

SAFETY DATA SHEET

Shape Charge Sealant 820

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name: Product no.: Shape Charge Sealant 820

MS-820

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture: Uses advised against : Sealant Restricted to professional users. None known.

1.3. Details of the supplier of the safety data sheet

Company and address:

Contact person:

E-mail: SDS date: SDS Version:

-
Hernon Manufacturing Inc
121 Tech Drive
FL 32771 Sanford
USA
T: +1-407-322-4000
www.hernon.com
Hernon SDS Coordinator
customerservice@hernon.com
10/24/2024
1.0

1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webpoisoncontrol (triage.webpoisoncontrol.org) to get specific guidance for your case. VelocityEHS:

+1-800-255-3924 (USA) +1-813-248-0585 (International) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) 400-120-0751 (China) 000-800-100-4086 (India) 800-099-0731 (Mexico) Contract #: (MIS0002665)

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture



Skin Irrit. 2; H315, Causes skin irritation.
Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Irrit. 2; H319, Causes serious eye irritation.
Carc. 1B; H350, May cause cancer.
STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s):



Signal word:	Danger
Hazard statement(s):	Causes skin irritation. (H315) May cause an allergic skin reaction. (H317) Causes serious eye irritation. (H319) May cause cancer. (H350) May cause damage to organs through prolonged or repeated exposure. (H373)
Precautionary statement(s):	
General:	-
Prevention:	Obtain special instructions before use. (P201) Do not breathe vapour/mist. (P260) Wash hands thoroughly after handling. (P264) Contaminated work clothing should not be allowed out of the workplace. (P272) Wear eye protection/protective clothing. (P280)
Response:	 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) IF exposed or concerned: Get medical advice/attention. (P308+P313) Get medical advice/attention if you feel unwell. (P314) If skin irritation or rash occurs: Get medical advice/attention. (P333+P313) If eye irritation persists: Get medical advice/attention. (P337+P313) Take off contaminated clothing and wash it before reuse. (P362+P364)
Storage:	-
Disposal:	Dispose of contents/container in accordance with local regulation (P501)
Additional labelling:	Restricted to professional users.
Other bazards	

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.



3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Aliphatic Urethane Methacrylate	CAS No.: Confidential	30-60%	Skin Irrit. 2, H315 Eye Irrit. 2B, H320	[19]
2-hydroxyethyl methacrylate	CAS No.: 868-77-9	10-30%	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319	
Propylidynetrimethyl trimethacrylate	CAS No.: 3290-92-4	5-20%		
Bisphenol A Polyethylene glycol diether dimethacrylate	CAS No.: 41637-38-1	5-10%		
Polyethylene Glycol Dimethacrylate	CAS No.: 25852-47-5	3-7%	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT SE 3, H335	
phenyl bis(2,4,6- trimethylbenzoyl)- phosphine oxide	CAS No.: 162881-26-7	1-5%	Skin Sens. 1A, H317	
Hydroxycyclohexyl phenyl ketone	CAS No.: 947-19-3	1-5%		
Cumene hydroperoxide	CAS No.: 80-15-9	1-5%	Org. Perox. E, H242 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 (SCL: 10.00 %) Skin Irrit. 2, H315 (SCL: 3.00 %) Eye Dam. 1, H318 Acute Tox. 3, H331 STOT SE 3, H336 STOT RE 2, H373	
maleic acid	CAS No.: 110-16-7	1-5%	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335	
Cumene	CAS No.: 98-82-8	0.1-1%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 Carc. 1B, H350	



Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: FIRST-AID MEASURES

Description of first aid measures 4.1. General information: If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink. Inhalation: Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her. Skin contact: Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention. If in eyes: Flush eyes immediately with plenty of water or Eve contact: isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport. Ingestion: If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material. Burns: Not applicable.

4.2. Most important symptoms and effects, both acute and delayed Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

4.3. Indication of any immediate medical attention and special treatment needed IF exposed or concerned:

Get immediate medical advice/attention.



Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are: Sulphur oxides Nitrogen oxides (NO_x) Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **6.1. Personal precautions, protective equipment and emergency procedures** Avoid direct contact with spilled substances. Ensure adequate ventilation, especially in confined areas. Contaminated areas may be slippery.
- **6.2. Environmental precautions** Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.
- 6.3. Methods and material for containment and cleaning up Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
 Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste. See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid direct contact with the product. Avoid contact during pregnancy and while nursing. Smoking, drinking and consumption of food is not allowed in the work area.



See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s).

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material:

al: Always store in containers of the same material as the original container.

Storage conditions:

Keep at temperatures between 7 and 29 °C. Dry, cool and well ventilated Protect from moisture. Protect from sunlight. Store away from heat, sparks, flames, or other sources of ignition.

Incompatible materials:

Reducing agents Strong oxidizing agents Alkali Acids Metal Free radical initiators Peroxides

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Cumene Long term exposure limit (OSHA Table Z-1) (mg/m³): 245 Long term exposure limit (OSHA Table Z-1) (ppm): 50 Long term exposure limit (ACGIH TLV) (ppm): 50

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:	Smoking, drinking and consumption of food is not allowed in the work area.
Exposure scenarios:	There are no exposure scenarios implemented for this product.
Exposure limits:	Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.



Appropriate technical measures:	Do not recirculate outlet air that contain the substances. The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Apply standard precautions during use of the product. Avoid inhalation of vapours.
Hygiene measures:	Take off contaminated clothing and wash it before reuse.
Measures to avoid environmental exposure:	Keep damming materials near the workplace. If possible, collect spillage during work.
 	• • • • •

Individual protection measures, such as personal protective equipment

Generally:

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

Respiratory Equipment:

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.

Skin protection:

Recommended	Type/Category	Standards	
-	Protective Clothing		R

Hand protection: Nitrile Rubber

Eye protection:

Туре	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Red
Odor:	Mild
Odor threshold (ppm):	No data available
рН:	No data available
Density (g/cm³):	1.09
Kinematic viscosity:	No data available
Particle characteristics:	No data available

Phase changes



No data available
Does not apply to liquids.
>300
>149
No data available
No data available
No data available
>200
>93.3
No data available
No data available
No data available
Slightly soluble
No data available
No data available
No data available
No data available.
No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies None known.

10.4. Conditions to avoid

Incompatible Materials Extremes of temperature Mechanical influences (e.g. Shock, pressure, impact, friction). Fire, sparks or other ignition sources. Moisture

10.5. Incompatible materials

Strong oxidizing agents Reducing agents Alkali



Acids Free radical initiators Metal Peroxides

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Other information

Cumene has been classified by IARC as a group 2B carcinogen.

SECTION 12: ECOLOGICAL INFORMATION



- 12.1. Toxicity No data available.
 12.2. Persistence and degradability Based on available data, the classification criteria are not met.
 12.3. Bioaccumulative potential Based on available data, the classification criteria are not met.
 12.4. Mobility in soil No data available.
 12.5. Results of PBT and vPvB assessment This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
- **12.6.** Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

Cumene hydroperoxide is listed with EPA Hazardous Waste Number: U096 Cumene is listed with EPA Hazardous Waste Number: U055

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
DOT	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propylidynetrimethyl trimethacrylate)	Transport hazard class: 9 Label: 9 Classification code: M6	III	No	Limited quantitie s: 5 L Tunnel restrictio n code: (-) See below for additiona l informati on.
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propylidynetrimethyl trimethacrylate)	Transport hazard class: 9 Label: 9 Classification code: M6	III	No	Limited quantitie s: 5 L EmS: F-A



	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
						S-F See below for additiona l informati on.
ΙΑΤΑ		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propylidynetrimethyl trimethacrylate)	Transport hazard class: 9 Label: 9 Classification code: M6	III	No	See below for additiona l informati on.

