Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M WINDO-WELD Resealant P/N 08634

DISTRIBUTED BY: The Easthill Group

dba/ The Eastwood Company 263 Shoemaker Road Pottstown, PA 19464

USA & Canada: 800-345-1178 Outside USA: 610-323-2200

Emergency Contact: Chem-Trec 800-424-9300

Issue Date: 10/02/2006 **Supercedes Date:** 07/29/2005

Document Group: 10-5226-5

Product Use:

Specific Use: Windshield Replacement and Repair

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
HEPTANES	Mixture	10 - 30
ISOBUTYLENE-ISOPRENE POLYMER	9010-85-9	10 - 30
ASPHALT	8052-42-4	7 - 13
POLYBUTYLENE	9003-29-6	7 - 13
METHYLCYCLOHEXANE	108-87-2	5 - 10
TOLUENE	108-88-3	1 - 10
CARBON BLACK	1333-86-4	5 - 10
OCTANES	Mixture	3 - 7
LIMESTONE	1317-65-3	1 - 5
SILICA	7631-86-9	1 - 5
2,2,4-TRIMETHYLPENTANE	540-84-1	< 2.5
CYCLOHEXANE	110-82-7	0.5 - 1.5
TETRAMETHYL THIOPEROXYDICARBONIC DIAMIDE	137-26-8	<= 0.04776
QUARTZ SILICA	14808-60-7	<= 0.031425
BENZENE	71-43-2	<= 0.007362

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Black General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. 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:

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

Photosensitization: Signs/symptoms may include a sunburn-like reaction such as blistering, redness, swelling, and itching from minor exposure to sunlight.

May be absorbed through skin and cause target organ effects.

Inhalation:

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

Intentional concentration and inhalation may be harmful or fatal.

Prolonged or repeated exposure may cause:

Pulmonary Edema: Signs/symptoms may include chest discomfort, shortness of breath, significant cough with frothy sputum production, bluish colored skin (cyanosis), increased heart rate and possible respiratory failure, and may be fatal.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

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

May be harmful if swallowed.

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.

Prolonged or repeated exposure may cause:

Central Neuropathy: Signs/symptoms may include irritability, memory impairment, personality changes, sleep disorders, and decreased ability to concentrate.

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

jaundice.

Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

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>	C.A.S. No.	Class Description	Regulation
ASPHALT	8052-42-4	Group 2B	International Agency for Research on Cancer
BENZENE	71-43-2	Group 1	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
CARBON BLACK	1333-86-4	Group 2B	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Group 1	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens

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. 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 temperature No Data Available

Flash Point 10.00 °F [Test Method: Closed Cup]

Flammable Limits - LEL 1.00 % 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).

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5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: 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. 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. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. 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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. 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. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

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 static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid contact with oxidizing agents. Avoid skin contact.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

If exhaust ventilation is not available, use appropriate respiratory protection. For additional health and precautionary information, including air monitoring methodology, contact 3M. 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 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

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: 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 facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters. 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

Ingredient	Authority	Type	<u>Limit</u>	Additional Information
2,2,4-TRIMETHYLPENTANE	ACGIH	TWA	300 ppm	_
2,2,4-TRIMETHYLPENTANE	ACGIH	STEL	375 ppm	
ALUMINUM PYRO POWDERS	ACGIH	TWA, as Al	5 mg/m3	
ALUMINUM PYRO POWDERS	OSHA	TWA, as Al	5 mg/m3	Table Z-1A
ASPHALT	ACGIH	TWA, as fume	0.5 mg/m3	Table A4
BENZENE	ACGIH	TWA	0.5 ppm	Skin Notation*; Table A1
BENZENE	ACGIH	STEL	2.5 ppm	Skin Notation*; Table A1
BENZENE	OSHA	TWA	1 ppm	Standard Appendix
BENZENE	OSHA	STEL	5 ppm	Standard Appendix
CADMIUM DUST	OSHA	TWA, as dust	0.2 mg/m3	Table Z-2
CADMIUM DUST	OSHA	CEIL, as dust	0.6 mg/m3	Table Z-2
CARBON BLACK	ACGIH	TWA	3.5 mg/m3	Table A4
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	Table Z-1
COPPER COMPOUNDS	ACGIH	TWA, as Cu dust or	1 mg/m3	
		mist		
COPPER COMPOUNDS	OSHA	TWA, as dust or mist		Table Z-1A
CYCLOHEXANE	ACGIH	TWA	100 ppm	
CYCLOHEXANE	OSHA	TWA	300 ppm	Table Z-1
LIMESTONE	ACGIH	TWA	10 mg/m3	
LIMESTONE	OSHA	TWA, respirable	5 mg/m3	Table Z-1
LIMESTONE	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
METHYLCYCLOHEXANE	ACGIH	TWA	400 ppm	
METHYLCYCLOHEXANE	OSHA	TWA, Vacated	400 ppm	
METHYLCYCLOHEXANE	OSHA	TWA	500 ppm	Table Z-1
MOLYBDENUM, INSOLUBLE	ACGIH	TWA, respirable	3 mg/m3	
COMPOUNDS				
MOLYBDENUM, INSOLUBLE	ACGIH	TWA, as Mo,	10 mg/m3	
COMPOUNDS		inhalable fraction		
MOLYBDENUM, INSOLUBLE	OSHA	TWA, as Mo	10 mg/m3	Table Z-1A
COMPOUNDS				

