

SAFETY DATA SHEET

Issue Date 13-Feb-2019 Revision Date 13-Feb-2019 Version 1

1. IDENTIFICATION

Product identifier

Product Name Ultrabond 773

Other means of identification

Product Code MS-773 UN/ID no. UN 3082 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use UV 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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
May cause respiratory irritation

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Appearance No information available

Physical state Gel

Odor Mild

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

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/physician

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed May be harmful in contact with skin Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Substance</u>

Chemical Name	CAS No.	Weight-%	Trade Secret
HYDROXYETHYL METHACRYLATE	868-77-9	10 - 30	*
ISOBORNYL ACRYLATE	5888-33-5	10 - 30	*
ACRYLIC ACID	79-10-7	1 - 5	*
T-BUTYL PERBENZOATE	614-45-9	1 - 5	*
PHOTOINITIATOR	162881-26-7	0.1 - 1	*
MALEIC ACID	110-16-7	0.1 - 1	*

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

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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 physiciansTreat 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

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

confined areas.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Collect spillage. See

Section 12 for additional ecological information.

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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

Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly Advice on safe handling

after handling. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 46°F and 82°F (8°C and 28°C).

Reducing agents. Strong oxidizers. Incompatible materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACRYLIC ACID	TWA: 2 ppm	(vacated) TWA: 10 ppm	TWA: 2 ppm
79-10-7	S*	(vacated) TWA: 30 mg/m ³	TWA: 6 mg/m ³
		(vacated) S*	

Appropriate engineering controls

Engineering Controls Showers

> Eyewash stations Ventilation systems.

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.

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 No information available Odor

Color Clear light yellow **Odor threshold** No information available

Remarks • Method **Property** <u>Values</u>

Does not apply

Melting point / freezing point No information available

Boiling point / boiling range> 149 °C / 300 °FFlash point> 93.3 °C / 200 °FEvaporation rateNo information availableFlammability (solid, gas)No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available Relative density No information available Water solubility No information available 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
Molecular weight
VOC Content (%)
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.

Conditions to avoid

Incompatible materials.

Incompatible materials

Reducing agents. Strong oxidizers.

Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx). Irritating organic vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

InhalationNo data available.Eye contactNo data available.Skin contactNo data available.IngestionNo data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
HYDROXYETHYL	= 5050 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
METHACRYLATE 868-77-9			
ISOBORNYL ACRYLATE 5888-33-5	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
ACRYLIC ACID 79-10-7	= 193 mg/kg (Rat) = 33500 μg/kg (Rat)	= 280 μL/kg (Rabbit)= 295 mg/kg (Rabbit)	= 11.1 mg/L (Rat) 1 h = 3.6 mg/L (Rat) 4 h
T-BUTYL PERBENZOATE 614-45-9	= 1012 mg/kg (Rat)	-	-
MALEIC ACID 110-16-7	= 708 mg/kg (Rat)	= 1560 mg/kg (Rabbit)	> 720 mg/m ³ (Rat) 1 h
PHOTOINITIATOR 162881-26-7	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Information on toxicological effects

Symptoms No information available.

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

Sensitization Germ cell mutagenicityNo information available.
No information available.

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
ACRYLIC ACID	-	Group 3	-	-
79-10-7				

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
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)
 2,992.50 mg/kg

 ATEmix (dermal)
 3,328.00 mg/kg mg/l

ATEmix (inhalation-dust/mist) 2.45 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
HYDROXYETHYL	-	213 - 242: 96 h Pimephales	-
METHACRYLATE		promelas mg/L LC50 flow-through	
868-77-9		227: 96 h Pimephales promelas	
		mg/L LC50	
ACRYLIC ACID	0.17: 96 h Pseudokirchneriella	222: 96 h Brachydanio rerio mg/L	270: 24 h Daphnia magna mg/L
79-10-7	subcapitata mg/L EC50 0.04: 72 h	LC50 semi-static	LC50 Static 95: 48 h Daphnia
	Desmodesmus subspicatus mg/L		magna mg/L EC50
	EC50		
MALEIC ACID	-	5: 96 h Pimephales promelas mg/L	250 - 400: 48 h Daphnia magna
110-16-7		LC50 static	mg/L EC50

Persistence and degradability

No information available.

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Bioaccumulation

Chemical Name	Partition coefficient
HYDROXYETHYL METHACRYLATE	0.47
868-77-9	
ACRYLIC ACID	0.38 - 0.46
79-10-7	
MALEIC ACID	-0.79 - 0.32
110-16-7	

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.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
ACRYLIC ACID	-	-	=	U008
79-10-7				

Chemical Name	California Hazardous Waste Status
T-BUTYL PERBENZOATE	Ignitable
614-45-9	Reactive

14. TRANSPORT INFORMATION

DOT

<u>UN/ID</u> no. UN 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Isobornyl Acrylate)

Hazard Class 9
Packing Group III

Special Provisions 8, 146, 173, 335, IB3, T4, TP1, TP29

Marine pollutant Yes

Description Note: Not regulated for ground transport

IATA

UN/ID no. UN 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Isobornyl Acrylate)

Hazard Class 9
Packing Group III

Special Provisions A97, A158, A197

Description Limited Quantities: 5L, 30 kg gross weight

IMDG

UN/ID no. UN 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Isobornyl Acrylate)

Hazard Class9Packing GroupIIIEmS-No.F-A, S-FSpecial Provisions274, 335, 969

Marine pollutant Yes

Description Limited Quantities: 5L, 30 kg gross weight

15. REGULATORY INFORMATION

International Inventories

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

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

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 contains a chemical or 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 %
ACRYLIC ACID - 79-10-7	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 contains the following substances which are regulated 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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
ACRYLIC ACID	5000 lb	-	RQ 5000 lb final RQ
79-10-7			RQ 2270 kg final RQ
MALEIC ACID	5000 lb	=	RQ 5000 lb final RQ
110-16-7			RQ 2270 kg final RQ

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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
ACRYLIC ACID	X	X	X
79-10-7			
T-BUTYL PERBENZOATE	X	X	X
614-45-9			
MALEIC ACID	X	X	X
110-16-7			

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 - Flammability - Instability - Physical and Chemical

Properties -

HMIS Health hazards - Flammability - Physical hazards - Personal protection -

Prepared By SDS coordinator Issue Date 13-Feb-2019 Revision Date SDS coordinator 13-Feb-2019

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