Revised
Jan. 2016

Adhesive Systems, Inc.
A Division Of Royal Adhesives & Sealants LLC.

SAFETY DATA SHEETS

1. CHEMICAL PRODUCT

Adhesive Systems, Inc.
9411 Corsair Road
Frankfort, IL 60423
1-800-552-0299 Phone
1-815-464-5650 Fax

EMERGENCY PHONE 1-800-255-3924 International +01+813-248-0585

Product Name: MP55300/MP55305/MP55315 Part A (Resin)

Technical Name: Methyl Methacrylate

2. HAZARDS IDENTIFICATION

Primary Routes of Entry:	**Inhalation and skin**
Symptoms of Exposure:	**Eyes-redness, swelling, tearing, and hazy vision.**
	Skin-redness, swelling, and itching.
	Inhalation- Soreness of the nose and throat, coughing.

Medical Conditions Aggravated by Exposure: Preexisting eye, respiratory, and skin disorders may be aggravated by exposure.

Carcinogenicity: None

Symbol: **Signal Word: Danger**

GHS Class

Flammable Liquid. Category 2.
Serious Eye Damage. Category 1.
Skin corrosion. Category 1.
Germ cell mutagenicity. Category 2.
Skin Sensitization. Category 1.
Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

HAZARD STATEMENTS

H225 - Highly flammable liquid and vapor.
H318 - Causes serious eye damage.
H314 - Causes severe skin burns and eye damage.
H341 - Suspected of causing genetic defects.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.

PRECAUTIONARY STATEMENTS

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat/sparks/open flames/hotsurfaces. — No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P321 - Specific treatment (see ... on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use dry chemical, carbon dioxide to extinguish small fires. Use water for large fires.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

SAFETY DATA SHEETS

MP55300/MP55305/MP55315 Part A (Resin)

Methyl Methacrylate

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.
Skin:	Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects:	Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms:	Overexposure can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system. Liver. Kidney. Olfactory Function.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

3. COMPOSITION AND INFORMATION ON HARMFUL INGREDIENTS

Ingredients	Cas No.	OSHA PEL	ACGIH TLV	Other Limits	%Composition
Methyl Methacrylate	**80-62-6**	**100ppm**	**50ppm**	**100ppm (Canada)**	**35-65**
Chlorosulfonated Polyethylene	**68037-39-8**	**N.E.**	**N.E.**	**N.E.**	**20-30**
Methacrylic Acid	**79-41-4**	**20ppm(Skin)**	**20ppm (Skin)**	**None**	**5-15**

*Proprietary means the specific chemical identity and/or weight percent is being withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary measures:

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media:	Use carbon dioxide (CO_2) or dry chemical when fighting fires involving this material.
Unsuitable extinguishing media:	Water may cause frothing.
Unusual Fire Hazards:	Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization.

Special protective equipment and precautions for fire-fighters:

Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water. Vapors can flow along surfaces to distant ignition sources and flash back.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures:	Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Collect spill with a non-sparking tool. Place into a suitable container for disposal. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Flammable, eliminate ignition sources. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back. Ventilate area. Use proper personal protective equipment as listed in Section 8.

Reference to other sections:

Other Precautions:	Pump or shovel to storage/salvage vessels. Add inhibitor to prevent polymerization.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures. Do not reuse containers without proper cleaning or reconditioning.
Hygiene Practices:	Wash thoroughly after handling.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product. Hazardous liquid or vapor residue may remain in emptied container. Do not reuse, heat, burn, pressurize, cut, weld, braze, solder, drill, grind, expose to sparks, flame, or ignition sources of empty containers without proper commercial cleaning or reconditioning.

Conditions for safe storage, including any incompatibilities:

Storage:	Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Methacrylic acid :

Guideline ACGIH: TLV-TWA: 20 ppm

Methyl Methacrylate Monomer :

Guideline ACGIH: TLV-STEL: 100 ppm
TLV-TWA: 50 ppm
Sensitizer.

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection Description: Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

Notes : Only established PEL and TLV values for the ingredients are listed.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance:	Paste.	Molecular Formula:	Mixture
Color:	off-white.	Molecular Weight:	Mixture
Odor:	Fragrant.	Flash Point:	50°F (10°C)
Boiling Point:	213°F (100.5°C)	Flash Point Method:	Tag closed cup. (TCC)
Melting Point:	Not determined.	Lower Flammable/Explosive Limit:	2.1%
Specific Gravity:	1.0	Upper Flammable/Explosive Limit:	12.5%
Solubility:	Not determined.	Auto Ignition Temperature:	Not determined.
Vapor Density:	> 1 (air = 1)	VOC Content:	<20 g/L mixed.
Vapor Pressure:	28 mmHg @68°F		
Percent Volatile:	Not determined.		
Evaporation Rate:	3 (butyl acetate = 1)		
pH:	3.0-3.5 @ 5 Percent Solution		

9.2. Other information:

Percent Solids by Weight Not determined.

10. REACTIVITY AND STABILITY

Chemical Stability:

Chemical Stability: Unstable.

Possibility of hazardous reactions:

Hazardous Polymerization: Polymerization may occur under certain conditions.

Conditions To Avoid:

Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Oxygen-free atmospheres or inert gas blanketing. Freezing conditions. Material can soften paint and rubber.

Incompatible Materials:

Incompatible Materials: Oxidizing agents (eg peroxides, nitrates), reducing agents, acids, bases, azo-compounds, catalytic metals (eg copper, iron), halogens. Free radical initiators. Oxygen scavengers.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Methacrylic acid :

Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 500 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 1060 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Methyl Methacrylate Monomer :

Eye:	Administration into the eye - Rabbit Standard Draize test: 150 mg [Not reported.] (RTECS)
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >5 gm/kg [Skin and Appendages - Dermatitis, other(After systemic exposure)] (RTECS)
Inhalation:	Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 78000 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 7872 mg/kg [Behavioral - Muscle weakness Behavioral - Coma Lungs, Thorax, or Respiration - Respiratory depression] (RTECS)

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate:

13. DISPOSAL INFORMATION

Description of waste:

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

RCRA Number: D001

Important Disposal Information: DANGER! Rags, steel wool and waste soaked with this product may spontaneously catch fire if improperly discarded or stored. To avoid a spontaneous combustion fire, immediately after use, place rags, steel wool or waste in a sealed, water-filled, metal container.

SAFETY DATA SHEETS

MP55300/MP55305/MP55315 Part A (Resin)

Methyl Methacrylate

14. TRANSPORTATION INFORMATION

U.S.DOT
Materials shipped in Quantities of more than 1 Liter in combination or single packaging.
UN 1133 Adhesives 3 II
Limited quantities, No shipping paper required. Limited quantity mark is required on the outer surface of the finished package.

ICAO/IATA
Materials shipped in Quantities of more than 1 Liter in combination or single packaging.
UN 1133 Adhesives 3 II
Materials shipped in Limited Quantities
ID 8000 Consumer Commodity 9 (Limited Quantity Marking with Y required on outer surface of the package and Class 9 label also `required on the outer surface of the package)

IMDG
Materials shipped in Quantities of more than 1 Liter in combination or single packaging.
UN 1133 Adhesives 3 II
Limited quantities in combination packages only:
UN1133 Adhesives 3 II Ltd. Qty (FP in degrees C c.c. required on shipping paper) Limited marking only required on outer surface of package.

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Methacrylic acid :

TSCA Inventory Status: Listed

Canada DSL: Listed

Methyl Methacrylate Monomer :

TSCA Inventory Status: Listed

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Canada DSL: Listed

Chlorosulfonated polyethylene :

TSCA Inventory Status: Listed

Canada DSL: Listed

Canadian Regulations. WHMIS Hazard Class(es): B2; D2B
All components of this product are on the Canadian Domestic Substances List.

