HERNON®
MANUFACTURING, INC.

SAFETY DATA SHEET

Issue Date 09-Jul-2015 **Revision Date** 13-Oct-2015 **Version** 1

1. IDENTIFICATION

Product identifier

Product Name HASA 66071

Other means of identification

Product Code MS-66071
UN/ID no. None
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Structural Adhesive.
Uses advised against None known

Details of the supplier of the safety data sheet

Manufacturer Address
Hernon Manufacturing Inc.
121 Tech Drive
Sanford, FL 32771
800-527-0004

Emergency telephone number

Company Phone Number 407-322-4000
Emergency Telephone Chemtel 800-255-3924

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Category 4	

Label elements

Emergency Overview

Warning

Hazard statements
Harmful if swallowed
Causes skin irritation
Causes eye irritation
May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure
Very toxic to aquatic life with long lasting effects

Appearance No information available **Physical state** liquid **Odor** Sharp

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from flames and hot surfaces. - No smoking
Keep cool

Precautionary Statements - Response
Call a POISON CENTER or doctor/physician if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a POISON CENTER or doctor
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Polyurethane Methacrylate Resin	Proprietary	40-50	*

2-Hydroxyethyl methacrylate	868-77-9	20-30	*
Isobornyl Methacrylate	7534-94-3	10-20	*
Acrylic acid	79-10-7	1 - 5	*
Hydrophobic Amorphous Fumed Silic	67762-90-7	1 - 5	*
Cumene Hydroperoxide	80-15-9	1 - 5	*
Maleic acid	110-16-7	1 - 5	*
ACETYL 2 PHENYLHYDRAZINE	114-83-0	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use CO2, dry chemical, or foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). Irritating organic vapors.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes and skin. Use personal protective equipment as required.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 7 and 29 °C. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials Reducing agents. Strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Polyurethane Methacrylate Resin	TWA: 0.005 ppm	(vacated) Ceiling: 0.02 ppm regulated under Methylene bisphenyl isocyanate (vacated) Ceiling: 0.2 mg/m^3 regulated under Methylene bisphenyl isocyanate Ceiling: 0.02 ppm Ceiling: 0.2 mg/m^3	IDLH: 75 mg/m^3 Ceiling: 0.020 ppm 10 min Ceiling: 0.2 mg/m^3 10 min TWA: 0.005 ppm TWA: 0.05 mg/m^3
Acrylic acid 79-10-7	TWA: 2 ppm S*	(vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m^3 (vacated) S*	TWA: 2 ppm TWA: 6 mg/m^3

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Minimize exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing. Use rubber or plastic gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	No information available	**Odor**	Sharp
Color	amber	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	Does not apply	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 149 °C / 300 °F	
Flash point	> 85 °C / 185 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	8% Acrylic Acid	
Lower flammability limit:	2% Acrylic Acid	
Vapor pressure	>10 mm at 80 °F	
Vapor density	No information available	
Relative density	1.09	
Water solubility	slightly soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.
Possibility of Hazardous Reactions
None under normal processing.
Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid
Incompatible materials.
Incompatible materials
Reducing agents. Strong oxidizers.
Hazardous Decomposition Products
None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Harmful if swallowed Harmful by skin contact Harmful by inhalation

Inhalation Harmful by inhalation.

Eye contact Avoid contact with eyes.

Skin contact Harmful in contact with skin.

Ingestion May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyurethane Methacrylate Resin	= 31600 mg/kg (Rat) = 9200 mg/kg (Rat)	-	= 369 mg/m^3 (Rat) 4 h
2-Hydroxyethyl methacrylate 868-77-9	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Acrylic acid 79-10-7	= 33500 µg/kg (Rat) = 193 mg/kg (Rat)	= 295 mg/kg (Rabbit) = 280 µL/kg (Rabbit)	= 11.1 mg/L (Rat) 1 h = 3.6 mg/L (Rat) 4 h
Cumene Hydroperoxide 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat) 4 h
Maleic acid 110-16-7	= 708 mg/kg (Rat)	= 1560 mg/kg (Rabbit)	> 720 mg/m^3 (Rat) 1 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Chemical Name	ACGIH	IARC	NTP	OSHA
Polyurethane Methacrylate Resin	-	Group 3	-	-
Acrylic acid 79-10-7	-	Group 3	-	-

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 4,645.00 mg/kg
ATEmix (dermal) 6,147.00 mg/kg
ATEmix (inhalation-dust/mist) 2.30 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Hydroxyethyl methacrylate 868-77-9	-	213 - 242: 96 h Pimephales promelas mg/L LC50 flow-through 227: 96 h Pimephales promelas mg/L LC50	-
Acrylic acid 79-10-7	0.17: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.04: 72 h Desmodesmus subspicatus mg/L EC50	222: 96 h Brachydanio rerio mg/L LC50 semi-static	270: 24 h Daphnia magna mg/L LC50 Static 95: 48 h Daphnia magna mg/L EC50
Cumene Hydroperoxide 80-15-9	-	3.9: 96 h Oncorhynchus mykiss mg/L LC50 static	7: 24 h Daphnia magna mg/L EC50
Maleic acid 110-16-7	-	5: 96 h Pimephales promelas mg/L LC50 static	250 - 400: 48 h Daphnia magna mg/L EC50

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Chemical Name	Partition coefficient
2-Hydroxyethyl methacrylate 868-77-9	0.47
Acrylic acid 79-10-7	0.38 - 0.46
Maleic acid 110-16-7	-0.79 - 0.32

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number Not applicable

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acrylic acid 79-10-7	-	-	-	U008
Cumene Hydroperoxide 80-15-9	-	-	-	U096

Chemical Name	California Hazardous Waste Status
Cumene Hydroperoxide 80-15-9	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated
UN/ID no. None
Proper shipping name Not regulated
Hazard Class None
Packing Group None

Special Provisions	None

IATA Not regulated

UN/ID no.	None
Proper shipping name	Not regulated
Hazard Class	None
Packing Group	None
Special Provisions	None

IMDG Not regulated

UN/ID no.	None
Proper shipping name	Not regulated
Hazard Class	None
Packing Group	None
Special Provisions	None

RID Not regulated

UN/ID no.	None
Proper shipping name	Not regulated
Hazard Class	None
Packing Group	None
Special Provisions	None

ADR Not regulated

UN/ID no.	None
Proper shipping name	Not regulated
Hazard Class	None
Packing Group	None
Special Provisions	None

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

All ingredients are on the inventory or are exempt from listing.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Polyurethane Methacrylate Resin -	1.0
Acrylic acid - 79-10-7	1.0
Cumene Hydroperoxide - 80-15-9	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Maleic acid 110-16-7	5000 lb	-	-	X

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Polyurethane Methacrylate Resin	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Acrylic acid 79-10-7	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Cumene Hydroperoxide 80-15-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Maleic acid 110-16-7	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Polyurethane Methacrylate Resin	X	X	X
Acrylic acid 79-10-7	X	X	X
Cumene Hydroperoxide 80-15-9	X	X	X
Maleic acid 110-16-7	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** 0	**Flammability** 0	**Instability** 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** 0	**Flammability** 0	**Physical hazards** 0	**Personal protection** X

Prepared By SDS coordinator
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Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet