

1. Identification

| | | |
|---|---|--|
| Product identifier | Gasket Maker | |
| Other means of identification | | |
| FIR No. | 014716 | |
| Recommended use | Flexible, anaerobic gasketing material | |
| Recommended restrictions | None known. | |
| Manufacturer/Importer/Supplier/Distributor information | | |
| Supplier | | |
| Company Name | Ford Motor Company | |
| Address | Attention: MSDS Information, P.O. Box 1899 Dearborn, Michigan 48121 USA | |
| Telephone | 1-800-392-3673 | |
| MSDS Information | 1-800-448-2063 msds@brownart.com | |
| Emergency telephone numbers | Poison Control Center: USA and Canada: 1-800-959-3673 INFOTRAC (Transportation): USA and Canada 1-800-535-5053 | |

2. Hazard(s) identification

| | | |
|------------------------------|--|------------|
| Physical hazards | Not classified. | |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 1 |
| | Sensitization, skin | Category 1 |
| | Specific target organ toxicity, repeated exposure | Category 2 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 3 |
| | Hazardous to the aquatic environment, long-term hazard | Category 3 |
| OSHA defined hazards | Not classified. | |

Label elements



| | |
|--------------------------------|---|
| Signal word | Danger |
| Hazard statement | Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects. |
| Precautionary statement | |
| Prevention | Do not breathe mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves. Wear eye/face protection. |
| Response | If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. 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/doctor. Take off contaminated clothing and wash before reuse. |
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |

Hazard(s) not otherwise classified (HNOC) May be harmful if absorbed through skin. May cause irritation of respiratory tract.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|---------|
| 2-hydroxyethyl methacrylate | | 868-77-9 | 3 - < 5 |
| .ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE | | 80-15-9 | 1 - < 3 |
| ACRYLIC ACID | | 79-10-7 | < 1 |

Specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting.

Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|----------------------------|------|-------|
| ACRYLIC ACID (CAS 79-10-7) | TWA | 2 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|----------------------------|------|---------|
| ACRYLIC ACID (CAS 79-10-7) | TWA | 6 mg/m3 |
| | | 2 ppm |

US. Workplace Environmental Exposure Level (WEEL) Guides

| Components | Type | Value |
|---|------|---------|
| .ALPHA.,.ALPHA.-DIMETHYL BENZYL HYDROPEROXIDE (CAS 80-15-9) | TWA | 6 mg/m3 |
| | | 1 ppm |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

ACRYLIC ACID (CAS 79-10-7) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

ACRYLIC ACID (CAS 79-10-7) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

ACRYLIC ACID (CAS 79-10-7) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

ACRYLIC ACID (CAS 79-10-7) Can be absorbed through the skin.

US WEEL Guides: Skin designation

.ALPHA.,.ALPHA.-DIMETHYL BENZYL HYDROPEROXIDE (CAS 80-15-9) Can be absorbed through the skin.

Appropriate engineering controls

Use adequate ventilation to control airborne concentrations below the exposure limits/guidelines. If user operations generate a vapor, dust and/or mist, use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits/guidelines.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|--|
| Eye/face protection | Wear safety glasses with side shields (or goggles) and a face shield. Wear safety glasses with side shields (or goggles). |
| Skin protection | |
| Hand protection | Suitable chemical protective gloves should be worn when the potential exists for prolonged or repeated skin exposure. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Neoprene gloves are recommended. Nitrile gloves are recommended. |
| Other | Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant clothing if applicable. |
| Respiratory protection | If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard 29 CFR 1910.134 and/or Canadian Standard CSA Z94.4. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. |

9. Physical and chemical properties

Appearance

| | |
|---|---------------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Red. |
| Odor | Mild. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | > 302 °F (> 150 °C) |
| Flash point | > 203.0 °F (> 95.0 °C) ASTM D93 |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | < 5 mm Hg |
| Vapor pressure temp. | 69.8 °F (21 °C) |
| Vapor density | > 1 (AIR=1) |
| Relative density | 1.08 - 1.18 |
| Relative density temperature | 39.2 °F (4 °C) |
| Solubility(ies) | |
| Solubility (water) | SLIGHT |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

Other information

VOC (Weight %) 1.5 % CAM310

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Amines.

