

KIT - SAFETY DATA SHEET

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800.220.1966

Product identifier used on the label: Kit Name Stock No.:

MA 320 32000X

Other means of identification:

Recommended use of the chemical and restrictions on use:

 $\underline{Chemical\ manufacturer\ address\ and\ telephone\ number:}$ Manufacturer Name: ITW Polymers Adhesives, North America 30 Endicott Street Danvers, MA 01923 Address:

Component list	
Component B	MA320/MA3940 ACTIVATOR
Component A	MA320 ADHESIVE
Kit SDS Revision Date	10/11/2016

Component B - SDS

SECTION 1 : IDENTIFICATION		
Product identifier used on the label:		
Product Name:	MA 320/MA 3940 A CTIVA TOR	
Other means of identification:		
Synonyms:	None.	
Recommended use of the chemical and restrictions on use:		
Product Use/Restriction:	Not applicable.	
Chemical manufacturer address and telep	hone number:	
Manufacturer Name:	ITW Polymers Adhesives, North America	
Address:	30 Endicott Street	
	Danvers, MA 01923	
General Phone Number:	(978) 777-1100	
Emergency phone number:		
Emergency Phone Number:	(800) 424-9300	
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300	

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:	
Signal Word:	WARNING.
GHS Class:	Reproductive toxicity. Category 1B. Eye Irritation. Category 2. Skin Irritation. Category 2. Skin Sensitization. category 1. Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.
Hazard Statements:	H360 - May damage fertility or the unborn child. H319 - Causes serious eye irritation. H315 - Causes skin irritation. 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. 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. 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. 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. P337+P313 - If skin irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.
Hazardo pot otherwise classified th	at have been identified during the classification process:
Hazards not otherwise classified th	at 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.
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.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Mixtures: Chemical Name	CA S#	Ingredient Percent	EC Num.
Benzoyl peroxide	94-36-0	1 - 10 by weight	
Butyl benzyl phthalate	85-68-7	1 - 10 by weight	
Bisphenol A diglycidyl ether resin	25068-38-6	30 - 40 by weight	
Styrene-ethylene/butylene-styrene block copolymer	66070-58-4	1 - 10 by weight	
Diisodecyl adipate	27178-16-1	20 - 30 by weight	
Water	7732-18-5	1 - 10 by weight	
Proprietary ingredient(s)	Trade Secret	10 - 20 by weight	

SECTION 4 : FIRST AID MEASURES

Description of necessary measures	<u>.</u>
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.

SECTION 5 : FIRE FIGHTING MEASURES

$\underline{Suitable \ and \ unsuitable \ extinguishing \ media:}$

Suitable Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Unsuitable extinguishing media:	Water or foam may cause frothing.
Unusual Fire Hazards:	Organic peroxides can decompose violently if heated strongly while confined. Sudden reaction and fire may result if product is mixed with an oxidizing agent.

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.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective	equipment and emergency procedures:	
Personal 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. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. 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.	

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:		
Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.	
Hygiene Practices:	Wash thoroughly after handling.	
Conditions for safe storage, including any incompatibilities:		
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Do not store in temperatures above 100 °F.	

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:	
Benzoyl peroxide :	
Guideline ACGIH:	TLV-TWA: 5 mg/m3
Guideline OSHA:	PEL-TWA: 5 mg/m3
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.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance:	Viscous. Liquid.	
Color:	White	
Odor:	Slight. odor.	
Boiling Point:	Not determined.	
Melting Point:	Not determined.	
Specific Gravity:	1.0-1.25	
Product: MA320 Manufacturer: Revison:10/11/2016, Version:0		

| Manufacturer: | F 6,

Solubility:	slightly soluble.
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Percent Volatile:	<4
Evaporation Rate:	<<1 (butyl acetate = 1)
pH:	6
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Auto Ignition Temperature:	Not determined.
VOC Content:	Not determined.
9.2. Other information:	
Percent Solids by Weight	>96

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	
Chemical Stability:	Unstable.
Possibility of hazardous reactions:	
Hazardous Polymerization:	Not reported.
Conditions To Avoid:	
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Contamination, direct sunlight, friction and prolonged storage above 100°F (38°C).
Incompatible Materials:	
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:	

