



## Material Safety Data Sheet

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**PRODUCT NAME:** 3M(TM) Thermally Conductive Adhesive TC-2707  
**MANUFACTURER:** 3M  
**DIVISION:** Electronics Markets Materials Division

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

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

**Issue Date:** 07/16/2003  
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**Document Group:** 16-3085-4

**ID Number(s):**  
62-2661-1430-5, 62-2661-1432-1, 62-2661-1435-4, 62-2661-3530-0, 62-2661-3830-4

**This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:**

16-3082-1, 16-3083-9

Revision Changes:  
Kit: ID number(s) was modified.

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) Thermally Conductive Adhesive TC-2707 (Part A)  
**MANUFACTURER:** 3M  
**DIVISION:** Electronics Markets Materials Division

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

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

**Issue Date:** 05/09/11  
**Supersedes Date:** 08/21/09

**Document Group:** 16-3082-1

#### Product Use:

Intended Use: Adhesive  
 Specific Use: Adhesive Part A

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
aluminum	7429-90-5	40 - 70
4,7,10-trioxatridecane-1,13-diamine	4246-51-9	15 - 40
modified diglycidyl ether of bisphenol a	Trade Secret	7 - 13
amorphous silica	7631-86-9	1 - 5
2,4,6-tris((dimethylamino)methyl)phenol	90-72-2	1 - 5
silane, trimethoxyoctyl-, hydrolysis products with silica	92797-60-9	1 - 5
epoxy resin	25068-38-6	1 - 5

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Viscous

**Odor, Color, Grade:** gray, very mild pungent odor.

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** May cause chemical eye burns. May cause allergic skin reaction. May cause chemical skin burns.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Vapors from heated material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin Contact:**

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Inhalation:**

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

Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Ingestion:**

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

## 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:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate 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

<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	140 °C [ <i>Test Method: Estimated</i> ]
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>

### 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Not applicable.

**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. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

### 6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities.

### 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. 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. Clean up residue with an appropriate organic solvent.

**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

Avoid eye contact. Avoid skin contact. Avoid breathing of vapors, mists or spray. Avoid breathing of vapors created during cure cycle. 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. Do not ingest. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid contact with oxidizing agents.

### 7.2 STORAGE

Store away from acids. 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.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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: Safety Glasses with side shields  
Indirect Vented Goggles

### 8.2.2 Skin Protection

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.

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

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of vapors created during cure cycle.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges

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. Not applicable.

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
aluminum	ACGIH	TWA, respirable fraction	1 mg/m3	
aluminum	OSHA	TWA, as Al respirable dust	5 mg/m3	
aluminum	OSHA	TWA, as Al total dust	15 mg/m3	
amorphous silica	CMRG	TWA, as respirable dust	3 mg/m3	
2,4,6-tris((dimethylamino)methyl)phenol	CMRG	TWA	5 ppm	

#### 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>	Viscous
<b>Odor, Color, Grade:</b>	gray, very mild pungent odor.
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	140 °C [ <i>Test Method: Estimated</i> ]
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>

<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Density</b>	1.52 g/ml
<b>Vapor Density</b>	Nil
<b>Vapor Pressure</b>	0.002 mmHg [@ 20 °C]
<b>Specific Gravity</b>	1.52 [ <i>Ref Std: WATER=1</i> ]
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Negligible
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Volatile Organic Compounds</b>	10.6 g/l [ <i>Test Method: tested per EPA method 24A</i> ]
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	0.00 % weight
<b>VOC Less H2O &amp; Exempt Solvents</b>	10.6 g/l [ <i>Test Method: tested per EPA method 24A</i> ]
<b>Viscosity</b>	47000 centipoise [@ 20 °C]

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exotherm) with production of intense heat and smoke.

#### 10.2 Materials to avoid

Strong acids  
Strong oxidizing agents

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

### Hazardous Decomposition or By-Products

#### Substance

Aldehydes  
Carbon monoxide  
Carbon dioxide

#### Condition

Not Specified  
During Combustion  
During Combustion

## 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:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill.

As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

Combustion products will include HCl. Facility must be capable of handling halogenated materials.

