

FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

1. Product and Company Identification

Product Name:Seam SealerProduct Code:See AttachmentApplication:Seam sealer

Supplier: 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 Concentration	Hazard Classification
XYLENE (ALL ISOMERS)	1330-20-7	1-5	PEL/TLV-US HAZCOM DSL LISTED CAA-HAP ACGIH/OSHA
PETROLEUM NAPHTHA, LIGHT AROMATIC	64742-95-6	1-5	HAZCOM DSL LISTED RSMS_D_ALL
ISOCYANIC ACID, METHYLENEDI- P-PHENYLENE ESTER	101-68-8	0.1-1	WHMIS 0.1 RSMS_D_ALL RQ PEL/TLV-US HAZCOM DSL LISTED ACGIH/OSHA CAA-HAP

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary
Application: MATS Page: 1 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

3. Hazards Identification

COMBUSTIBLE

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

Inhalation may cause allergic respiratory reaction in lungs.

This product may cause an allergic skin reaction.
This product may cause nervous system damage.
This product is harmful by inhalation and if it is swallowed.

Excessive inhalation of this material causes headache, dizziness,

nausea and incoordination.

If ingested, this product may cause gastrointestinal irritation.

Overexposure may cause liver and kidney damage.

Physical and Chemical Hazards: This product is combustible at high temperatures.

Vapor harmful.

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.

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

at least 15 minutes and seek medical attention. If irritation persists, get medical attention.

Ingestion: If the material is swallowed, get immediate medical attention or advice

-- Do not induce vomiting.

Notes to a Physician: Certain pre-existing conditions may make workers particularly

susceptible to the effects of this chemical: asthma, allergies, known

sensitivity to diisocyanates impaired pulmonary function.

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.

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 2 / 10 Official Record



FIR No.: 181251 Level: 1

Version Number: US-US-4 Release Date: 2011-12-07

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.

Irritating and/or toxic fumes and gases may be emitted upon the

product's decomposition.

Vapors are heavier than air and may travel along the ground to some

distant source of ignition and flash back.

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: Ventilate the contaminated area.

Eliminate all sources of ignition or flammables that may come into

contact with a spill of this material.

Avoid inhalation of vapors and contact with skin and eyes.

Wear appropriate protective equipment and clothing during clean-up.

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.

Precautions and Advice for Safe

Handling:

Avoid skin and eye contact.

Do not puncture or incinerate container.

Keep the container closed when not in use.

Use with adequate ventilation.

Storage: Technical Measures: Do not reuse the empty container.

Storage Conditions: Do not store near heat, spark or open flame.

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

Store this product away from acids.

Store this product away from strong oxidizing agents.

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary
Application: MATS Page: 3 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

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 STEL/C References

ISOCYANIC ACID, 0.005(ppm) ACGIH

METHYLENEDI-P-PHENYLENE ESTER

C 0.02(ppm) OSHA

XYLENE (ALL 100(ppm) 150(ppm) ACGIH ISOMERS)

100(ppm) 150(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.

Use supplied-air respiratory equipment as required.

Hand Protection: The use of neoprene gloves is recommended.

The use of nitrile-latex gloves is recommended. The use of natural rubber gloves is recommended.

Eye Protection: Wear safety glasses with side shields.

Wear chemical goggles; face shield (if splashing is possible).

Skin and Body Protection: Light protective clothing is recommended.

Wash thoroughly after handling.

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

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 4 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

9. Physical and Chemical Properties

Specific Gravity: 1.19 @4°C

Physical State: LIQUID

Form: PASTE

Odor: SOLVENT

Color: OFF-WHITE

pH: N.AP

Temperature Range During which Changes

in Physical State Occur:

Boiling Point: 138.8-153.3 °C

Flash Point: 68 °C SCC

Explosion Properties:

UEL: 7 %

LEL: 1 % Vapor Pressure: ND

Vapor Density: >1 (AIR=1)

Solubility: INSOLUBLE IN WATER

Viscosity: N.AP

Evaporation Rate: <1 (BuAc = 1)

10. Stability and Reactivity

Stability: This is a stable material.

Hazardous polymerization will not occur.

Conditions and Materials to Avoid: Isocyanates may react with strong alkalies, acids, alcohols, primary or

secondary amines, oxidizing agents, water. Foaming and spattering

may occur on contact.

This product may react with strong oxidizing agents (bleach-sodium hypochlorite, calcium hypochlorite, hydrogen peroxide, permanganate,

nitric acid, concentrated OXYGEN, perchlorates).

This product may react with strong acids.

Static discharge, friction, sparks, open flames, heat and other sources

of ignition.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and other low molecular weight

hydrocarbons.

Decomposition of this product may yield oxides of nitrogen upon

decomposition.

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

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 5 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

11. Toxicological Information

1330-20-7 XYLENE (ALL ISOMERS)

Inhalation, adult rat, LC50 = 5000 ppm (4 Hours)

1330-20-7 XYLENE (ALL ISOMERS) Oral, adult rat, LD50 = 4300 mg/kg

101-68-8 ISOCYANIC ACID, METHYLENEDI-P-PHENYLENE ESTER

Inhalation, adult rat, LC50 = 178 mg/m3

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

nausea and incoordination.