Benzoyl peroxide :	
Eye:	Administration into the eye - Rabbit Standard Draize test: 500 mg/24H [Mild] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 7710 mg/kg [Lungs, Thorax, or Respiration - Cyanosis Liver - Other changes Kidney/Ureter/Bladder - Other changes in urine composition] Oral - Rat LD50 - Lethal dose, 50 percent kill: 6400 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Butyl benzyl phthalate :	
Skin:	Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: 6700 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >10000 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Inhalation:	Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: >6700 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 2330 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Bisphenol A diglycidyl ether resin :	
Eye :	Administration into the eye - Rabbit Standard Draize test: 100 mg [Mild] Administration into the eye - Rabbit Standard Draize test: 20 mg/24H [Moderate] Administration into the eye - Rabbit Standard Draize test: 5 mg/24H [Severe] (RTECS)
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >20 mL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: >1200 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 10700 uL/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 13600 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain] Oral - Rat LD50 - Lethal dose, 50 percent kill: 13.6 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 11.4 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value]

Diisodecyl adipate :

Ingestion:

Water:

Ingestion:

Oral - Rat LD50 - Lethal dose, 50 percent kill: 20.5 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: 11400 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: >90 mL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	
Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal:

Banzovi porovida :

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.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Refer to Bill of Lading
DOT UN Number:	Refer to Bill of Lading
IATA Shipping Name:	Refer to Bill of Lading
IATA UN Number:	Refer to Bill of Lading
IMDG UN Number :	Refer to Bill of Lading
IMDG Shipping Name :	Refer to Bill of Lading

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Benzoyl peroxide :	
TSCA Inventory Status:	Listed
Section 313:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
Canada DSL:	Listed
Butyl benzyl phthalate :	
TSCA Inventory Status:	Listed
California PROP 65:	Listed: developmental.
Canada DSL:	Listed
Bisphenol A diglycidyl ether resin :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Styrene-ethylene/butylene-styrer	ne block copolymer :
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Diisodecyl adipate :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
<u>Water</u> :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Canadian Regulations.	WHMIS Hazard Class(es): D2B All components of this product are on the Canadian Domestic Substances List.
WHMIS Pictograms:	$\overline{\mathbf{m}}$

HMIS Ratings:			
HMIS Health Hazard:	2*	Health Hazard	23
HMIS Fire Hazard:	2	Fire Hazard	2
HMIS Reactivity:	2	Reactivity	2
HMIS Personal Protection:	x	Personal Protection	x
SDS Revision Date:	April 26, 2016		
SDS Revision Notes:	Formula update		
SDS Author:	Actio Corporation		
Disclaimer:	This Health and Safety Information is correct to the best publication but we cannot accept liability for any loss, inju The information given in the Data Sheet is designed only the use of the substance. It is not a specification nor doe chemicals should be handled only by competent personn	Iry or damage which may result from its y as a guidance for safe handling, storag es it guarantee any specific properties. A	use. e an

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Component A - SDS

Product identifier used on the label:		
Product Name:	MA320 ADHESIVE	
Other means of identification:		
Synonyms:	None.	
	nd restrictions on use.	
Recommended use of the chemical a	ind restrictions on use.	
Product Use/Restriction:	Not applicable.	
Product Use/Restriction:	Not applicable.	
	Not applicable.	
Product Use/Restriction: Chemical manufacturer address and	Not applicable. telephone number:	
Product Use/Restriction: Chemical manufacturer address and Manufacturer Name:	Not applicable. <u>telephone number:</u> ITW Polymers Adhesives, North America 30 Endicott Street	
Product Use/Restriction: <u>Chemical manufacturer address and</u> Manufacturer Name: Address:	Not applicable. <u>telephone number:</u> ITW Polymers Adhesives, North America 30 Endicott Street Danvers, MA 01923	
Product Use/Restriction: <u>Chemical manufacturer address and</u> Manufacturer Name: Address: General Phone Number:	Not applicable. <u>telephone number:</u> ITW Polymers Adhesives, North America 30 Endicott Street Danvers, MA 01923	

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:



Signal Word:	DANGER.
GHS Class:	Flammable Liquid. Category 2. Specific Target Organ Toxicity -STOT Repeated exposure RE. Category 2 (Inhalataion, respiratory system). Eye Irritation. 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. H373 - May cause damage to organs through prolonged or repeated exposure. H319 - Causes serious eye irritation. H317 - Causes skin irritation. H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.
Precautionary Statements:	 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 breathte 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. 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. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P312 - Specific treatment (see on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If skin irritation persists: Get medical advice/attention. P374-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.
Hazards not otherwise classified the	at 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. Central nervous 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.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CA S#	Ingredient Percent	EC Num.
Methyl Methacrylate	80-62-6	60 - 70 by weight	201-297-1
Methacrylic acid	79-41-4	1 - 5 by weight	201-204-4
Styrene-Butadiene-Styrene Polymer	9003-55-8	10 - 20 by weight	
Methylmethacrylate-Butadiene-Styrene Acrylic Copolymer	PN1220	10 - 20 by weight	
Non hazardous	64742-43-4	1 - 5 by weight	265-145-6
Ethylene glycol	107-21-1	0.1 - 1 by weight	203-473-3

SECTION 4 : FIRST AID MEASURES

neasures:
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.
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.
If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media:	Use carbon dioxide (CO2) 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.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:		
Personal 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.	

