

Product Name:       ReAct <sup>®</sup> 727       Product Type:       Structural Adhesive         Company:       Hemon Manufacturing, Inc.       Contact Information:       Telephone:       407-322-4000         121 Tech Drive       Sardord, FL 32771       Contact Information:       Telephone:       407-322-4000         Company:       Hemon Manufacturing, Inc.       Contact Information:       Telephone:       407-322-4000         Company:       Company:       Generation:       Telephone:       407-322-4000         Company:       Sardord, FL 32771       Contact Information:       Telephone:       407-322-400         Company:       Sardord, FL 32771       Contact Information:       Telephone:       407-322-400         Company:       Manufacturing, Inc.       Sardord       Other       None       None         Interscients       -%       ACGIH TLV       OSHA PEL       OTHER         Polyurethane Methacrylate Resin       30-60       None       None       None         Biling Methacrylate       5-10       None       None       None         Silica, fumed, treated       1-3       10mg/m Inhalable fraction, marginable fraction, itsmale dust, tert-Butyl Peroxybenzoate       1-3       None       None       None         Maleic Acid       1-3	1. PRODUC	CT AND COMPANY IDENTIF					
Incredients       -%       ACGIH TLV       OSHA PEL       OTHER         Polyurethane Methacrylate Resin       30-60       None       None       None       None         Hydroxyalkyl Methacrylate       30-60       None       None       None       None         High Boiling Methacrylate       5-10       20 ppm TWA       None       None       None         Silica, fumed, treated       1-3       10mg/m³ Inhalable fraction, 3mg/m³       5mg/m³       None       None         Silica, fumed, treated       1-3       10mg/m³ Inhalable fraction, 3mg/m³       5mg/m³       None       None         Accid       1-3       None       None       None       None       None         Maleic Acid       1-3       None       None       None       None         Accid       1-3       None       None       None       None         Accid       1-3       None       None       None       None         Maleic Acid       1-3       None       None       None       None         Marcal State:       Liquid       EMERGENCY OVERVIEW       Physical state:       1       See Section 8         Odor:       Sharp, irritating       Mary CAUSE EYE, AND SKIN IREACTION. Mary CAUSE AL		Hernon Manufacturing, Inc. 121 Tech Drive			Telephon Emergen	e: 407-322-4000 cy Telephone: 800-2	
Polyurethane Methacrylate Resin       30-60       None       None       None       None         Hydroxyalkyl Methacrylate       30-60       None       None       None       None       None         High Boiling Methacrylate       5-10       None       None       None       None       None         Methacrylite Acid       5-10       20 ppm TWA       None       None       None         Silica, fumed, treated       1-3       10mg/m³ Inhalable       5mg/m³       Respirable dist,       Tomp/m³ Total         TWVA       15mg/m³ Total       15mg/m³ Total       15mg/m³ Total       None       None         tert-Butyl Peroxybenzoate       1-3       None       None       None       None         Maleic Acid       1-3       None       None       None       None         Joint:       Color:       Oft-white       HEALTH:       2         Physical state:       Liquid       EMERGENCY OVERVIEW       Healer Acid       1         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION.       See Section 8         WWARNING:       MAY CAUSE EYE, AND SKIN IRRITATION.       See Section 8         MAY CAUSE ALLERGIC SKIN REACTION.       MAY CAUSE RESPIRATORY TRACT IRRITATION.         MAY BE HARMFUL IF S	2. COMPO	SITION / INFORMATION ON	INGREDIENTS				
Hydroxyalkyl Methacrylate       30-60       None       None       None       None       None       None         High Boiling Methacrylate       5-10       20 ppm TWA       None       None       None       None         Methacrylic Acid       5-10       20 ppm TWA       None       None       None       None         Silica, fumed, treated       1-3       10mg/m <sup>3</sup> [nhalable fraction, 3mg/m <sup>3</sup> Respirable fraction, 10mg/m <sup>3</sup> ]       Smg/m <sup>3</sup> Total dust       None         tert-Butyl Peroxybenzoate       1-3       None       None       None       None         Alaeic Acid       1-3       None       None       None       None       None         3.       HAZARDS IDENTIFICATION       EMERGENCY OVERVIEW       HEALTH:       2       2         Physical state:       Liquid       EMERGENCY OVERVIEW       Personal Protection:       See Section 8         Odor:       Sharp, irritating       PHYSICAL HAZARD:       1       Personal Protection:       See Section 8         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.       Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure: Inhalation:	Ingredients		%	ACGI	<u>H TLV</u>	OSHA PEL	<b>OTHER</b>
