

SAFETY DATA SHEET

Issue Date 09-Jul-2015

Revision Date 21-Dec-2015

Version 1

1. IDENTIFICATION		
Product identifier		
Product Name	Shot Shell Crimp Sealant 721	
Other means of identification		
Product Code	MS-721	
UN/ID no.	None	
Synonyms	None	
Recommended use of the chem	ical and restrictions on use	
Recommended Use	Adhesives and/or sealants.	
Uses advised against	None known	
Details of the supplier of the saf	ety data sheet	
Manufacturer Address		
Hernon Manufacturing Inc.		
121 Tech Drive		
Sanford, FL 32771		
800-527-0004		

Emergency telephone number Company Phone Number Emergency Telephone

407-322-4000 Chemtel 800-255-3924

2. HAZARDS IDENTIFICATION

Classification

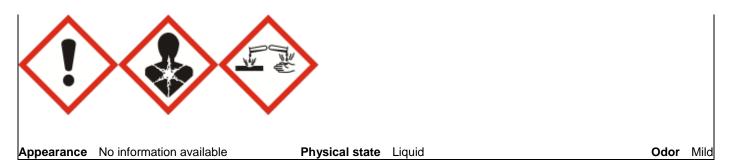
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Danger

Hazard statements Harmful if swallowed Harmful in contact with skin Harmful if inhaled Causes serious eye damage Suspected of causing cancer May cause respiratory irritation May cause damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Keep away from flames and hot surfaces. - No smoking Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

Get medical advice/attention 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 Immediately call a POISON CENTER or doctor IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Immediately call a POSION CENTER or doctor In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Epoxy Diacrylate	PROPRIETARY	40-60	*
ISOBORNYL ACRYLATE	5888-33-5	30-50	*
N-VINYL-2- PYRROLIDINONE	88-12-0	5-10	*
Photoinitiator	1462881-26-7	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 effect	ts, 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			
<u>Suitable extinguishing media</u> Use CO2, dry chemical, or foam.				
Unsuitable extinguishing media No information available.				
Specific hazards arising from the ch No information available.	emical			
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 containm	ent 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.

Incompatible materials

Reducing agents. Strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N-VINYL-2- PYRROLIDINONE 88-12-0	TWA: 0.05 ppm	-	-
Appropriate opgingering controls			

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 Appearance Color	Liquid No information available Clear yellow	Odor Odor threshold	Mild No information available
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Relative density Water solubility Solubility in other solvents Partition coefficient Autoignition temperature	ValuesDoes not applyNo information available> 149 °C / 300 °F> 93 °C / 200 °FNo information availableNo information availableNo information availableSo information availableNo information availableNo information availableNo information availableNo information availableSo information availableSo information availableNo information available	<u>Remarks • Method</u>	

Decomposition temperature
Kinematic viscosity
Dynamic viscosity
Explosive properties
Oxidizing properties

Other Information

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

No information available No information available No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stabilityStable under normal conditions.Possibility of Hazardous ReactionsNone under normal processing.Hazardous polymerizationHazardous polymerization

Hazardous polymerization does not occur.

<u>Conditions to avoid</u> Incompatible materials. <u>Incompatible materials</u> Reducing agents. Strong oxidizers. <u>Hazardous Decomposition Products</u> Carbon oxides. Nitrogen oxides (NOx). Irritating organic vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May cause irritation of respiratory tract.	
Eye contact	Irritating to eyes.	
Skin contact	May be harmful in contact with skin.	
Ingestion	May be harmful if swallowed.	

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ISOBORNYL ACRYLATE 5888-33-5	= 4890 mg/kg (Rat)	>5 g/kg (Rabbit)	_
N-VINYL-2- PYRROLIDINONE 88-12-0	= 830 mg/kg (Rat)	= 560 mg/kg (Rabbit)	= 3.07 mg/L (Rat)4 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 informatior	n available.			
Carcinogenicity	The table belo	The table below indicates whether each agency has listed any ingredient as a carcinogen			
Chemical Name	ACGIH	IARC	NTP	OSHA	
N-VINYL-2- PYRROLIDINONE 88-12-0	A3	Group 3	-	-	
Reproductive toxicity STOT - single exposure STOT - repeated exposure Aspiration hazard	Irritant	ontains a chemical which i n available.	s known or suspected re	productive hazard	

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	3,180.00 mg/kg
ATEmix (dermal)	3,616.00 mg/kg
ATEmix (inhalation-dust/mist)	13.08 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
N-VINYL-2- PYRROLIDINONE	780: 72 h Desmodesmus	-	45: 48 h Daphnia species mg/L
88-12-0	subspicatus mg/L EC50		EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
N-VINYL-2- PYRROLIDINONE	0.4
88-12-0	

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

14. TRANSPORT INFORMATION

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

Special Provisions	None
	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

<u>SARA 313</u>

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

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)

<u>CERCLA</u>

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

US State Regulations

California Proposition 65

This product contains chemicals known to the state of California to cause birth defects or other reproductive harm N-VINYL-2- PYRROLIDINONE

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
N-VINYL-2- PYRROLIDINONE	Х	-	-
88-12-0			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

<u>NFPA</u>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2*	Flammability 1	Physical hazards 2	Personal protection X

Prepared By	SDS coordinator
Issue Date	09-Jul-2015
Revision Date	21-Dec-2015
Revision Note	
No information available	
<u>Disclaimer</u>	

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