

MATERIAL SAFETY DATA SHEET**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Product Name: MMA Series Resin

Item Numbers 5000 Series Resins, All 5300 Series, All 5400 Series, All 5600 Series, Special Products

Product Use/Class:

MANUFACTURER: Advanced Adhesives Systems, Inc.
681 North Mountain Road
Newington, CT 06111

Distributed by:

Michigan Fiber **GLASS
SALES**

EMERGENCY TELEPHONE NUMBERS: 800 255 3924 CHEM TEL

(586) 777-2032

SECTION 2. - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT
1	Methyl Methacrylate (MMA)	80-62-6	40-75
2	Cumene Hydroperoxide	80-15-9	1-10
3	Methacrylic acid	79-41-4	1-10
4	p-toluenesulfonyl chloride	98-59-9	1-10

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

EXPOSURE LIMITS 8 hrs. TWA (ppm)

ITEM	ACGIH TLV	OSHA PEL	OTHER
1	100ppm	100ppm	100ppm (Canada)
2			Skin
3	20ppm (Skin)	20ppm (skin)	

SECTION 3. - HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW:**

PHYSICAL STATE: Liquid. COLOR: Milky white. ODOR: Pungent. Acrylic.

WARNING! FLAMMABLE LIQUID AND VAPOR. MAY CAUSE ALLERGIC SKIN REACTION

MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION

Product Name MMA 9999 SERIES RESIN

Date of Preparation:

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INGESTION:

Toxicity by ingestion is not likely to occur

INHALATION:

Moderate respiratory tract irritation. Shortness of breath. Coughing.

CHRONIC:

Detailed information provided in section 11.

CONDITIONS AGGRAVATED BY EXPOSURE:

Respiratory disorders. Skin disorders. Eye disorders

SECTION 4. - FIRST AID MEASURES

EYE:

Immediately flush eyes with water for at least 20 minutes. Get immediate medical attention.

SKIN:

Wash thoroughly with soap and water. Discard contaminated clothing. Do not use organic solvents. If irritation occurs, get medical attention.

INHALATION:

Remove person to fresh air or apply artificial respiration if not breathing. Get medical attention if short of breathe or if respiratory symptoms develop.

INGESTION:

Give 1-2 glasses of milk or water to conscious person. Get immediate medical attention. DO NOT INDUCE VOMITING.

SECTION 5. - FIRE FIGHTING MEASURES

Flashpoint and Method: 51F (TCC)

Flammable Limits: 2.1 MMA, Upper 12.5 for MMA

Autoignition Temperature: NA

EXTINGUISHING MEDIA:

Flammable liquid, insoluble in water.

Use DRY chemical powder

SPECIAL FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

HAZARDOUS COMBUSTION PRODUCTS:

Oxides of carbon and nitrogen. Hydrogen cyanide. Methylene bisphenyl isocyanate. Hydrocarbons. Smoke. Cyclopentanone.

SECTION 6. - ACCIDENTAL RELEASE MEASURES

Remove sources of ignition. Use with ventilation. Dike area to prevent spreading. Absorb on vermiculite, sand or other inert absorbing material. Dispose of as chemical waste in accordance with current local, state, and federal regulations. Do not discharge into water. Incineration recommended. Wash spill area with strong detergent. After proper mixing of resin and activator sides, the material will polymerize into a cured solid state which can be treated as a nonhazardous solid. Applicable CERCLA/RCRA waste code:0001 (ignitability) U162 (MMA)

SECTION 7. - HANDLING AND STORAGE**HANDLING:**

Avoid prolonged or repeated breathing of vapor. Avoid contact with skin and eyes. Wash hands before smoking or eating.

STORAGE:

Avoid storage over 100F, contamination with incompatible materials. Store in cool place. Do not store in direct sunlight. Recommended storage in flammable material containment area

SECTION 8. - EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS:**

Use local exhaust ventilation if the potential for airborne exposure exists

PERSONAL PROTECTION:**RESPIRATORY PROTECTION:**

Use NIOSH approved respirator if there is potential to exceed any exposure limit(s).

SKIN PROTECTION: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

EYE PROTECTION: Chemical splash goggles or safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: NA

SECTION 9. - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	29mm at 20C	Vapor Density:	>1 Heavier than air, 3.5 for MMA
Solubility in H2O:	Slight	Specific Gravity:	0.94-1.0
Boiling Point:	214F for MMA	Freezing Point:	NA
Physical State:	Liquid	pH:	NA
Odor:	Pungent. Acrylic	Appearance:	Light gel, milky white in color
VOC:	1.98%; 1.92 g/l (adhesive & activator mixed)		

SECTION 10. - STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

No known conditions to avoid. Oxidizing agents, Alkalis, Moisture. Strong acids. Strong bases. Reducing agent. Ultraviolet radiation. Amines

HAZARDOUS POLYMERIZATION:

May occur. Excessive aging. Excessive heat. Polymerization catalysts. Oxygen-free atmosphere. Inhibitor depletion. Direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

Ingredients	NTP	IARC	OSHA
Methyl methacrylate	No	N/A	No
Organic peroxide	No	No	No
Methacrylic acid	No	No	No
p-toluenesulfonyl chloride	No	No	No

Ingredients	Target Organ and other health effects
Methyl methacrylate	Allergen, Irritant, Nervous System, Respiratory, Kidney, Liver
Organic peroxide	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Methacrylic acid	Allergen, Corrosive, Irritant
p-toluenesulfonyl chloride	Allergen, Irritant, Corrosive

SECTION 12. - ECOLOGICAL INFORMATION

Not available

SECTION 13. - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose according to EPA and local governmental regulations. EPA Hazardous waste # 0001;U162;D003

SECTION 14. - TRANSPORT INFORMATION

DOT (49 CFR 172)

PROPER SHIPPING NAME: Adhesives

HAZARD CLASS: 3

IDENTIFICATION NUMBER: Un1133

PACKING GROUP: II

EXCEPTIONS: Single unit less than or equal to 1 liter

PROPER SHIPPING NAME: Consumer Commodity

CLASS / DIVISION: ORM-D

INTERNATIONAL AIR TRANSPORTATION (IATA)

PROPER SHIPPING NAME: Adhesives

CLASS / DIVISION: 3

IDENTIFICATION NUMBER: UN1133

PACKING GROUP: II

..... Consumer Commodity, Class 9, ID 8000, less than 500 ml.

All components are listed on or exempt from listing on the Toxic Substances Control Act Inventory.

CERCLA (Comprehensive Emergency Response, Compensation, and Liability Act):
NA

SARA TITLE III (Superfund Amendments and Reauthorization Act):

313 Reportable Ingredients:
Methyl Methacrylate, Cumene hydroperoxide

CANADIAN INVENTORY STATUS:
All components are listed on or are exempt from listing on the Canadian Domestic Substances List

CALIFORNIA PROPOSITION 65:
This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm

SECTION 16. - OTHER INFORMATION

NFPA

Health 2 Fire 3 Reactivity 2 Special None

Hazardous Materials Information System (HMIS) Ratings:

Health 2 Flammability 3 Reactivity 2 Protective Equipment: See section 8

REVISION SUMMARY:

Change to 16 section format.

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