

FIR No.: 156626 Level: 3

Version Number: US-US-3 Release Date: 2006-09-15

1. Product and Company Identification

Product Name: Metal Bonding Adhesive

Product Code: See Attachment

Application:Metal bonding adhesiveSupplier:Ford Motor Company

Attention: MSDS Information, P.O. Box 1899

Dearborn, Michigan 48121

1-800-392-3673

**Emergency Telephone:** Poison Control Center: 1-800-959-3673

CHEMTREC: U.S. and Canada: 1-800-424-9300 CHEMTREC: International: 1-703-527-3887

2. Composition/Information on Ingredients

This chemical product is a preparation.

**Chemical Name CAS Number** Percent Hazard Concentration Classification 80-62-6 METHYL METHACRYLATE >30-60 CAA-HAP **HAZCOM** RQ **RSMSREST** WHMIS 1 **SARA 313** 79-41-4 METHACRYLIC ACID 1-5 **HAZCOM** WHMIS 1

3. Hazards Identification

Flammable liquid and vapor.

**Health:** This product may be harmful if it is absorbed through the skin.

This product is irritating to the eyes, respiratory system and skin.

This product may cause sensitization by skin contact.

This product is harmful if swallowed.

**Environment:** Material contains a chemical which is a Hazardous Air Pollutant (HAP),

regulated by the United States Clean Air Act.

4. First-Aid Measures

Inhalation: If gas/fume/vapor/dust/mist from the material is inhaled, remove the

affected person immediately to fresh air. If irritation persists, get medical attention.

**Skin Contact:** Wash skin with soap and water.

If irritation persists, get medical attention.

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Eye Contact: In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

**Ingestion:** If the material is swallowed, do not induce vomiting. Get immediate

medical attention or advice -- give several glasses of water or milk. Do not give anything by mouth to an unconscious or convulsing person.

**Notes to a Physician:** If the affected person's breathing is difficult, give oxygen.

5. Fire-Fighting Measures

**Extinguishing Media:** Dry chemical, foam, carbon dioxide, water fog.

Specific Methods: Water may be used to cool exposed containers to prevent pressure

build-up and explosion when exposed to extreme heat.

**Specific Hazards:** Due to pressure buildup, closed containers exposed to excess heat

may explode.

Empty containers may retain product residue including Flammable or Explosive vapors. Do not cut, drill, grind, or weld near full, partially full,

or empty product containers.

**Protection of Firefighters:** Fire fighters should be equipped with NIOSH-approved, self-contained

breathing apparatus (SCBA) and full protective clothing.

6. Accidental Release Measures

**Personal Precautions:** Avoid skin contact and inhalation of vapors during disposal of spills.

Eliminate all sources of ignition or flammables that may come into

contact with a spill of this material.

**Environmental Precautions:**No available information.

Methods for Cleaning Up: Absorb the spilled material with an inert absorbent (nonflammable)

material.

7. Handling and Storage

Handling:

**Technical Measures:** Keep this product from heat, sparks, or open flame.

Protect electric equipment against sparking in case of risk of

explosion.

**Precautions and Advice for Safe** 

Handling:

Do not puncture the container. Use with adequate ventilation.

**Storage:** Technical Measures: No special precautions necessary.

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**Storage Conditions:** Ground all containers of this material.

Keep the container tightly closed and in a cool, well-ventilated place.

Keep this product from heat, sparks, or open flame.

8. Exposure Controls/Personal Protection

**Engineering Measures:**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.

**Exposure Limits:** 

Chemical Name TWA 8 hr STEL/C References

METHACRYLIC ACID 20(ppm) ACGIH

OSHA

METHYL 50(ppm) 100(ppm) ACGIH

**METHACRYLATE** 

100(ppm) 410(ppm) OSHA

**Personal Protective Equipment:** 

**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.

**Hand Protection:** Use of impervious gloves is recommended, such as neoprene.

**Eye Protection:** Wear chemical goggles.

**Skin and Body Protection:** Remove contaminated clothing and wash before reuse.

**Hygiene Measures:** When using this material, do not eat, drink or smoke.

Wash thoroughly after handling.

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9. Physical and Chemical Properties

Specific Gravity: 1.13

Physical State: PASTE

Odor: SWEET

Color: OFF-WHITE

pH: N.AV

Temperature Range During which Changes

in Physical State Occur:

Boiling Point: >60 °C

Flash Point: 15.56 °C SETAFLASH

Auto-ignition Temperature: N.AV

**Explosion Properties:** 

UEL: 8.8 % LEL: 1.6 %

Vapor Density: >1 (AIR = 1)

Solubility: INSOLUBLE IN WATER

Viscosity: N.AV

Evaporation Rate: <1

10. Stability and Reactivity

Stability: Hazardous polymerization will not occur.