* Packing group

** Environmental hazards

Additional information

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of DOT/IMDG/IATA provided the packaging's meet the general specifications for packaging: Part 178 (DOT) / 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport. IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

- **14.6.** Special precautions for user Not applicable.
- **14.7.** Transport in bulk according to IMO instruments No data available.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. U.S. Federal regulations

TSCA (the non-confidential portion):

Aliphatic Urethane Methacrylate is listed 2-hydroxyethyl methacrylate is listed Propylidynetrimethyl trimethacrylate is listed Bisphenol A Polyethylene glycol diether dimethacrylate is



	listed Polyethylene Glycol Dimethacrylate is listed phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide is listed Hydroxycyclohexyl phenyl ketone is listed Cumene hydroperoxide is listed maleic acid is listed Cumene is listed
Clean Air Act:	Cumene is regulated as a hazardous air pollutant (HAPS)
EPCRA Section 302:	None of the components are listed
EPCRA Section 304:	None of the components are listed
EPCRA section 313:	Cumene hydroperoxide is listed Cumene is listed
CERCLA:	Cumene hydroperoxide is regulated with a Reportable Quantity (RQ) of: 10 pounds maleic acid is regulated with a Reportable Quantity (RQ) of: 5000 pounds Cumene is regulated with a Reportable Quantity (RQ) of: 5000 pounds
Hazardous chemical inventory reporting:	This product is subject to Tier II reporting.
State regulations	
California / Prop. 65:	Cumene is known to cause: Cancer —
Massachusetts / Right To Know Act:	Cumene hydroperoxide is listed maleic acid is listed Cumene is listed
New Jersey / Right To Know Act:	Cumene hydroperoxide / Substance number: 0543 Cumene hydroperoxide is on the Special Health Hazard Substance List
	 maleic acid / Substance number: 1151
	Cumene / Substance number: 0542 Cumene is on the Special Health Hazard Substance List
New York / Right To Know Act:	— Cumene hydroperoxide is listed Cumene hydroperoxide is regulated with a Reportable Quantity (RQ) of: 10 pounds Cumene hydroperoxide is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds
	— maleic acid is listed maleic acid is regulated with a Reportable Quantity (RQ) of: 5000 pounds maleic acid is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
	Cumene is listed



Cumene is regulated with a Reportable Quantity (RQ) of: 5000 pounds Cumene is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds

Pennsylvania / Right To Know Act:

Cumene hydroperoxide is listed Cumene hydroperoxide is hazardous to the environment (E)

maleic acid is listed maleic acid is hazardous to the environment (E)

Cumene is listed Cumene is hazardous to the environment (E)

15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

15.5. Demands for specific education No specific requirements.

15.6. Additional information

- Not applicable.
- **15.7.** Chemical safety assessment No
- 15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H226, Flammable liquid and vapour.

- H242, Heating may cause a fire.
- H302, Harmful if swallowed.
- H304, May be fatal if swallowed and enters airways.
- H312, Harmful in contact with skin.
- H314, Causes severe skin burns and eye damage.
- H315, Causes skin irritation.
- H317, May cause an allergic skin reaction.
- H318, Causes serious eye damage.
- H319, Causes serious eye irritation.
- H320, Causes eye irritation
- H331, Toxic if inhaled.

H335, May cause respiratory irritation.

- H336, May cause drowsiness or dizziness.
- H350, May cause cancer.

H373, May cause damage to organs through prolonged or repeated exposure.

The full text of identified uses as mentioned in section 1



None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service CERCLA = Comprehensive Environmental Response Compensation and Liability Act DOT = Department of Transportation EINECS = European Inventory of Existing Commercial chemical Substances EPCRA = Emergency Planning and Community Right-To-Know Act GHS = Globally Harmonized System of Classification and Labelling of Chemicals HCIS = Hazardous Chemical Information System HNOC = Hazards Not Otherwise Classified IARC = International Agency for Research on Cancer IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health OECD = Organisation for Economic Co-operation and Development OSHA = Occupational Safety and Health Administration PBT = Persistent, Bioaccumulative and Toxic RCRA = Resource Conservation and Recovery Act RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SARA = Superfund Amendments and Reauthorization Act SCL = A specific concentration limit. STEL = Short-term exposure limits STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TSCA = The Toxic Substances Control Act TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The safety data sheet is validated by

SDS Coordinator

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in



section 1) and is not necessarily correct for use with other chemicals/products. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. Country-language: US-en