WHMIS Pictograms:

16. OTHER INFORMATION

Initial: 8/22/2007
Revised: Jan. 2016

HMIS HEALTH 2 FLAMMABILITY 3 REACTIVITY 2

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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Jan. 2016

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SAFETY DATA SHEETS

1. CHEMICAL PRODUCT

Adhesive Systems, Inc.
9411 Corsair Road
Frankfort, IL 60423
1-800-552-0299 Phone
1-815-464-5650 Fax

EMERGENCY PHONE 1-800-255-3924 International +01+813-248-0585

Product Name: MP55300/MP55305/MP55315 Part B (Activator)

Technical Name: Methyl Methacrylate

2. HAZARDS IDENTIFICATION

Primary Routes of Entry: **Inhalation and skin**

Symptoms of Exposure: **Eyes-redness, swelling, tearing, and hazy vision.**
Skin-redness, swelling, and itching.
Inhalation- Soreness of the nose and throat, coughing.

Medical Conditions Aggravated by Exposure: **Preexisting eye, respiratory, and skin disorders may be aggravated by exposure.**

Carcinogenicity: **None**

Symbol:  **Signal Word: Danger**

Flammable Liquid. Category 2.
Skin Irritation. Category 2.
Skin Sensitization. Category 1.
Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

HAZARD STATEMENTS
H225 - Highly flammable liquid and vapor.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.

P210 - Keep away from heat/sparks/open flames/hotsurfaces. — No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P321 - Specific treatment (see ... on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use dry chemical, carbon dioxide to extinguish small fires. Use water for large fires.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

SAFETY DATA SHEETS

MP55300/MP55305/MP55315 Part B (Activator)

Methyl Methacrylate

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye: Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Skin: Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.

Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs: Eyes. Skin. Respiratory system. Digestive system. Liver. Kidney. Olfactory Function.

Aggravation of Pre-Existing Conditions: Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

3. COMPOSITION AND INFORMATION ON HARMFUL INGREDIENTS

Ingredients	Cas No.	OSHA PEL	ACGIH TLV	Other Limits	%Composition
Methyl Methacrylate	**80-62-6**	**100ppm**	**50ppm**	**100ppm (Canada)**	**65-85**
P(BD/MMA/STY)	**25053-09-2**	**N.E.**	**N.E.**	**N.E**	**5-15**

4. FIRST AID MEASURES

Description of necessary measures:

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media:	Use carbon dioxide (CO_2) or dry chemical when fighting fires involving this material.
Unsuitable extinguishing media:	Water may cause frothing.
Unusual Fire Hazards:	Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization.

Special protective equipment and precautions for fire-fighters:

Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water. Vapors can flow along surfaces to distant ignition sources and flash back.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personnel Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures: Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Collect spill with a non-sparking tool. Place into a suitable container for disposal. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue.

Flammable, eliminate ignition sources. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back. Ventilate area. Use proper personal protective equipment as listed in Section 8.

Reference to other sections:

Other Precautions: Pump or shovel to storage/salvage vessels. Add inhibitor to prevent polymerization.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures. Use explosion proof equipment and no sparking tools.
Hygiene Practices:	Wash thoroughly after handling.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product. Hazardous liquid or vapor residue may remain in emptied container. Do not reuse, heat, burn, pressurize, cut, weld, braze, solder, drill, grind, expose to sparks, flame, or ignition sources of empty containers without proper commercial cleaning or reconditioning.

Conditions for safe storage, including any incompatibilities:

Storage: Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Methyl Methacrylate Monomer :

Guideline ACGIH:	TLV-STEL: 100 ppm TLV-TWA: 50 ppm Sensitizer.
Guideline OSHA:	PEL-TWA: 100 ppm

Appropriate engineering controls:

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment. Equipment needs to be explosive proof.

