MATERIAL SAFETY
DATA SHEET

3M

3M Center

St. Paul, Minnesota

55144-1000

1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 2001, Minnesota Mining and Manufacturing Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that:

- 1) the information is copied in full with no changes unless prior agreement is obtained from 3M, and
- 2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

DIVISION: ENGINEERED ADHESIVES

TRADE NAME:

3M(TM) Fastbond(TM) Contact Adhesive 2000-NF Light Orange

ID NUMBER/U.P.C.:

 $62 - 4346 - 7430 - 5 \quad 00 - 21200 - 87952 - 4 \quad 62 - 4346 - 7535 - 1 \quad 00 - 21200 - 87961 - 6 \\$

62-4346-8030-2 00-21200-89537-1

ISSUED: May 16, 2001

SUPERSEDES: March 29, 2000

DOCUMENT: 06-1658-1

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:

06-1223-4 06-1312-5

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

MATERIAL SAFETY

3M

DATA SHEET

3M Center

St. Paul, Minnesota

55144-1000

1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 2001, Minnesota Mining and Manufacturing Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that:

- 1) the information is copied in full with no changes unless prior agreement is obtained from 3M, and
- 2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

DIVISION: ENGINEERED ADHESIVES

TRADE NAME:

3M(TM) Fastbond(TM) Contact Adhesive 2000-NF Light Orange

ID NUMBER/U.P.C.:

 $62 - 4346 - 7536 - 9 \quad 00 - 21200 - 25437 - 6 \quad 62 - 4346 - 8230 - 8 \quad 00 - 21200 - 30015 - 8 \quad 00 - 21200 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000$ $62 - 4346 - 8430 - 4 \quad 00 - 21200 - 87953 - 1 \quad 62 - 4346 - 8436 - 1 \quad 00 - 21200 - 31336 - 3136 - 316$ $62 - 4346 - 8535 - 0 \quad 00 - 21200 - 87953 - 1 \quad 62 - 4346 - 9430 - 3 \quad 00 - 21200 - 87955 - 5 \\$ $62 - 4346 - 9535 - 9 \quad 00 - 21200 - 87955 - 5 \quad 62 - 4346 - 9930 - 2 \quad 00 - 21200 - 87958 - 6$

ISSUED: November 08, 2001 SUPERSEDES: May 16, 2001

DOCUMENT: 06-1223-4

1. INGREDIENT C.A.S. NO. PERCENT - 10.0 < 3.0

< 2.5

IN CASE OF EMERGENCY: THE NUMBERS AT THE TOP OF THIS PAGE PROVIDE 24 HOUR RESPONSE FROM ANY PHONE FOR ALL EMERGENCIES WITH THIS PRODUCT. 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.

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372: TOLUENE

METHYL ALCOHOL

ZINC OXIDE

2. PHYSICAL DATA

BOILING POINT:..... 147 F

(methanol)

VAPOR PRESSURE:..... N/A

pH:..... ca. 10

VISCOSITY:..... 200 - 600 centipoise

APPEARANCE AND ODOR:

liquid, light orange, slight odor of ammonia

3. FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA:

Water spray, Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Not applicable.

NFPA HAZARD CODES: HEALTH: 1 FIRE: 0 REACTIVITY: 0

UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Not applicable.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

4. REACTIVITY DATA (continued)

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Hydrogen Chloride, Aldehydes, Ketones.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Cover with absorbent material. Collect spilled material. Place in a U.S. DOT-approved container.

RECOMMENDED DISPOSAL:

Incinerate in an industrial or commercial facility in the presence of a combustible material. Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

U.S. EPA Toxicity Characteristics Leaching Procedure,(TCLP),Method 1311, 40 CFR Part 261, Appendix 2 was run on properly mixed Fastbond 2000 and Spray Activator #1 with the following results: Arsenic <0.2 mg/L, Barium 0.10 mg/L, Cadmium <0.01 mg/L, Chromium <0.05 mg/L, Lead <0.5 mg/L, Mercury <0.2 ug/L, Selenium<0.3 mg/L, Silver<0.05 mg/L, Zinc 53 mg/L.

REGULATORY INFORMATION:

Volatile Organic Compounds: 37 gms/liter tested per EPA method 24. VOC Less H2O & Exempt Solvents: 77 gms/liter tested per EPA method 24. Hazardous Air Pollutants: .09 #/# solids calculated. Hazardous Air Pollutants: 4.6 % by wt calculated.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: No

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

6. SUGGESTED FIRST AID (continued)

SKIN CONTACT:

Flush skin with large amounts of water. If irritation persists, get medical attention.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact with vapor, spray, or mist. Wear vented goggles. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: nitrile rubber, polyethylene/ethylene vinyl alcohol, polytetrafluoroethylene (Teflon), fluoroelastomer (Viton).

