

Issue Date 27-May-2015

Revision Date 06-Jun-2024

Version 7

1. IDENTIFICATION

Product identifier

Product Name Fusionbond 784

Other means of identification

Product Code MS-784
UN/ID no. UN 1133
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesives.
Uses advised against None known

Details of the supplier of the safety data sheet

Manufacturer Address
Heron 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 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable liquids | Category 3 |

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of causing cancer
May cause respiratory irritation
Flammable liquid and vapor



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
 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
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ ventilating / lighting/ .? / equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool

Precautionary Statements - Response

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

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. Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---------------------|---------|----------|--------------|
| METHYL METHACRYLATE | 80-62-6 | 30 - 60 | * |

| | | | |
|--------------------------------------|------------|---------|---|
| METHACRYLIC ACID | 79-41-4 | 7 - 13 | * |
| T-BUTYL PERBENZOATE | 614-45-9 | 1 - 5 | * |
| BUTYLENE GLYCOL DIMETHACRYLATE, 1, 3 | 1189-08-8 | 1 - 5 | * |
| TITANIUM DIOXIDE | 13463-67-7 | 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 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

No Information Available.

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. 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. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

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 Reducing agent. Strong oxidizer.

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

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------------------|---|--|---|
| METHYL METHACRYLATE 80-62-6 | STEL: 100 ppm TWA: 50 ppm | TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m ³ | IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m ³ |
| 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 |
| TITANIUM DIOXIDE 13463-67-7 | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust | IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale |
| BUTYL HYDROXY TOLUENE 128-37-0 | TWA: 2 mg/m ³ inhalable fraction and vapor | (vacated) TWA: 10 mg/m ³ | TWA: 10 mg/m ³ |

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. 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 | Odor | Sharp |
| Appearance | No Information Available | Odor threshold | No Information Available |
| Color | White | | |

| <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 | > 37.8 °C / 100 °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 | < 10 mm @ 80°F | |
| Vapor density | No Information Available | |
| Relative density | 0.97 | |
| 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

Not Applicable

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Incompatible materials. Extremes of temperature and direct sunlight.

Incompatible materials

Reducing agent. Strong oxidizer.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | No known effect based on information supplied. |
| Eye contact | No known effect based on information supplied. |
| Skin contact | No known effect based on information supplied. |
| Ingestion | No known effect based on information supplied. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------------|------------------------------|------------------------|
| METHYL METHACRYLATE 80-62-6 | 8420 - 10000 mg/kg (Rat) | 5000 - 7500 mg/kg (Rabbit) | = 7093 ppm (Rat) 4 h |
| METHACRYLIC ACID 79-41-4 | = 1060 mg/kg (Rat) | 500 - 1000 mg/kg (Rabbit) | = 7.1 mg/L (Rat) 4 h |
| T-BUTYL PERBENZOATE 614-45-9 | = 1012 mg/kg (Rat) | - | - |
| TITANIUM DIOXIDE 13463-67-7 | > 10000 mg/kg (Rat) | - | - |
| BUTYL HYDROXY TOLUENE 128-37-0 | > 2930 mg/kg (Rat) | > 2000 mg/kg (Rat) | - |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-thiodi-2,1-ethanediy l ester 41484-35-9 | = 6300 mg/kg (Rat) | Vis-cous | - |

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 No Information Available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------------------|-------|----------|-----|------|
| METHYL METHACRYLATE 80-62-6 | - | Group 3 | - | - |
| TITANIUM DIOXIDE 13463-67-7 | - | Group 2B | - | X |
| BUTYL HYDROXY TOLUENE 128-37-0 | - | 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) 3,488.80 mg/kg

ATEmix (dermal) 3,200.20 mg/kg

ATEmix (inhalation-vapor) 36.9409 mg/l

12. ECOLOGICAL INFORMATION

Yes.

Ecotoxicity

Harmful to aquatic life with long lasting effects

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|---|--|----------------------------------|
| METHYL METHACRYLATE 80-62-6 | 170: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 79: 96 h Oncorhynchus mykiss mg/L LC50 static | 69: 48 h Daphnia magna mg/L EC50 |
| METHACRYLIC ACID 79-41-4 | - | 85: 96 h Oncorhynchus mykiss mg/L LC50 flow-through | - |
| T-BUTYL PERBENZOATE 614-45-9 | - | 1.6: 96 h Danio rerio mg/L LC50 semi-static | - |
| BUTYL HYDROXY TOLUENE 128-37-0 | 6: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.42: 72 h Desmodesmus subspicatus mg/L EC50 | - | - |
| Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-thiodi-2,1-ethanediyl ester 41484-35-9 | - | 57: 96 h Danio rerio mg/L LC50 static | - |

Persistence and degradability

No Information Available.

Bioaccumulation

No Information Available.

| Chemical Name | Partition coefficient |
|-----------------------------------|-----------------------|
| METHYL METHACRYLATE 80-62-6 | 0.7 |
| METHACRYLIC ACID 79-41-4 | 0.93 |
| BUTYL HYDROXY TOLUENE 128-37-0 | 4.17 |

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 |
|--------------------------------|------|-----------------------------------|------------------------|------------------------|
| METHYL METHACRYLATE 80-62-6 | U162 | Included in waste stream: F039 | - | U162 |

| Chemical Name | California Hazardous Waste Status |
|---------------------------------|-----------------------------------|
| METHYL METHACRYLATE 80-62-6 | Toxic Ignitable |
| T-BUTYL PERBENZOATE 614-45-9 | Ignitable Reactive |

14. TRANSPORT INFORMATION

DOT

UN/ID no. UN1133
Proper shipping name Adhesive
Hazard Class 3
Packing Group III
Special Provisions None
Limited Quantities (Not more than 5L) *

IATA

UN/ID no. UN1133
Proper shipping name Adhesive
Hazard Class 3
Packing Group III
Special Provisions None
Limited Quantities (Not more than 5L) *

IMDG

UN/ID no. UN1133
Proper shipping name Adhesive
Hazard Class 3
Packing Group III
Special Provisions None
Marine pollutant Yes
Limited Quantities (Not more than 5L) *

*See 173.121 in CFR 49
(Capacity of Packaging <30L)

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/NDL - 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 % |
|-------------------------------|-------------------------------|
| METHYL METHACRYLATE - 80-62-6 | 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 |
|--------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| METHYL METHACRYLATE 80-62-6 | 1000 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) |
|--------------------------------|--------------------------|----------------|---|
| METHYL METHACRYLATE 80-62-6 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|-------------------------------|---------------------------|
| TITANIUM DIOXIDE - 13463-67-7 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------------|------------|---------------|--------------|
| METHYL METHACRYLATE 80-62-6 | X | X | X |
| METHACRYLIC ACID 79-41-4 | X | X | X |
| T-BUTYL PERBENZOATE 614-45-9 | X | X | X |
| TITANIUM DIOXIDE 13463-67-7 | X | X | X |
| BUTYL HYDROXY TOLUENE 128-37-0 | 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

| | | | | |
|-------------|------------------|----------------|--------------------|---|
| <u>NFPA</u> | Health hazards 2 | Flammability 2 | Instability 2 | Physical and Chemical Properties Not Applicable |
| <u>HMIS</u> | Health hazards 2 | Flammability 2 | Physical hazards 2 | Personal protection B |

Prepared By SDS coordinator
Issue Date 27-May-2015
Revision Date 08-Mar-2024

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