Individual protection measures:

Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

Notes : Only established PEL and TLV values for the ingredients are listed.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance:	Paste.	Molecular Weight:	Mixture
Odor:	Fragrant.	Flash Point:	50°F (10°C)
Boiling Point:	213°F (100.5°C)	Flash Point Method:	Tag closed cup. (TCC)
Melting Point:	Not determined.	Lower Flammable/Explosive Limit:	2.1%
Specific Gravity:	0.96	Upper Flammable/Explosive Limit:	12.5%
Solubility:	Not determined.	Auto Ignition Temperature:	Not determined.
Vapor Density:	3.5 (air = 1)	VOC Content:	<20 g/L mixed.
Vapor Pressure:	28 mmHg @68°F		
Percent Volatile:	Not determined.		
Evaporation Rate:	3 (butyl acetate = 1)		
pH:	4.5-5.5 @ 5 Percent Solution	Percent Solids by Weight	Not determined. 9.2. Other information:
Molecular Formula:	Mixture		

SAFETY DATA SHEETS

MP55300/MP55305/MP55315 Part B (Activator)

Methyl Methacrylate

10. REACTIVITY AND STABILITY

Chemical Stability:

Chemical Stability: Unstable.

Possibility of hazardous reactions:

Hazardous Polymerization: Polymerization may occur under certain conditions.

Conditions To Avoid:

Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Oxygen-free atmospheres or inert gas blanketing. Freezing conditions.

Incompatible Materials:

Incompatible Materials: Oxidizing agents (eg peroxides, nitrates), reducing agents, acids, bases, azo-compounds, catalytic metals (eg copper, iron), halogens. Free radical initiators. Oxygen scavengers.

11. TOXICOLOGICAL INFORMATION

Methyl Methacrylate Monomer :

Eye: Administration into the eye - Rabbit Standard Draize test: 150 mg [Not reported.] (RTECS)

Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >5 gm/kg [Skin and Appendages - Dermatitis, other(After systemic exposure)] (RTECS)

Inhalation: Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 78000 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 7872 mg/kg [Behavioral - Muscle weakness Behavioral - Coma Lungs, Thorax, or Respiration - Respiratory depression] (RTECS)

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

13. DISPOSAL INFORMATION

Description of waste:

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

RCRA Number: D001

Important Disposal Information: DANGER! Rags, steel wool and waste soaked with this product may spontaneously catch fire if improperly discarded or stored. To avoid a spontaneous combustion fire, immediately after use, place rags, steel wool or waste in a sealed, water-filled, metal container.

SAFETY DATA SHEETS

MP55300/MP55305/MP55315 Part B (Activator)

Methyl Methacrylate

14. TRANSPORTATION INFORMATION

U.S.DOT

Materials shipped in Quantities of more than 1 Liter in combination or single packaging.
UN 1133 Adhesives 3 II

Limited quantities, No shipping paper required. Limited quantity mark is required on the outer surface of the finished package.

ICAO/IATA
Materials shipped in Quantities of more than 1 Liter in combination or single packaging.
UN 1133 Adhesives 3 II

Materials shipped in Limited Quantities
ID 8000 Consumer Commodity 9 (Limited Quantity Marking with Y required on outer surface of the package and Class 9 label also `required on the outer surface of the package)

IMDG
Materials shipped in Quantities of more than 1 Liter in combination or single packaging.
UN 1133 Adhesives 3 II

Limited quantities in combination packages only:

UN1133 Adhesives 3 II Ltd. Qty (FP in degrees C c.c. required on shipping paper) Limited marking only required on outer surface of package.

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Methyl Methacrylate Monomer :

TSCA Inventory Status:	Listed
Section 313:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
Canada DSL:	Listed

WHMIS Pictograms:

16. OTHER INFORMATION

Initial: 8/22/2007
Revised: Jan. 2016

HMIS HEALTH 2 FLAMMABILITY 3 REACTIVITY 2

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.