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**FOR CHEMICAL EMERGENCY
CALL (800) 424-9300 24 HRS.**

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: #1404 3M™ SUPER 77™ Multipurpose Adhesive (Aerosol)

PRODUCT USE:

Intended Use: General purpose aerosol adhesive
Specific Use: General purpose aerosol adhesive

SECTION 2 - INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. NO.</u>	<u>% byWt.</u>
Hydrotreated Light Naphtha (Petroleum)	64742-49-0	15-40
Cyclohexane	110-82-7	10-30
Non-Volatile Ingredients – N.J.T.S. Reg No. 04499600-5776P	Trade Secret	10-30
Dimethyl Ether	115-10-6	10-30
Propane	75-28-5	3-7
Isobutane	75-28-5	3-7
Hexane	110-54-3	.01-1

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Odor, Color, Grade: red, solvent odor

General Physical Form: Gas

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. Aerosol container contains flammable material under pressure. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

POTENTIAL HEALTH EFFECTS

Eye Contact:

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

Skin contact:

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

May be absorbed through skin and cause target organ effects.

Inhalation:

Intentional concentration and inhalation may be harmful or fatal.

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

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.

Prolonged or repeated exposure may cause:

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

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

SECTION 4 – FIRST AID MEASURES

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

FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point	-42.00°F (Test Method: Tagliabue Closed Cup)
Flammable Limits – LEL	1.2% volume
Flammable Limits – UEL	27% volume

EXTHINGUISHING MEDIA

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

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. Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Closed containers expose 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 sources and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.
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SECTION 6 – ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Refer to other sections of the 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. Working from around edges and 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 spill as possible using non-sparking tools. Clean up residue with an appropriate organic solvent. Read and follow safety precautions on the solvent label and MSDS. Place in 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

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. Do not pierce or burn container, even after use. No smoking while handling this material. Do not spray near flames or source of ignition. Avoid eye contact with vapors, mists or spray. Keep out of the reach of children. Vapors may ignite explosively. May cause flash fire. Prevent build-up of vapors – open all windows and doors. Maintain vapor concentrations below recommended exposure limits. Use only with cross-ventilation. Without adequate ventilation, vapors may settle in low-lying areas. Keep away from heat, sparks and open flame. Do not smoke or ignite matches, lighters, etc.

STORAGE

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

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use with functioning spray booth and local exhaust. 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 protective equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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.

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: Polyethylene/Ethylene Vinyl Alcohol.

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 face piece or full-face air-purifying respirator with organic vapor cartridge. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance. Organic vapor cartridges may have short service life.

Prevention of Swallowing

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

EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
CYCLOHEXANE	ACGIH	TWA	100 ppm	
CYCLOHEXANE	OSHA	TWA	300 ppm	Table Z-1
Dimethyl Ether	AIHA	TWA	1000 ppm	
Dimethyl Ether	CMRG	TWA	1000 ppm	
HEXANE	ACGIH	TWA	50 ppm	Skin Notation*
HEXANE	OSHA	TWA, vacated	50 ppm	Table Z-1A
HEXANE	OSHA	TWA	500 ppm	
Hydrotreated Light Naphtha (petroleum)	CMRG	TWA	50 ppm	
Isobutane	ACGIH	TWA	1000 ppm	
PROPANE	ACGIH	TWA	1000 ppm	

* 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:	red, solvent odor
General Physical Form:	Gas
Autoignition temperature	No Data Available
Flash Point	-50.00°F [Test method: [Close Cup]
Flammable Limits - LEL	1.2% volume
Flammable Limits - UEL	27% volume
Boiling point	<=68°F
Desity	0.736 g/ml
Vapor Density	>=1.0 [Ref Std: AIR=1]
Specific Gravity	0.726 [Ref Std: WATER=1]
pH	No Data Available
Melting point	No Data Available
Solubility in Water	Nil
Evaporation rate	No Data Available
Hazardous Air Pollutants	4.0 – 5.0% weight
Volatile Organic Compounds	534 g/l [Test method: Calculated SCAQMD
rule 443.1]	
VOC Less H2) & Exempt Solvents	534 g/l [Test method: Calculated SCAQMD
rule 443.1]	
Viscosity	Not Applicable
Solids Content	20-30%

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Materials and Conditions to Avoid: Heat; Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Hydrocarbons
Formaldehyde
Carbon monoxide
Carbon Dioxide

Condition

During Combustion
During Combustion
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 DIPOSAL METHOD

Incinerate uncured product in a permitted hazardous waste incinerator. Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

The facility should be equipped to handle gaseous waste.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal

SECTION 14 – TRANSPORATION INFORMATION

ID Number(s):
62-4976-8030-6, 62-4979-8830-9

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

311/312 Hazard Categories

Fire Hazard – Yes Pressure Hazard – Yes 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>
CYCLOHEXANE	110-82-7	10-30

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

Ingredient (Category if applicable)

<u>Ingredient (Category if applicable)</u>	<u>C.A.S. No</u>	<u>Regulation</u>	<u>Status</u>
HEXANE	110-54-3	Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable
CYCLOHEXANE	110-82-7	Toxic Substance Control Act (TSCA) 4 Test Rule Chemicals	Applicable

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

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

INTERNATIONAL REGULATIONS

Non hazardous according to WHMIS criteria.

WHMIS: Non-hazardous

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

SECTION 16 – OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 4 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 also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

No revision information is available.

SECTION 17 - COMMENTS

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with Fibre Glast Developments or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their needs.