Hazardous decomposition products Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information**Information on likely routes of exposure**

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May cause an allergic skin reaction.

| Components | Species | Calculated/Test Results |
|--|--------------------------------------|-------------------------|
| .ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE (CAS 80-15-9) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rat | 0.5 ml/kg |
| <i>Inhalation</i> | | |
| LC50 | Mouse | 200 mg/l, 4 Hours |
| 2-hydroxyethyl methacrylate (CAS 868-77-9) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Mouse | 3275 mg/kg |
| | | 5.1 ml/kg |
| | Rat | 5050 mg/kg |
| ACRYLIC ACID (CAS 79-10-7) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Rat | 1200 mg/l, 4 Hours |
| <i>Oral</i> | | |
| LD50 | Mouse | 2400 mg/kg |
| | Rat | 33.5 mg/kg |
| Skin corrosion/irritation | Causes skin irritation. | |
| Serious eye damage/eye irritation | Causes serious eye damage. | |
| Respiratory or skin sensitization | | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | May cause an allergic skin reaction. | |

| | |
|---|--|
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
| IARC Monographs. Overall Evaluation of Carcinogenicity | |
| ACRYLIC ACID (CAS 79-10-7) | 3 Not classifiable as to carcinogenicity to humans. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | |
| Not listed. | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | May cause damage to organs through prolonged or repeated exposure. Eyes. Skin. Respiratory tract. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. |

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Ecotoxicity

| Components | Species | Calculated/Test Results |
|--|--|--------------------------|
| 2-hydroxyethyl methacrylate (CAS 868-77-9) | | |
| Aquatic | | |
| Fish | LC50 Fathead minnow (<i>Pimephales promelas</i>) | 213 - 242 mg/l, 96 hours |

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

| | |
|-----------------------------|------|
| 2-hydroxyethyl methacrylate | 0.47 |
| ACRYLIC ACID | 0.35 |

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

<Unspecified>

Not regulated as dangerous goods.

IATA

<Unspecified>

Not regulated as dangerous goods.

IMDG**<Unspecified>**

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.**15. Regulatory information****US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

.ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE (CAS 80-15-9) Listed.

ACRYLIC ACID (CAS 79-10-7) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories** Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No**SARA 313 (TRI reporting)**

| Chemical name | CAS number | % by wt. |
|--|------------|----------|
| .ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE | 80-15-9 | 1 - < 3 |
| ACRYLIC ACID | 79-10-7 | < 1 |

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

ACRYLIC ACID (CAS 79-10-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

US. Massachusetts RTK - Substance List

.ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE (CAS 80-15-9)

ACRYLIC ACID (CAS 79-10-7)

US. New Jersey Worker and Community Right-to-Know Act

.ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE (CAS 80-15-9)

ACRYLIC ACID (CAS 79-10-7)

US. Pennsylvania Worker and Community Right-to-Know Law

.ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE (CAS 80-15-9)

ACRYLIC ACID (CAS 79-10-7)

US. Rhode Island RTK

.ALPHA.,.ALPHA.-DIMETHYLBENZYL HYDROPEROXIDE (CAS 80-15-9)

ACRYLIC ACID (CAS 79-10-7)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. Other information, including date of preparation or last revision

Issue date 05-16-2015
Version # 01
HMIS® ratings Health: 2
Flammability: 1
Physical hazard: 0
NFPA ratings Health: 2
Flammability: 1
Instability: 0

Preparation Information and Disclaimer This document was prepared by FCSD-Toxicology, Ford Motor Company, Diagnostic Service Center II, 1800 Fairlane Drive, Allen Park, MI 48101, USA, based in part on information provided by the manufacturer. The information on this data sheet represents our current data and is accurate to the best of our knowledge as to the proper handling of this product under normal conditions and in accordance with the application specified on the packaging and/or technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user. To the extent that there are any differences between this product's Safety Data Sheet (SDS) and the consumer packaged product labels, the SDS should be followed.

Part number(s) TA-16