**EPA Hazardous Waste Number (RCRA):** Not regulated

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

## SECTION 14: TRANSPORT INFORMATION

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

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>
aluminum	7429-90-5	40 - 70

### STATE REGULATIONS

Contact 3M for more information.

### 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.

**WHMIS:** Hazardous

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: 3 Flammability: 1 Reactivity: 1 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.

### Revision Changes:

Section 16: Disclaimer (second paragraph) was modified.  
Section 7: Handling information was modified.  
Section 7: Storage information was modified.  
Section 8: Prevention of swallowing information was modified.  
Section 10: Hazardous decomposition or by-products table 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 14: Transportation legal text was modified.  
Section 15: Inventories information 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 9: Property description for optional properties was modified.  
Section 8: Respiratory protection - recommended respirators guide was modified.  
Section 9: Flammable limits (LEL) information was modified.  
Section 9: Flammable limits (UEL) 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 6: 6.2. Environmental precautions heading was added.  
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.  
Section 10.1 Conditions to avoid heading was added.  
Section 10.2 Materials to avoid heading was added.  
Section 16: Web address was added.  
Section 6: Personal precautions information was added.  
Section 6: Environmental procedures information was added.  
Section 6: Methods for cleaning up information was added.  
Section 10: Materials to avoid physical property was added.  
Section 10: Conditions to avoid physical property was added.  
Section 1: Address was added.  
Copyright was added.  
Company logo was added.  
Section 6: Clean-up methods heading was added.  
Telephone header was added.  
Company Telephone was added.  
Section 1: Emergency phone information was added.  
Section 1: Emergency phone information was deleted.  
Company Logo was deleted.  
Copyright was deleted.  
Section 6: Release measures information was deleted.  
Section 6: Release measures heading was deleted.



Section 10: Materials and conditions to avoid physical property was deleted.

Section 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) Thermally Conductive Adhesive TC-2707 (part B)  
**MANUFACTURER:** 3M  
**DIVISION:** Electronics Markets Materials Division

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

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

**Issue Date:** 08/21/09  
**Supersedes Date:** 03/12/03

**Document Group:** 16-3083-9

**Product Use:**

Intended Use: Adhesive  
 Specific Use: PART B OF 2 PART ADHESIVE

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
EPOXY RESIN	25068-38-6	40 - 70
ALUMINUM	7429-90-5	40 - 70
METHYL METHACRYLATE-BUTADIENE-STYRENE POLYMER	25053-09-2	3 - 7

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** gray, very mild odor.

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** May cause allergic skin reaction.

#### 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:**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Inhalation:**

Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

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

**Ingestion:**

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

## 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**

*No Data Available*

<b>Flash Point</b>	>=170 °C [ <i>Test Method: Estimated</i> ]
<b>Flammable Limits - LEL</b>	<i>No Data Available</i>
<b>Flammable Limits - UEL</b>	<i>No Data Available</i>

## 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

## 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:** Not applicable.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Ventilate the area with fresh air. Collect as much of the spilled material as possible. Clean up residue with an appropriate organic solvent. Read and follow safety precautions on the solvent label and MSDS.

**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. Avoid prolonged or repeated skin contact. Avoid breathing of vapors created during cure cycle. For industrial or professional use only. Avoid contact with oxidizing agents. 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 oxidizing agents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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: Safety Glasses with side shields, Indirect Vented Goggles.

**8.2.2 Skin Protection**

Avoid prolonged or repeated 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.

Gloves made from the following material(s) are recommended: Polyethylene/Ethylene Vinyl Alcohol.

**8.2.3 Respiratory Protection**

Avoid breathing of vapors created during cure cycle.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half mask R95 particulate respirator, Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

**8.2.4 Prevention of Swallowing**

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

**8.3 EXPOSURE GUIDELINES**

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
ALUMINUM	ACGIH	TWA, respirable	1 mg/m3	Table A4
ALUMINUM	OSHA	TWA, respirable	5 mg/m3	Table Z-1
ALUMINUM	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
ALUMINUM PYRO POWDERS	ACGIH	TWA, as Al	5 mg/m3	
ALUMINUM PYRO POWDERS	OSHA	TWA, as Al	5 mg/m3	Table Z-1A

