

Issue Date 28-Aug-2018

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Version 1

1. IDENTIFICATION**Product identifier****Product Name** ReAct 795**Other means of identification****Product Code** MS-795**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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Label elements**Emergency Overview****Danger****Hazard statements**

Causes severe skin burns and eye damage

May cause an allergic skin reaction

May cause respiratory irritation

**Appearance** No information available**Physical state** Liquid**Odor** Sharp**Precautionary Statements - Prevention**

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

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

Contaminated work clothing must not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

Precautionary Statements - ResponseIF 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): 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

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

May be harmful in contact with skin

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substance**

Chemical Name	CAS No.	Weight-%	Trade Secret
URETHANE METHACRYLATE OLIGOMER	PROPRIETARY	15 - 40	*
HYDROXYPROPYL METHACRYLATE	27813-02-1	10 - 30	*
ISOBORNYL METHACRYLATE	7534-94-3	5 - 10	*
METHACRYLIC ACID	79-41-4	3 - 7	*
HYDROXYETHYL METHACRYLATE	868-77-9	3 - 7	*
T-BUTYL PERBENZOATE	614-45-9	1 - 5	*
MALEIC ACID	110-16-7	1 - 5	*
HYDROQUINONE	123-31-9	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

Hazardous combustion products Carbon oxides. Nitrogen oxides (NO_x). 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 Use personal protective equipment as required. Ensure adequate ventilation, especially in 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.

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	Remove all sources of ignition. 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.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep at temperatures between 46°F and 82°F (8°C and 28°C). Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
Incompatible materials	Strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHACRYLIC ACID 79-41-4	TWA: 20 ppm	(vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m ³ (vacated) S*	TWA: 20 ppm TWA: 70 mg/m ³
HYDROQUINONE 123-31-9	TWA: 1 mg/m ³	TWA: 2 mg/m ³ (vacated) TWA: 2 mg/m ³	IDLH: 50 mg/m ³ Ceiling: 2 mg/m ³ 15 min

Appropriate engineering controls

Engineering Controls	Showers Eyewash stations Ventilation systems.
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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.
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9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid	Odor	Sharp
Appearance	No information available	Odor threshold	No information available
Color	Off White - Light yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Does not apply	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 149 °C / 300 °F	
Flash point	> 93.3 °C / 200 °F	
Evaporation rate	No information available	
Flammability (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	1.07	
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.

Conditions to avoid

Incompatible materials.

Incompatible materials

Strong oxidizers.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
HYDROXYPROPYL METHACRYLATE 27813-02-1	= 11200 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
METHACRYLIC ACID 79-41-4	= 1060 mg/kg (Rat)	500 - 1000 mg/kg (Rabbit) = 500 mg/kg (Rabbit)	= 7.1 mg/L (Rat) 4 h
HYDROXYETHYL METHACRYLATE 868-77-9	= 5050 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
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
HYDROQUINONE 123-31-9	= 298 mg/kg (Rat)	= 74800 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
HYDROQUINONE 123-31-9	A3	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) 684.50 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
HYDROXYPROPYL METHACRYLATE 27813-02-1	-	493: 48 h Leuciscus idus melanotus mg/L LC50 static	-
HYDROXYETHYL METHACRYLATE 868-77-9	-	213 - 242: 96 h Pimephales promelas mg/L LC50 flow-through 227: 96 h Pimephales promelas mg/L LC50	-
MALEIC ACID 110-16-7	-	5: 96 h Pimephales promelas mg/L LC50 static	250 - 400: 48 h Daphnia magna mg/L EC50
HYDROQUINONE 123-31-9	0.335: 72 h Pseudokirchneriella subcapitata mg/L EC50 13.5: 120 h Desmodesmus subspicatus mg/L EC50	0.044: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.17: 96 h Brachydanio rerio mg/L LC50 0.044: 96 h Pimephales promelas mg/L LC50 flow-through 0.1 - 0.18: 96 h Pimephales promelas mg/L LC50 static	0.29: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
HYDROXYPROPYL METHACRYLATE 27813-02-1	0.97
METHACRYLIC ACID 79-41-4	0.93
HYDROXYETHYL METHACRYLATE 868-77-9	0.47
MALEIC ACID 110-16-7	-0.79 - 0.32
HYDROQUINONE 123-31-9	0.5

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
HYDROQUINONE 123-31-9	-	Included in waste stream: K060	-	-

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

14. TRANSPORT INFORMATION**DOT**

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

IATA

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

IMDG

UN/ID no. Not regulated
 Proper shipping name None
 Hazard Class Not regulated
 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 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 %
HYDROQUINONE - 123-31-9	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 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)
MALEIC ACID 110-16-7	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
HYDROQUINONE 123-31-9	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 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
METHACRYLIC ACID 79-41-4	X	X	X
T-BUTYL PERBENZOATE 614-45-9	X	X	X
MALEIC ACID 110-16-7	X	X	X
HYDROQUINONE 123-31-9	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
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<u>NFPA</u>	Health hazards -	Flammability -	Instability -	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards -	Flammability -	Physical hazards -	Personal protection -

Prepared By	SDS coordinator
Issue Date	28-Aug-2018
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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