This is a stable material.

Conditions and Materials to Avoid: Static discharge, friction, sparks, open flames, heat and other sources

of ignition.

This product reacts with acids.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Decomposition of this product may yield oxides of nitrogen upon

decomposition.

Irritating and toxic gases or fumes may be released during a fire.

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#### 11. Toxicological Information

80-62-6 METHYL METHACRYLATE Inhalation, adult rat, LC50 = 3750 ppm 80-62-6 METHYL METHACRYLATE Oral, adult rat, LD50 = 7872 mg/kg 79-41-4 METHACRYLIC ACID Skin, adult rabbit, LD50 = 500 mg/kg

**Inhalation:** Excessive inhalation of this material causes headache, dizziness,

nausea and incoordination.

**Skin Contact:** May cause allergic skin reaction.

Prolonged and/or repeated skin contact with this product may cause

irritation/dermatitis.

12. Ecological Information

No specific aquatic data available for this product.

13. Disposal Considerations

Waste from Residues: Dispose of waste material according to Local, State, Federal, and

Provincial Environmental Regulation.

Contaminated Packaging: No available information.

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#### 14. Transport Information

#### U.S. Department of Transportation (DOT) 49 - CFR 172.101

Proper Shipping Name: Adhesives

UN Number: UN1133

Hazard Class / Division: 3
Packing Group: II

Reportable Quantity (per

packaging):

CAS RQ Name

62-53-3 >100000 ANILINE

75-56-9 >100000 PROPYLENE OXIDE

80-62-6 2857 METHYL METHACRYLATE

Regulated Quantity:

Bulk Non-Bulk Limited Quantity

X X

Label: FLAMMABLE LIQUID

#### Canadian Transportation of Dangerous Goods (T.D.G.) - TDGR Schedule II

Proper Shipping Name: ADHESIVES

UN Number: UN1133

Hazard Class / Division: 3
Packing Group: II

Regulated Quantity:

Bulk Non-Bulk Limited Quantity

X X

Label: FLAMMABLE LIQUID

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Secretary of Communication and Transportation (SCT) - NOM-002-SCT2/1994 (Mexico)

Proper Shipping Name: ADHESIVOS

UN Number: UN1133

Hazard Class/Division: 3
Packing Group: II

Regulated Quantity:

Bulk Non-Bulk Limited Quantity

X

Label: FLAMMABLE LIQUID

International and Domestic Air Transportation - ICAO & IATA Section 4.2

Proper Shipping Name: ADHESIVES

UN Number: UN1133

Χ

Hazard Class/Division: 3
Packing Group: II

Label: FLAMMABLE LIQUID

International Water Transportation - IMDG Code Amendment 31-02

Proper Shipping Name: ADHESIVES

UN Number: UN1133

Hazard Class/Division: 3

Flashpoint: 15.56 °C Setaflash

Packing Group:

Ems Number: 3-05

Regulated Quantity:

Bulk Non-Bulk Limited Quantity

X X

Label: FLAMMABLE LIQUID

#### 15. Regulatory Information

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

This product contains an ingredient(s) considered to be an environmental hazardous substance(s) by the State of New Jersey.

This product contains an ingredients(s) considered to be a hazardous substance(s) by the State of New Jersey. Material contains a chemical which is a Ford Motor Company Material of Concern. Use and release of this material should be minimized to the greatest extent possible.

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#### 16. Other Information

Key/Legend: N.AP = Not applicable; N.AV = Not available; ND = Not determined or No data; TLV = Threshold limit value; TWA = Time-weighted average; STEL = Short-term exposure limit; C = Ceiling limit

**Preparation Information:** The chemical identification and properties for this material were provided

by the manufacturer. For Canadian locations, a manufacturer's MSDS is

available upon request. Health and safety information has been evaluated by the Occupational and Environmental Health Sciences

Department, Ford Motor Company, National Parts General Office, MD74, 29500 Plymouth Road, Livonia, MI 48150, USA.

**Disclaimer:**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.

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Rotunda

# **Material Safety Data Sheet**

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**Attachment** 

Product Code	Container Size	Part of Kit	Kit Product Code
TA-1	1.7 fl. oz. (50 mL)	Sheet Metal Bonding Kit	TA-7-A(Inactive)
TA-1-A (Obsolete)	1.7 fl. oz. (50 mL)		
TA-1-B	7.6 fl. oz. (225 mL)		

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