SECTION 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.	

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:	
Methyl Methacrylate :	
Guideline ACGIH:	TLV-STEL: 100 ppm
	Sensitizer.
	TLV-TWA: 50 ppm
Guideline OSHA:	PEL-TWA: 100 ppm
Methacrylic acid :	
Guideline ACGIH:	TLV-TWA: 20 ppm
Ethylene glycol :	
Guideline ACGIH:	TLV-STEL: C 100 mg/m3 (H)
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.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES: Physical State Appearance: Paste. Color: off-white. Odor: Fragrant. Boiling Point: 213°F (100.5°C) Melting Point: -54°F (-47.7°C) Specific Gravity: 0.92 Solubility: Not determined. Vapor Density: > 1 (air = 1)28 mmHg @68°F Vapor Pressure: Percent Volatile: Not determined. 3 (butyl acetate = 1) Evaporation Rate: pH: Not determined. Mixture Molecular Formula: Molecular Weight: Mixture Flash Point: 50°F(10°C) Flash Point Method: Tag closed cup. (TCC) Lower Flammable/Explosive Limit: 1.7% Upper Flammable/Explosive Limit: 12.5% Auto Ignition Temperature: 789°F VOC Content: <50 g/L mixed. 9.2. Other information: Percent Solids by Weight Not determined.

SECTION 10 : STABILITY and REACTIVITY

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.

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Methyl Methacrylate :		
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)	
Methacrylic acid :		
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 500 mg/kg [Details of toxic	
Product: MA320 Manufacturer: Revison:10/11/2016, Version:0		

	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)	
Styrene-Butadiene-Styrene Polymer :		
Eye:	Administration into the eye - Rabbit Standard Draize test: 500 mg/24H [Mild] (RTECS)	
Ethylene glycol :		
Eye:	Administration into the eye - Rat Standard Draize test: 0.012 %/3D [Not reported.] Administration into the eye - Rabbit Standard Draize test: 500 mg/24H [Mild] Administration into the eye - Rabbit Standard Draize test: 100 mg/1H [Mild] Administration into the eye - Rabbit Standard Draize test: 0.012 ppm/3D [Not reported.] Administration into the eye - Rabbit Standard Draize test: 1440 mg/6H [Moderate] (RTECS)	
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 9530 uL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)	
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 4700 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)	

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	
Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

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.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Refer to Bill of Lading
DOT UN Number:	Refer to Bill of Lading
IATA Shipping Name:	Refer to Bill of Lading
IATA UN Number:	Refer to Bill of Lading
IMDG UN Number :	Refer to Bill of Lading
IMDG Shipping Name :	Refer to Bill of Lading

SECTION 15 : REGULATORY INFORMATION

 $\underline{Safety, \, health \, and \, environmental \, regulations \, specific \, for \, the \, product:}$

Methyl Methacrylate :			
TSCA Inventory Status:	Listed		
Section 313:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.		
California PROP 65:	IARC: Group 3: Unclassifiable as to carcinogenicity to humans.		
Canada DSL:	Listed		
EC Number:	201-297-1		
Methacrylic acid :			
TSCA Inventory Status:	Listed		
Canada DSL:	Listed		
EC Number:	201-204-4		
Styrene-Butadiene-Styrene Polymer :			
TSCA Inventory Status:	Listed		
California PROP 65:	IARC: Group 3: Unclassifiable as to carcinogenicity to humans.		
Canada DSL:	Listed		
Non hazardous :			
TSCA Inventory Status:	Listed		
Product: MA320 Manufacturer: Revison:10/11/2016, Version:0			

Canada DSL:	Listed
EC Number:	265-145-6
Ethylene glycol :	
TSCA Inventory Status:	Listed
Section 313:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
Canada DSL:	Listed
EC Number:	203-473-3
Canadian Regulations.	WHMIS Hazard Class(es): B2; D2B All components of this product are on the Canadian Domestic Substances List.
WHMIS Pictograms:	\odot \bigcirc

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:			
HMIS Health Hazard:	2*	Health Hazard	2*
HMIS Fire Hazard:	3	Fire Hazard	3
HMIS Reactivity:	2	Reactivity	2
HMIS Personal Protection:	Х	Personal Protection	x
	* Chronic Health Effects		
SDS Revision Date:	July 25, 2016		
SDS Revision Notes:	Formula Update		
SDS Author:	Actio Corporation		
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.		

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