RECOMMENDED VENTILATION:

Do not use in a confined area or areas with little or no air movement. Conduct air monitoring to determine adequacy of ventilation. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection. Provide ventilation adequate to control vapor concentrations below recommended exposure limits and/or control spray or mist.

RESPIRATORY PROTECTION:

Avoid prolonged breathing of vapors. Avoid prolonged breathing of spray or mists.

PREVENTION OF ACCIDENTAL INGESTION:

Do not ingest.

RECOMMENDED STORAGE:

Keep container closed when not in use. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

7. PRECAUTIONARY INFORMATION (continued)

OTHER PRECAUTIONARY INFORMATION:

Not intended for consumer sale or use.

The Threshold Limit Value for total airborne particulate is 10 mg/m3. The Threshold Limit Value for respirable airborne particulates is 3mg/m3. The results of air monitoring conducted by 3M indicate that spraying two and one half gallons of adhesive over a 30 minute period in an area with limited ventilation results in an exposure to toluene of 1.5 ppm.

EXPOSURE LIMITS

WATER. NONE NONE NONE NONE NONE POLYCHLOROPRENE NONE	INGREDIENT		UNIT	TYPE	-	SKIN*	
SCINC STER OF HYDROGENATED ROSIN NONE NON							
ROSIN	POLYCHLOROPRENE	NONE	NONE	NONE	NONE		
PHENOL-ALPHA-PINENE RESIN	GLYCEROL ESTER OF HYDROGENATED						
TOLUENE	ROSIN	NONE	NONE	NONE	NONE		
TOLUENE	PHENOL-ALPHA-PINENE RESIN	NONE	NONE	NONE	NONE		
TOLUENE. 150 PPM STEL OSHAV OSHA VACATED PEL TOLUENE. 200 PPM TWA OSHA TOLUENE. 300 PPM CEIL OSHA TOLUENE. 300 PPM CEIL OSHA TOLUENE. 75 PPM STEL CMRG Y METHYL ALCOHOL 200 PPM TWA ACGIH Y METHYL ALCOHOL 250 PPM TWA OSHA Y METHYL ALCOHOL 250 PPM STEL OSHA Y METHYL ALCOHOL 250 PPM STEL OSHA Y METHYL ALCOHOL 250 PPM TWA OSHA Y METHYL ALCOHOL 250 PPM STEL OSHA Y METHYL ALCOHOL 550 PPM STEL OSHA Y METHYL ALCOHOL 550 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA OSHAV AS DUST OSHA VACATED PEL ZINC OXIDE 5 MG/M3 STEL ACGIH AS CUR ZINC OXIDE 5 MG/M3 STEL OSHAV AS STEL ZINC OXIDE 5 MG/M3 STEL OSHAV AS STEL ZINC OXIDE 10 MG/M3 TWA OSHA AS STEL ZINC OXIDE 10 MG/M3 TWA OSHA AS STEL ZINC OXIDE 10 MG/M3 TWA OSHA AS STEL ZINC OXIDE 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE 5 MG/M3 TWA OSHA	TOLUENE	50	PPM	TWA	ACGIH	Y	
TOLUENE. 150 PPM	TOLUENE	100	PPM	TWA	OSHAV		
OSHA VACATED PEL		OSHA	VACATED F	PEL			
TOLUENE. 200 PPM TWA OSHA TOLUENE. 300 PPM CEIL OSHA TOLUENE. 75 PPM STEL CMRG Y METHYL ALCOHOL 2200 PPM TWA ACGIH Y METHYL ALCOHOL 2500 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA ACGIH AS DUST OSHA VACATED PEL TOSHA VACATED PEL TOSHA VACATED PEL TOSHA VACATED PEL TOSHA TWA ACGIH AS SUBER TWE TOSHA TWA ACGIH AS SUBER TWE TOSHA TWA ACGIH TWA TWA ACGIH TWA TWA ACGIH TWA T	TOLUENE	150	PPM	STEL	OSHAV		
TOLUENE		OSHA	VACATED F	PEL			
TOLUENE. 75 PPM	TOLUENE	200	PPM	TWA	OSHA		
METHYL ALCOHOL 200 PPM TWA ACGIH Y METHYL ALCOHOL 250 PPM STEL ACGIH Y METHYL ALCOHOL 200 PPM TWA OSHA Y METHYL ALCOHOL 250 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA ACGIH	TOLUENE	300	PPM	CEIL	OSHA		
METHYL ALCOHOL 250 PPM STEL ACGIH Y METHYL ALCOHOL 200 PPM TWA OSHA Y METHYL ALCOHOL 250 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA ACGIH ACGIH AS DUST NG/M3 TWA OSHAV ACGIH AS DUST ACGIH	TOLUENE	75		STEL	CMRG	Y	
