



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) Flexiclear(TM) Body Seam Sealer, P.N. 08401, 08405

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 06/11/12

**Supersedes Date:** 05/06/11

**Document Group:** 10-5391-7

#### Product Use:

Intended Use: Automotive

Specific Use: Joint and seam sealer for interior and exterior joints and seams.

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
TOLUENE	108-88-3	15 - 40
STYRENE/ALPHA-METHYLSTYRENE COPOLYMER	9011-11-4	10 - 30
HYDROCARBON POLYMER, HYDROGENATED	Trade Secret	10 - 30
SYNTHETIC RUBBER POLYMER	Trade Secret	7 - 13
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	7 - 13
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	112945-52-5	5 - 10
XYLENE	1330-20-7	1 - 5
ETHYLBENZENE	100-41-4	< 1.5
BENZENE	71-43-2	< 0.05
CUMENE	98-82-8	< 0.05

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Paste

**Odor, Color, Grade:** Clear buttery paste with solvent odor

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** Flammable solid. May cause severe skin irritation.

Contains a chemical or chemicals which can cause cancer. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin Contact:**

Severe Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Class Description</u>	<u>Regulation</u>
BENZENE	71-43-2	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
BENZENE	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens

BENZENE	71-43-2	Cancer hazard	OSHA Carcinogens
CUMENE	98-82-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
ETHYLBENZENE	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	24 °F [ <i>Test Method:</i> Closed Cup] [ <i>Details:</i> Method D56]
Flammable Limits(LEL)	1.27 % volume
Flammable Limits(UEL)	7.00 % volume

### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Flammable solid.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

### 6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

#### Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid breathing of fumes. Do not ingest. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid eye contact with dust or airborne particles. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

### 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Do not store containers on their sides. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from flammable and combustible materials. Store away from oxidizing agents. Store in a cool, dry place.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust ventilation on open containers. Use in an enclosed process area is recommended. Use in a well-ventilated area. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Full Face Shield  
Indirect Vented Goggles

#### 8.2.2 Skin Protection

Not applicable. Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Fluoroelastomer  
Polymer laminate

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of fumes.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest. Wash hands after handling and before eating.

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
BENZENE	ACGIH	TWA	0.5 ppm	Skin Notation*
BENZENE	ACGIH	STEL	2.5 ppm	Skin Notation*
BENZENE	OSHA	TWA	1 ppm	29 CFR 1910.1028
BENZENE	OSHA	STEL	5 ppm	29 CFR 1910.1028
BENZENE	OSHA	TWA	10 ppm	
BENZENE	OSHA	CEIL	25 ppm	
Benzene, 1,3-dimethyl-	ACGIH	TWA	100 ppm	
Benzene, 1,3-dimethyl-	ACGIH	STEL	150 ppm	
Benzene, 1,4-dimethyl-	ACGIH	TWA	100 ppm	
Benzene, 1,4-dimethyl-	ACGIH	STEL	150 ppm	
CUMENE	ACGIH	TWA	50 ppm	
CUMENE	OSHA	TWA	245 mg/m3	Skin Notation*
ETHYLBENZENE	ACGIH	TWA	20 ppm	
ETHYLBENZENE	CMRG	TWA	25 ppm	
ETHYLBENZENE	CMRG	STEL	75 ppm	
ETHYLBENZENE	OSHA	TWA	435 mg/m3	
MINERAL OILS, HIGHLY-REFINED OILS	ACGIH	TWA, inhalable fraction	5 mg/m3	
Paraffin oil	OSHA	TWA, as mist	5 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA concentration	0.8 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA	20 millions of particles/cu. ft.	
TOLUENE	ACGIH	TWA	20 ppm	
TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA	200 ppm	
TOLUENE	OSHA	CEIL	300 ppm	
WHITE MINERAL OIL (PETROLEUM)	CMRG	TWA	5 mg/m3	
WHITE MINERAL OIL (PETROLEUM)	CMRG	STEL	10 mg/m3	
XYLENE	ACGIH	TWA	100 ppm	
XYLENE	ACGIH	STEL	150 ppm	
XYLENE	CMRG	TWA	50 ppm	
XYLENE	CMRG	STEL	75 ppm	
XYLENE	OSHA	TWA	435 mg/m3	

\* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

#### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Specific Physical Form:</b>	Paste
<b>Odor, Color, Grade:</b>	Clear buttery paste with solvent odor
<b>General Physical Form:</b>	Solid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	24 °F [ <i>Test Method:</i> Closed Cup] [ <i>Details:</i> Method D56]
<b>Flammable Limits(LEL)</b>	1.27 % volume
<b>Flammable Limits(UEL)</b>	7.00 % volume
<b>Boiling Point</b>	232 °F [ <i>Details:</i> CONDITIONS: (toluene)]
<b>Density</b>	0.98 g/ml
<b>Vapor Density</b>	3.14 [ <i>Ref Std:</i> AIR=1]
<b>Vapor Pressure</b>	25.19 mmHg [ <i>Details:</i> CONDITIONS: @ 68F]
<b>Specific Gravity</b>	0.980 [ <i>Ref Std:</i> WATER=1]
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	4.50 [ <i>Ref Std:</i> ETHER=1]
<b>Hazardous Air Pollutants</b>	40.8 % weight [ <i>Test Method:</i> Calculated]
<b>Volatile Organic Compounds</b>	39.6 % weight [ <i>Test Method:</i> calculated per CARB title 2]
<b>Volatile Organic Compounds</b>	391 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	39.9 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	391 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]
<b>Viscosity</b>	Approximately 450000 centipoise

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Sparks and/or flames  
Heat

#### 10.2 Materials to avoid

Strong acids  
Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Toxic Vapor, Gas, Particulate	Not Specified

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable), D018 (Benzene)

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

### ID Number(s):

62-5508-5209-9

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
TOLUENE	108-88-3	15 - 40
XYLENE	1330-20-7	1 - 5
XYLENE (Benzene, 1,2-dimethyl-)	1330-20-7	1 - 5
XYLENE (Benzene, 1,3-dimethyl-)	1330-20-7	1 - 5
XYLENE (Benzene, 1,4-dimethyl-)	1330-20-7	1 - 5
XYLENE (Benzene, dimethyl-)	1330-20-7	1 - 5

ETHYLBENZENE 100-41-4 < 1.5

### STATE REGULATIONS

Contact 3M for more information.

### CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
BENZENE	71-43-2	*Male reproductive toxin
BENZENE	71-43-2	**Carcinogen
BENZENE	71-43-2	*Developmental Toxin
CUMENE	98-82-8	**Carcinogen
ETHYLBENZENE	100-41-4	**Carcinogen
TOLUENE	108-88-3	*Female reproductive toxin
TOLUENE	108-88-3	*Developmental Toxin

\* WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

\*\* WARNING: contains a chemical which can cause cancer.

### CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. Contact 3M for more information.

### INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: OTHER INFORMATION

#### NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Reason for Reissue:** Update Human Health Effects.

#### Revision Changes:

- Section 1: Product use information was modified.
- Section 3: Potential effects from skin contact information was modified.
- Section 3: Potential effects from inhalation information was modified.
- Section 7: Handling information was modified.
- Section 7: Storage information was modified.
- Section 8: Engineering controls information was modified.
- Section 8: Skin protection phrase was modified.
- Section 8: Respiratory protection information was modified.
- Section 8: Prevention of swallowing information was modified.
- Section 10: Hazardous decomposition or by-products table was modified.
- Section 13: Waste disposal method information was modified.

Section 13: EPA hazardous waste number (RCRA) information was modified.  
Section 8: Eye/face protection information was modified.  
Section 8: Skin protection - recommended gloves information was modified.  
Section 8: Respiratory protection - recommended respirators information was modified.  
Section 9: Density information was modified.  
Section 9: Vapor density value was modified.  
Section 9: Vapor pressure value was modified.  
Section 9: Boiling point information was modified.  
Section 5: Flammable limits (UE) information was modified.  
Section 5: Flammable limits (LEL) information was modified.  
Section 5: Autoignition temperature information was modified.  
Sections 3 and 9: Odor, color, grade information was modified.  
Section 9: Property description for optional properties was modified.  
Section 9: Specific gravity information was modified.  
Section 9: pH information was modified.  
Section 9: Melting point information was modified.  
Section 9: Solubility in water text was modified.  
Section 9: Flammable limits (LEL) information was modified.  
Section 9: Flammable limits (UEL) information was modified.  
Section 9: Autoignition temperature information was modified.  
Section 2: Ingredient table was modified.  
Section 15: EPCRA 313 information was modified.  
Section 8: Exposure guidelines ingredient information was modified.  
Section 3: Carcinogenicity table was modified.  
Section 15: California proposition 65 ingredient information was modified.  
Section 6: Personal precautions information was modified.  
Section 6: Environmental procedures information was modified.  
Section 6: Methods for cleaning up information was modified.  
Section 10: Materials to avoid physical property was modified.  
Section 10: Conditions to avoid physical property was modified.  
Copyright was modified.  
Section 5: Flash point information was added.  
Section 9: Flash point information was added.  
Section 8: Hand protection information was added.  
Section 15: TSCA section 12[b] text was deleted.  
Section 15: TSCA section 12[b] information was deleted.

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