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OIL MIST, MINERAL	ACGIH	TWA, as mist	5 mg/m3	
OIL MIST, MINERAL	ACGIH	STEL, as mist	10 mg/m3	
OIL MIST, MINERAL	OSHA	TWA, as mist	5 mg/m3	Table Z-1
QUARTZ SILICA	ACGIH	TWA, respirable	0.025 mg/m3	Table A2
QUARTZ SILICA	OSHA	TWA, respirable	0.1 mg/m3	Table Z-1A
SILICA	CMRG	TWA, as respirable	3 mg/m3	
		dust		
TETRAMETHYL	ACGIH	TWA	1 mg/m3	Table A4
THIOPEROXYDICARBONIC DIAMIDE				
TETRAMETHYL	OSHA	TWA	5 mg/m3	Table Z-1
THIOPEROXYDICARBONIC DIAMIDE				
TOLUENE	ACGIH	TWA	50 ppm	Skin Notation*; Table A4
TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA, Vacated	100 ppm	
TOLUENE	OSHA	STEL, Vacated	150 ppm	
TOLUENE	OSHA	TWA	200 ppm	Table Z-2
TOLUENE	OSHA	CEIL	300 ppm	Table Z-2

^{*} 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.

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

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

Odor, Color, Grade:BlackGeneral Physical Form:Liquid

Autoignition temperature No Data Available

Flash Point 10.00 °F [Test Method: Closed Cup]

Flammable Limits - LEL

Flammable Limits - UEL

7.00 % volume

7.00 % volume

200.00 - 250.00 °F

Vapor Density 3.70 [Ref Std: AIR=1]

Vapor Pressure 37.0000 mmHg [Details: CONDITIONS: @ 68F]

Specific Gravity 0.900 [Ref Std: WATER=1]

pHMelting pointNo Data Available

Solubility in Water Negligible

Evaporation rate 4.50 [Ref Std: ETHER=1]

Volatile Organic Compounds 365.00 g/l [Test Method: South Cost Air Qual Mgmt Dist] [Details:

CONDITIONS: Rule 443.1, calculated]

Percent volatile 40.00 % weight

VOC Less H2O & Exempt Solvents 365.00 g/l [Test Method: South Cost Air Qual Mgmt Dist] [Details:

CONDITIONS: Rule 443.1, calculated]

3M MATERIAL SAFETY DATA SHEET 3M WINDO-WELD Resealant P/N 08634

Viscosity

Approximately 60000 centipoise

10/02/2006

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Sparks and/or flames; Strong oxidizing agents; Strong acids

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideNot SpecifiedCarbon dioxideNot 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.

Dispose of empty product containers in a sanitary landfill.

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):

62-5550-5209-1

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 - 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):

Ingredient	<u>C.A.S. No</u>	<u>% by Wt</u>
TOLUENE	108-88-3	1 - 10
CYCLOHEXANE	110-82-7	0.5 - 1.5

This material contains a chemical which requires export notification under TSCA Section 12[b]:

Ingredient (Category if applicable)	C.A.S. No	Regulation	Status
CYCLOHEXANE	110-82-7	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	C.A.S. No.	<u>Classification</u>
BENZENE	71-43-2	*Male reproductive toxin
BENZENE	71-43-2	**Carcinogen
BENZENE	71-43-2	*Developmental Toxin
BITUMENS, EXTRACTS OF STEAM-	NONE	**Carcinogen
REFINED AND AIR-REFINED		
CARBON BLACK	1333-86-4	**Carcinogen
TOLUENE	108-88-3	*Developmental Toxin

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

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),

^{**} WARNING: contains a chemical which can cause cancer.

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.

Revision Changes:

Copyright was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 16: Reason for reissue heading was deleted.

Section 16: Reason for reissue phrase was deleted.

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