High Boiling Methacrylate       5-10       None       None       None       None       None         Methacrylic Acid       5-10       20 ppm TWA       None       None       None         Silica, fumed, treated       1-3       10mg/m <sup>3</sup> Inhalable fraction, 3mg/m <sup>3</sup> Respirable dust, 15mg/m <sup>3</sup> Total dust       Smg/m <sup>3</sup> respirable dust, 15mg/m <sup>3</sup> Total dust       None         tert-Butyl Peroxybenzoate       1-3       None       None       None       None         Maleic Acid       1-3       None       None       None       None         IMAZARDS IDENTIFICATION         EMERGENCY OVERVIEW         Physical state:       Liquid Color:       Off-white Odor:       2       PHYSICAL HAZARD:       1         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE ALEERGIC SKIN REACTION. MAY CAUSE ALEERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED.       See Section 8         Primary Routes of Entry:       Skin, Inhalation, Eyes       Signs and Symptoms of Exposure: Inhalation:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.       Eye contact:       Contact with eyes will cause irritation.	Polyurethane M	ethacrylate Resin	30-60	No	one	None	None
Methacrylic Acid       5-10       20 ppm TWA       None       None         Silica, fumed, treated       1-3       10mg/m³ Inhalable fraction, 3mg/m³       Smg/m³       Respirable dust, 15mg/m³ Total dust         tert-Butyl Peroxybenzoate       1-3       None       None       None       None         Maleic Acid       1-3       None       None       None       None         Maleic Acid       1-3       None       None       None       None         3.       HAZARDS IDENTIFICATION       EMERGENCY OVERVIEW       HEALTH:       2         Physical state:       Liquid Color:       Off-white       FLAMMABILITY:       2         Odor:       Sharp, irritating       MAY CAUSE EYE, AND SKIN IRRITATION.       See Section 8         WARNING:       MAY CAUSE ALLERGIC SKIN REACTION.       See Section 8         WARNING:       MAY CAUSE ALLERGIC SKIN REACTION.       See Section 8         May CAUSE RESPIRATORY TRACT IRRITATION.       MAY CAUSE RESPIRATORY TRACT IRRITATION.         MAY B HARMFUL IF SWALLOWED.       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.	Hydroxyalkyl Me	ethacrylate	30-60	No	one	None	None
Silica, fumed, treated       1-3       10mg/m³ Inhalable fraction, 3mg/m³ Respirable dust, 15mg/m³ Total dust       None         tert-Butyl Peroxybenzoate       1-3       None       None       None       None         Maleic Acid       1-3       None       None       None       None         3.       HAZARDS IDENTIFICATION       EMERGENCY OVERVIEW       HIS: HEALTH:       2         Physical state:       Liquid Color:       Off-white Odor:       FLAMMABILITY:       2         Odor:       Sharp, irritating       PHYSICAL HAZARD:       1         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.         Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.	High Boiling Me	thacrylate	5-10	No	one	None	None
fraction, 3mg/m³ Respirable fraction, TWA       Respirable fraction, dust         tert-Butyl Peroxybenzoate       1-3       None       None       None         Maleic Acid       1-3       None       None       None         3.       HAZARDS IDENTIFICATION       EMERGENCY OVERVIEW         Physical state:       Liquid       HEALTH:       2         Color:       Off-white       FLAMMABILITY:       2         Odor:       Sharp, irritating       PHYSICAL HAZARD:       1         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:       May cause irritation to nose and throat. Skin contact:       May cause allergic skin reaction. May cause skin irritation. Eye contact:       Contact with eyes will cause irritation.	Methacrylic Acie	d	5-10	20 ppm TWA		None	None