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

irritation/dermatitis.

Sensitization: Diisocyanates most notable toxic effect is the ability to sensitize people

so that they develop asthma-like respiratory symptoms when subsequently exposed to very low levels of the chemical. Workplace exposures to surprisingly low concentrations, on the order of a few parts per billion, have triggered the appearance of the symptoms: a sensation of tightness of the chest, cough, difficulty in breathing, lung irritation; stomach or intestinal upset (nausea, vomiting, diarrhea); headache, central nervous system depression(dizziness, drowsiness, weakness, fatigue, nausea, unconsciousness); allergic reactions (causes narrowing of the air passage of the lungs, sweating, flushing, hives, rapid heart rate, and lowered blood pressure); narcosis (dazed or sluggish feeling). These attacks are potentially life threatening; may be delayed in onset (occurring some hours after exposure has taken place). Diisocyanates also may irritate the upper respiratory tract, eyes, and skin. THE IRRITATIVE EFFECTS OCCUR AT LEVELS FAR ABOVE THOSE

WHICH BRING ON THE ASTHMA-LIKE ATTACKS IN

DIISOCYANATE-SENSITIZED PEOPLE.

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 6 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

Chronic (Long Term) Toxicity:

A study by the International Isocyanate Institute suggests that prolonged exposure to high concentrations of polymeric methylene bisphenlisocyanate (MDI) may increase the incidence of tumors in the lungs. This study entailed a lifetime exposure of male and female rats to an aerosol of polymeric MDI at levels up to 6 mg/m3. The tumor effects noted in the study occurred at levels that would not be tolerated in a workplace due to the irritant and sensitizing properties of MDI and in the absence of prolonged high exposures leading to irritation and sensitization, it is unlikely that tumor formation would occur. However, this report emphasizes the need to maintain exposures below the recommended occupational exposure limits.

Long-term overexposure may cause blood, liver and kidney effects. Prolonged or repeated contact may cause liver, kidney, and lung damage.

Prolonged or repeated occupational overexposure to solvents has been linked to permanent brain and nervous system damage.

This material contains butyl benzyl phthalate, prolonged or repeated overexposure to this product may damage the peripheral nerves and affect blood cells and liver function.

Xylenes consist of a mixture of ortho, meta, and para xylene isomers and 5-15% ethylbenzene. Laboratory animal studies show that rats exposed to xylene vapor during pregnancy showed embryo/fetotoxic effects. Mice exposed orally to doses producing maternal toxicity also showed embryo/fetotoxic effects. Ethylbenzene has been shown to cause tumors in laboratory animals at HIGH inhalation exposures (750 ppm). Tumors were not observed in laboratory animals at LOWER (<250 ppm). Human data is not available.

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 consideration given when disposed of according to local, state, and

Federal regulations.

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 7 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

14. Transport Information

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

This product is not regulated as a dangerous good.

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

This product is not regulated as a dangerous good.

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

This product is not regulated as a dangerous good.

International and Domestic Air Transportation - ICAO & IATA Section 4.2

This product is not regulated as a dangerous good.

International Water Transportation - IMDG Code Amendment 31-02

This product is not regulated as a dangerous good.

15. Regulatory Information

The components of this product are listed on the TSCA Inventory

This product contains NONE of the substances 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

California Proposition 65: WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

This product contains an ingredient(s) considered to be a "toxic or hazardous substance" by the Commonwealth of Massachussetts (Massachussetts Right to Know Law).

This product contains an ingredient(s) considered to be a hazardous substance by the State of Pennsylvania (Pennsylvania Worker and Community Right to Know Act).

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.

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

HMIS and NFPA Hazard Class Information:

HMIS Hazard Class: Health: 2 (Moderate) Flammability: 2 (Moderate) Physical Hazard: 1 (Slight)

NFPA Hazard Class: Health: 2 (Moderate) Flammability: 2 (Moderate) Instability: 1 (Slight)

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 8 / 10 Official Record



FIR No.: 181251 Level: 1

Version Number: US-US-4 Release Date: 2011-12-07

The following sections contain revisions OR $\,\,8\,$

NEW statements.

2

16 15

Preparation Information:

The chemical identification and properties for this material were provided by the manufacturer. For Canadian locations, a manufacture's MSDS is available upon request. Health and safety information has been evaluated by the Occupational and Environmental Health Sciences Department, Ford Motor Company, Diagnostic Service Center II, 1800 Fairlane Drive, Allen Park, MI 48101, 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.

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary

Application: MATS Page: 9 / 10 Official Record



FIR No.: 181251 **Level:** 1

Version Number: US-US-4 Release Date: 2011-12-07

Attachment

Product Code Container Size Part of Kit Kit Product Code

TA-2 10.3 fl. oz. (305 mL)

Owner: Ford Motor Company PRINTED DOCUMENT IS TRANSIENT Ford Proprietary
Application: MATS Page: 10 / 10 Official Record