity: Estimate of 96 hour median threshold limit: 1000-1,000 ppm; 96 hour LC50, fathead minnow: 150 ppm; 96 hour LC50, bluegill sunfish: 232 ppm. LC50=85mg/L, 96 hour, Rainbow trout (slightly toxic); EC50 > 130mg/L, 48 hour, Daphnia magna (practically non-toxic); EC50=0.6mg/L, 96 hour, Algae (highly toxic).

Mobility and persistence: Partially biodegradeable in water. BOD-5 day: 0.14 g/g - 0.9 g/g; THOD: 1.92 g/g. Readily biodegraded (86% within 28 days) under aerobic conditions.

Environmental fate: Produces high tonnage material in wholly contained systems. Liquid with moderate mobility. Sparingly soluble in water. High potential for bioaccumulation. Low mobility in soil.

13. Disposal considerations

Waste management recommendations: If this product becomes a waste, it would be hazardous 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: Adhesives

Hazard class: 3
UN number: 1133
Packing group: II
ERG #: 128

Other: Containers < 30 L are PG III

15. Regulatory information

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

RCRA code if material becomes waste: D001

SARA Title III, Section 313: This product does contain Methyl Methacrylate, which is defined as a toxic chemical under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40CFR Part 372.

SARA Section 312 hazard classes: Immediate health hazard, delayed health hazard, fire hazard, reactivity hazard.

WHMIS hazard classes: B2, D2B (All components are on the DSL)

Notes: In normal use, the methyl methacrylate in this product is polymerized during cure. For purposes of air quality regulations, the maximum amount of VOC emitted is negligible (less than 5%). Actual emissions are a function of substrate and process and should be considered on an individual basis.

16. Other information

None

NON-WARRANTY: Information contained herein is based on tests we believe to be reliable and accurate. It is offered in good faith for the benefit of the consumer. Adhesive Systems shall not be liable for any injury, loss, or damage in the use of it's chemical products since the conditions of use are beyond our control. In every case we urge and recommend the user conduct tests to determine to their own satisfaction that the product is of acceptable quality and is suitable for their particular purpose under their own operating conditions. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Because of changing reporting requirements and other variables it is impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to determine proper personal protection based on the actual condition of use and to comply with all Federal, State, and Local laws and regulations.



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EMERGENCY PHONE (800) 255-3924 MATERIAL SAFETY DATA SHEET MP55550 PART B (ACTIVATOR)

HMIS HEALTH 2 FLAMMABILITY 2 REACTIVITY 1
NFPA HEALTH 2 FIRE HAZARD 2 REACTIVITY 1

1. Chemical Product

Product Name: MP55550 PART B (ACTIVATOR)

2. Identity of Ingredients

Ingredients	CAS No.	OSHA PEL	ACGIH TLV	Other Limits	%Composition
Titanium Dioxide	13463-67-7	5 mg/m³	10 mg/m³	n/e	50-70
Dipropylene Glycol Dibenzoate	27138-31-4	n/e	n/e	n/e	10-20
Dibutyl Phthalate	84-74-2	5 mg/m³	5 mg/m³	n/e	10-20
Benzoyl Peroxide	94-36-0	5 mg/m³	5 mg/m³	n/e	< 5

3. Hazards Identification

Hazard description: Reproductive category 2, 3; T Toxic; N Dangerous for the environment
Information concerning particular hazards for humans and the environment: R 61 May cause harm to the unborn child; R 62 Possible risk of impaired fertility; R 50 Very toxic to aquatic organisms

4. First aid measures

Eye contact: Flush with clean water for at least 15 minutes while holding eyelids open. Get medical attention if symptoms persist. Skin contact: Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash skin with warm soap and water. Consult a physician if irritation develops.

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

Ingestion: Call a physician or poison control center immediately. Induce vomiting only if directed by medical personnel. The patient should lie on their left side while vomiting to reduce the risk of aspiration. Never give anything by mouth to an unconsious person.

5. Fire fighting measures

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. Protective equipment: No special measures required.

6. Accidental release measures

Person-related safety precautions: Not required

Measures for environmental protection: Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.

Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to item 13.

MATERIAL SAFETY DATA SHEET MP55550 PART B (ACTIVATOR)

7. Handling and storage

Information for safe handling: Open and handle container with care.

Information for fire and explosion protection: Keep respiratory protective device available.

Storage requirements: Store in a dry well ventilated place away from heat and sunlight.

8. Exposure controls / personal protection

Ventilation: Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

Other engineering controls: Have emergency eye wash and safety shower present.

Eye and face protection: Wear safety glasses. Wear coverall chemical splash goggles and face shield when eye and face contact is

possible.

Skin protection: Chemical-resistant gloves (i.e. butyl) and other gear as required to prevent skin contact.

Respiratory protection: Not required

9. Physical and chemical properties

Specific gravity:2.1-2.2Boiling point:n/dMelting point:n/dVapor density:n/dVapor pressure:n/dEvaporation rate:> 1

VOC: < 50 g/L (mixed)

10. Stability and reactivity

Hazardous polymerization may occur at or above 55°C.

Conditions to avoid: Heat, sparks, open flames and other ignition sources. To maintain quality, store below 25°C.

Incompatible materials: Rust, iron, copper, acids, bases, reducing agents, peroxide accelerators.

Hazardous products of decomposition: Benzoic acid, benzene

Conditions under which hazardous polymerization may occur: Excessive heat/aging.

11. Toxicological information

Acute oral effects: LD50 (rat): > 2000 mg/kg estimate Acute dermal effects: LD50 (rabbit): > 2000 mg/kg estimate

Eye irritation: Moderately irritating Skin irritation: May be mildly irritating

12. Ecological information

Ecotoxicity: Very toxic for fish.

Notes: Water hazard class 2 (German regulation) (Assessment by list): hazardous for water.

Do not allow product to reach ground water, water course, or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms.

13. Disposal considerations

Waste management recommendations: Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

14. Transport information

Proper shipping name: Environmentally hazardous substance, liquid, N.O.S. (Dibutyl Phthalate Mixture)

Hazard class: 9
UN number: 3082
Packing group: III

Other: Marine Pollutant

MATERIAL SAFETY DATA SHEET MP55550 PART B (ACTIVATOR)

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

16. Other information

15. Regulatory information

None

NON-WARRANTY: Information contained herein is based on tests we believe to be reliable and accurate. It is offered in good faith for the benefit of the consumer. Adhesive Systems shall not be liable for any injury, loss, or damage in the use of it's chemical products since the conditions of use are beyond our control. In every case we urge and recommend the user conduct tests to determine to their own satisfaction that the product is of acceptable quality and is suitable for their particular purpose under their own operating conditions. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Because of changing reporting requirements and other variables it is impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to determine proper personal protection based on the actual condition of use and to comply with all Federal, State, and Local laws and regulations.