Maleic Acid       1-3       None       None       None         I HAZARDS IDENTIFICATION         EMERGENCY OVERVIEW         Physical state:       Liquid       HMIS: FLAMMABILITY:       2         Color:       Off-white Odor:       FLAMMABILITY:       2         Odor:       Sharp, irritating       PHYSICAL HAZARD:       1         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION. MAY CAUSE ALERSPIRATORY TRACT ION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.         Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.	Silica, fumed, tro	eated	1-3	fraction, Respirabl	3mg/m <sup>3</sup> e fraction,	Respirable dust, 15mg/m <sup>3</sup> Total	None
3. HAZARDS IDENTIFICATION         Physical state:       Liquid         Physical state:       Liquid         Color:       Off-white         Odor:       Sharp, irritating         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION.         MAY CAUSE RESPIRATORY TRACT IRRITATION.         MAY BE HARMFUL IF SWALLOWED.         Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:         Inhalation:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.	tert-Butyl Peroxybenzoate		1-3	None		None	None
EMERGENCY OVERVIEW         Physical state:       Liquid       HEALTH:       2         Color:       Off-white       FLAMMABILITY:       2         Odor:       Sharp, irritating       PHYSICAL HAZARD:       1         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION.       See Section 8         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION.       MAY CAUSE ALLERGIC SKIN REACTION.         MAY CAUSE ALLERGIC SKIN REACTION.       MAY CAUSE RESPIRATORY TRACT IRRITATION.         MAY BE HARMFUL IF SWALLOWED.       MAY BE HARMFUL IF SWALLOWED.         Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:       Inhalation:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.	Maleic Acid		1-3	No	one	None	None
Physical state:       Liquid       HEALTH:       2         Color:       Off-white       FLAMMABILITY:       2         Odor:       Sharp, irritating       PHYSICAL HAZARD:       1         Personal Protection:       See Section 8         WARNING:       MAY CAUSE EYE, AND SKIN IRRITATION.         MAY CAUSE ALLERGIC SKIN REACTION.       MAY CAUSE RESPIRATORY TRACT IRRITATION.         MAY BE HARMFUL IF SWALLOWED.       MAY BE HARMFUL IF SWALLOWED.         Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.			EMERGENCY	OVERVIE	W		
MAY CAUSE ALLERGIC SKIN REACTION.         MAY CAUSE RESPIRATORY TRACT IRRITATION.         MAY BE HARMFUL IF SWALLOWED.         Primary Routes of Entry:       Skin, Inhalation, Eyes         Signs and Symptoms of Exposure:       Inhalation:         Inhalation:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.	Color:	Off-white			F	IEALTH: LAMMABILITY: HYSICAL HAZARD:	2 1
Signs and Symptoms of Exposure:       Inhalation:       May cause irritation to nose and throat.         Skin contact:       May cause allergic skin reaction. May cause skin irritation.         Eye contact:       Contact with eyes will cause irritation.		WARNING:	MAY CAUSE A MAY CAUSE R	LLERGIC S	KIN REAG	CTION. T IRRITATION.	
Inhalation:May cause irritation to nose and throat.Skin contact:May cause allergic skin reaction. May cause skin irritation.Eye contact:Contact with eyes will cause irritation.	-	-	Skin, Inhal	ation, Eyes			
Skin contact:May cause allergic skin reaction. May cause skin irritation.Eye contact:Contact with eyes will cause irritation.		-	Mav cause	irritation to r	lose and th	roat.	
Eye contact:       Contact with eyes will cause irritation.			-				n.
Ingestion: May be harmful if swallowed.	-						
Existing Conditions Aggravated by Exposure: Eye, skin, and respiratory disorders.	-		-			S.	



4. FIRST AID MEASURES				
Ingestion:	Do not induce vomiting. Keep individual calm. Obtain medical attention.			
Inhalation:	Remove to fresh air. If symptoms develop and persist, get medical attention.			
Skin Contact:	Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.			
Eye Contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.			
5. FIRE FIGHTING MEASURES				
Flash Point (TCC):	Approximately 171°F			
Recommended Extinguishing Agents:	Carbon dioxide, foam, dry chemical			
Special Firefighting Procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.			
Hazardous Combustion Products:	Oxides of carbon. Oxides of nitrogen. Irritating organic vapors.			