METHYL ALCOHOL 200 PPM TWA OSHA Y METHYL ALCOHOL 250 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA ACGIH AS DUST OSHA VACATED PEL VACATED PEL ACGIH A	METHYL ALCOHOL	200	PPM	TWA	ACGIH	Y	
METHYL ALCOHOL 250 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA ACGIH ZINC OXIDE 10 MG/M3 TWA OSHAV ZINC OXIDE 5 MG/M3 TWA ACGIH ZINC OXIDE 10 MG/M3 STEL ACGIH ZINC OXIDE 5 MG/M3 TWA OSHA ZINC OXIDE 10 MG/M3 STEL OSHAV AS fume OSHA VACATED PEL OSHAV AS fume ZINC OXIDE 15 MG/M3 TWA OSHA ZINC OXIDE 15 MG/M3 TWA OSHA ZINC OXIDE 5 MG/M3 TWA OSHA	METHYL ALCOHOL	250	PPM	STEL	ACGIH	Y	
METHYL ALCOHOL 250 PPM STEL OSHA Y ZINC OXIDE 10 MG/M3 TWA ACGIH ZINC OXIDE 10 MG/M3 TWA OSHAV ZINC OXIDE 5 MG/M3 TWA ACGIH ZINC OXIDE 10 MG/M3 STEL ACGIH ZINC OXIDE 5 MG/M3 TWA OSHA ZINC OXIDE 10 MG/M3 STEL OSHAV AS fume OSHA VACATED PEL OSHAV AS fume ZINC OXIDE 15 MG/M3 TWA OSHA ZINC OXIDE 15 MG/M3 TWA OSHA ZINC OXIDE 5 MG/M3 TWA OSHA	METHYL ALCOHOL	200	PPM	TWA	OSHA	Y	
ZINC OXIDE. 10 MG/M3 TWA ACGIH AS DUST 10 MG/M3 TWA OSHAV AS DUST OSHA VACATED PEL ZINC OXIDE. 5 MG/M3 TWA ACGIH as fume ZINC OXIDE. 10 MG/M3 TWA ACGIH as fume ZINC OXIDE. 5 MG/M3 TWA ACGIH as fume ZINC OXIDE. 5 MG/M3 TWA OSHA as fume ZINC OXIDE. 5 MG/M3 TWA OSHA as fume ZINC OXIDE. 10 MG/M3 STEL OSHAV as fume OSHA VACATED PEL ZINC OXIDE. 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE. 5 MG/M3 TWA OSHA	METHYL ALCOHOL	250	PPM	STEL	OSHA	Y	
ZINC OXIDE	ZINC OXIDE	10	MG/M3	AWT	ACGIH		
AS DUST OSHA VACATED PEL ZINC OXIDE 5 MG/M3 TWA ACGIH as fume ZINC OXIDE 10 MG/M3 STEL ACGIH as fume ZINC OXIDE 5 MG/M3 TWA OSHA as fume ZINC OXIDE 10 MG/M3 TWA OSHA as fume ZINC OXIDE 10 MG/M3 STEL OSHAV as fume OSHA VACATED PEL ZINC OXIDE 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE 5 MG/M3 TWA OSHA		AS DUST					
OSHA VACATED PEL	ZINC OXIDE	10	MG/M3	TWA	OSHAV		
ZINC OXIDE							
As fume 10 MG/M3							
ZINC OXIDE	ZINC OXIDE		-, -	TWA	ACGIH		
As fume S MG/M3 TWA OSHA As fume							
ZINC OXIDE. 5 MG/M3 TWA OSHA as fume ZINC OXIDE. 10 MG/M3 STEL OSHAV as fume OSHAV OSHA VACATED PEL ZINC OXIDE. 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE. 5 MG/M3 TWA OSHA	ZINC OXIDE		-, -	STEL	ACGIH		
As fume 10 MG/M3 STEL OSHAV as fume OSHA VACATED PEL ZINC OXIDE 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE 5 MG/M3 TWA OSHA OSHA							
ZINC OXIDE. 10 MG/M3 STEL OSHAV as fume OSHA VACATED PEL ZINC OXIDE. 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE. 5 MG/M3 TWA OSHA	ZINC OXIDE		-, -	TWA	OSHA		
as fume				~			
OSHA VACATED PEL ZINC OXIDE. 15 MG/M3 TWA OSHA AS TOTAL DUST ZINC OXIDE. 5 MG/M3 TWA OSHA	ZINC OXIDE			STEL	OSHAV		
ZINC OXIDE							
AS TOTAL DUST ZINC OXIDE	TIME OWED				0.0117		
ZINC OXIDE 5 MG/M3 TWA OSHA	ZINC OXIDE				OSHA		
	ETNG OVIDE				0.0117		
KESTIKABLE	ZINC OXIDE			.T.MA	USHA		
And Hand							

MSDS: 3M(TM) Fastbond(TM) Contact Adhesive 2000-NF Light Orange November 08, 2001

PAGE 6

EXPOSURE LIMITS (continued)

INGREDIENT VALUE UNIT TYPE AUTH SKIN*

* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN 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 Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL. Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing.