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>Odor, Color, Grade:</b>	gray, very mild odor.
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	No Data Available
<b>Flash Point</b>	>=170 °C [Test Method: Estimated]
<b>Flammable Limits - LEL</b>	No Data Available
<b>Flammable Limits - UEL</b>	No Data Available
<b>Boiling point</b>	Not Applicable
<b>Density</b>	1.62 g/ml
<b>Vapor Density</b>	Nil
<b>Vapor Pressure</b>	<=0.02 [@ 20 °C]
<b>Specific Gravity</b>	1.62 [Ref Std: WATER=1]
<b>pH</b>	No Data Available
<b>Melting point</b>	Not Applicable
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	Not Applicable
<b>Volatile Organic Compounds</b>	2 g/l [Test Method: tested per EPA method 24A]

Percent volatile	0.00 % weight
VOC Less H2O & Exempt Solvents	2 g/l [ <i>Test Method:</i> tested per EPA method 24A]
Viscosity	105000 centipoise [@ 20 °C]

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Strong acids; Strong oxidizing agents; Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exotherm) with production of intense heat and smoke.

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

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Aldehydes	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

## 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:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill. As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

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

## SECTION 14: TRANSPORT INFORMATION

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No 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>
ALUMINUM	7429-90-5	40 - 70

### STATE REGULATIONS

Contact 3M for more information.

### 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: 1 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.

### Revision Changes:

Section 1: Product use information was modified.  
Section 16: NFPA hazard classification heading was modified.  
Copyright was modified.  
Section 3: Potential effects from inhalation information was modified.  
Section 3: Potential effects from ingestion information was modified.  
Section 5: Fire fighting procedures information was modified.  
Section 7: Handling information was modified.  
Section 8: Engineering controls information was modified.  
Section 15: 311/312 hazard categories heading was modified.  
Section 15: International regulations information was modified.  
Section 15: State regulations information was modified.  
Section 15: US federal regulations information was modified.  
Section 4: First aid for ingestion (swallowing) - decontamination - was modified.  
Section 4: First aid for ingestion (swallowing) - medical assistance - was modified.  
Section 10: Hazardous polymerization heading was modified.  
Section 16: NFPA explanation was modified.  
Section 15: Inventories information was modified.  
Section 12: Ecotoxicological information heading was modified.  
Section 12: Chemical fate information heading was modified.  
Section 16: NFPA hazard classification for special hazards was modified.  
Section 12: Ecotoxicological phrase was modified.  
Section 12: Chemical Fate phrase was modified.  
Section 2: Ingredient phrase was added.  
Section 2: Ingredient table was added.  
Section 15: EPCRA 313 information was added.  
Section 15: EPCRA 313 text was added.  
Section 8: Exposure guidelines ingredient information was added.  
Section 8: Exposure guidelines data source legend was added.

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## Transport Information Document

**Date:** March 12, 2012

**3M ID Number:** 62-2661-1435-4

**Product Description:** 3M(TM) Thermally Conductive Adhesive TC-2707, 37 mL Duo-Pak, 12 per case

**Transport Protective Service:** PROTECTIVE SERVICE NOT REQUIRED

**NMFC Item:** 004620

**NMFC Sub:** 06

**NMFC Class:** 060.0

**Flash Point (Closed-cup):** 284°F/140°C

### UNITED STATES DEPARTMENT OF TRANSPORTATION - GROUND (U.S. DOT, 49 CFR)

CONSUMER COMMODITY, ORM-D OR LIMITED QUANTITY

### UNITED STATES DEPARTMENT OF TRANSPORTATION - VESSEL (U.S. DOT, 49 CFR)

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., (CONTAINS 4,7,10-TRIOXATRIDECANE-1,13-DIAMINE), 8, II, LIMITED QUANTITY

### INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., (CONTAINS 4,7,10-TRIOXATRIDECANE-1,13-DIAMINE), 8, II

### INTERNATIONAL MARITIME ORGANIZATION (IMO)

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., (CONTAINS 4,7,10-TRIOXATRIDECANE-1,13-DIAMINE), 8, II, LIMITED QUANTITY

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