Unusual Fire or Explosion Hazards:	None			
Flammable/Explosive Limits – lower %:	Not available			
Flammable/Explosive Limits – upper %:	Not available			
6. ACCIDENTAL RELEASE MEASURES				
Personal Precautions:	Wear proper protective equipment			
Measures for Environmental Protection:	Do not allow entry into drains or surface waters			
Clean-up Measures:	Remove all ignition sources. Ensure adequate ventilation. Soak up with inert absorbent. Store in a partly filled, closed container until disposal.			
7. HANDLING AND STORAGE				
Handling:	Keep away from heat, spark and flame. Do not breathe mist or vapors. Avoid contact with eyes, skin and clothing.			
Storage:	Store between 46° and 82°F unless otherwise labeled to preserve shelf life. Store away from heat, sparks, flames, or other sources of ignition.			
8. EXPOSURE CONTROLS, PERSONAL	PROTECTION			
Eye/Face Protection:	Safety glasses or goggles with side shields			
Skin Protection:	Use rubber or plastic gloves, and protective clothing as necessary			
Respiratory Protection:	Use NIOSH approved respirator if there is a potential to exceed exposure limits			
Engineering Controls:	Forced ventilation may be required if concentrations exceed exposure limits			



## 06/2009

9. PHYSICAL AND CHEMICAL PROPE	ERTIES					
Physical State:	Liquid					
Color:	Off-white					
Odor:	Sharp, irritating					
Vapor Pressure:	Less than 10 mm at 80°F					
Vapor Density:	Not available					
Solubility in Water:	Slight					
Specific Gravity:	1.07					
Boiling Point:	> 300°F					
Volatile Organic Compound Content	53.2%					
Evaporation Rate (Ether = 1)	Not available					
pH:	Does not apply					
10. STABILITY AND REACTIVITY						
Stability	Qieble.					
Stability:	Stable					
Hazardous Polymerization:	Will not occur					
Hazardous Decomposition Products: Incompatibility:	Oxides of carbon. Oxides of nitrogen. Irritating organic vapors.					
incompatibility.	Strong oxidizers.					
11. TOXICOLOGICAL INFORMATION						
		Operation and Obstan				
Ingredients:	Literature Referenced Target Organ and Other Health Effects	Carcinogen Status NTP IARC OSHA				
Polyurethane Methacrylate Resin	No data	NO NO NO				
Hydroxyalkyl Methacrylate	ALG IRR	NO NO NO				
High Boiling Methacrylate	ALG IRR	NO NO NO				
Methacrylic Acid	ALG COR IRR	NO NO NO				
Silica, fumed, treated	NTO	NO NO NO				
tert-Butyl Peroxybenzoate	CNS IRR MUT	NO NO NO				
Maleic Acid	IRR	NO NO NO				
Abbreviations:						
ALG Allergen COR Corrosive CNS	Central Nervous System					
COR Corrosive MUT Mutagen NTO	No Target Organs					
12. ECOLOGICAL INFORMATION						
12. ECOLOGICAL INFORMATION						



13. DISPOSAL CONSIDERATIONS			
Recommended methods of disposal:	Dispose of according to Federal, State and Local regulations.		
EPA Hazardous Waste Number: Not an RCRA hazardous waste			
14. TRANSPORTATION INFORMAT	ΓΙΟΝ		
U.S. Dept. of Transportation Ground (49 (	CFR):		
Proper Shipping Name	Unrestricted		
Hazard Class or Division:	None		
Identification Number	None		
Packing group:	None		
International Air Transportation (ICAO/IA	ΤΑ):		
Proper Shipping Name:	Unrestricted		
Hazard Class or Division:	None		
Identification Number	None		
Packing group:	None		
WaterTransportation (IMO/IMDG):			
Proper Shipping Name:	Unrestricted		
Hazard Class or Division:	None		
Identification Number	None		
Packing group:	None		
i aeimig greup:	None		
Marine pollutant:	None		
Marine pollutant:			
Marine pollutant:			
Marine pollutant: 15. REGULATORY INFORMATION United States Regulatory Information	None All components are listed or are exempt from listing on the Toxic Substances		
Marine pollutant: <u>15. REGULATORY INFORMATION</u> United States Regulatory Information TSCA 8 (b) Inventory Status:	None All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community		
Marine pollutant: <u>15. REGULATORY INFORMATION</u> United States Regulatory Information TSCA 8 (b) Inventory Status: CERCLA/SARA 313:	None All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community		