SKIN CONTACT:

Contact with the skin during product use is not expected to result in significant irritation.

Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Ingestion may cause:

November 08, 2001	PAGE	7
8. HEALTH HAZARD DATA (continued)		
Blindness.		
REPRODUCTIVE/DEVELOPMENTAL TOXINS: WARNING: Contains a chemical which can cause birth defects. (108-883)	-	
SECTION CHANGE DATES		

PRECAUTIONARY INFO. SECTION CHANGED SINCE May 16, 2001 ISSUE

MODG: 2M/EM) Forthard/EM) Contract Adhering 2000 NE Light Organia

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.



Material Safety Data Sheet

Copyright, 2005, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Fastbond(TM) Spray Activator No.1

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 01/27/2005 **Supercedes Date:** 01/07/2002

Document Group: 06-1312-5

Product Use:

Specific Use: Accelerator for contact adhesive

SECTION 2: INGREDIENTS

 Ingredient
 C.A.S. No.
 % by Wt

 WATER
 7732-18-5
 80 - 90

 ZINC SULFATE
 7733-02-0
 10 - 20

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: liquid, transparent

General Physical Form: Liquid

Immediate health, physical, and environmental hazards:

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Skin Contact:

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

Inhalation:

Upper 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, nausea, diarrhea and vomiting.

3.3 POTENTIAL ENVIRONMENTAL EFFECTS

U.S. EPA Toxicity Characteristic Leaching Procedure, (TCLP), Method 1311, 40CFR Part 261, Appendix 2 was run on properly mixed Fastbond 2000 and Spray Activator #1 with the following results: Arsenic <0.2 mg/L; Barium 0.10 mg/L; Cadmium <0.01 mg/L; Chromium <0.05 mg/L; Lead <0.5 mg/L; Mercury <0.2 ug/L; Selenium <0.3 mg/L; Silver <0.05 mg/L; Zinc 53 mg/L

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: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

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

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot Applicable

5.2 EXTINGUISHING MEDIA

Material will not burn.

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: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. 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 detergent and water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities.

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 breathing of vapors, mists or spray. Avoid prolonged or repeated skin contact. Avoid eye contact with vapors, mists, or spray. For industrial or professional use only.

7.2 STORAGE

Keep container in well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. Use with functioning spray booth or local exhaust.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles.

8.2.2 Skin Protection

Gloves not normally required. Avoid prolonged or repeated skin contact. FOR INDUSTRIAL OR PROFESSIONAL USE ONLY.

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, Polyvinyl Chloride, Polyvinyl Alcohol (PVA), Polyethylene/Ethylene Vinyl Alcohol.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

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 N95 particulate filters. 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

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade: liquid, transparent

General Physical Form: Liquid

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling point212.00 °F

Vapor Density <=1.00 [Ref Std: AIR=1]

Vapor Pressure 18.5 mmHg

Specific Gravity 1.12 - 1.16 [Ref Std: WATER=1]

Melting point No Data Available

Solubility in Water Complete

Evaporation rate 1.00 [*Ref Std:* WATER=1]

Hazardous Air Pollutants 0 % weight [Test Method: Calculated]

Volatile Organic Compounds 0 g/l [Test Method: calculated SCAQMD rule 443.1]

Percent volatile 85 - 88 % weight

VOC Less H2O & Exempt Solvents 0 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity <=50 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong bases

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide Carbon dioxide

Condition

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: Reclaim if feasible. Reclaim solvent if feasible. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

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

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

62-4446-8030-3, 62-4446-8030-0, 62-4446-8032-6, 62-4446-8033-4, 62-4446-8034-2, 62-4446-8035-9, 62-4446-8036-7, 62-4446-8039-1, 62-446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-8039-1, 62-4446-803

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 - No

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

IngredientC.A.S. No% by WtZINC SULFATE (ZINC COMPOUNDS)7733-02-010 - 20

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: 1 Flammability: 0 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.

No revision information is available.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY

OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

3M MSDSs are available at www.3M.com

Page 7 of 7