31.1 Center St. Paul, Minnesota 55144-1000 612/733 1110

Duns No.: 00-617-3082

MATERIAL SAFETY DATA SHEET

DIVISION: ADHESIVES, COATINGS AND SEALERS TRADE NAME: 3M Feathering Disc Adhesive, Type II PART NO. 08051 3M I.D. NUMBER: 62-4487-2608-3

ISSUED: DECEMBER 30, 1989 SUPERSEDES: JULY 28, 1989 DOCUMENT: 10-5266-1

1. INGREDIENT	C.A.S. NO.	PERCENT	VALUE UNIT	LIMITS TYPE AUTH	
n-hexane hexane (other isomers) polyterpene resin natural rubber glycerol ester of hydrogenated rosin	110-54-3 none 13680-35-8 9006-04-6 65997-13-9	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	50 PPM NONE NONE NONE NONE NONE NONE NONE NONE	TWA ACGIF NONE NONE NONE NONE NONE NONE NONE NONE	
kaolin titanium dioxide	1332-58-7 13463-67-7	1.0 - 10.0 0.1 - 1.0	10 mg/m3 10 mg/m3	TWA ACGIH TWA ACGIH	

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists - NONE: None Established

2. PHYSICAL DATA	
BOILING POINT:	
VAPOR PRESSURE:	12.6500 mmHg
VAPOR DENSITY:	2.97 Air = 1
EVAPORATION RATE:	1.90 Ether = 1
SOLUBILITY IN WATER:	Verv slight
SP. GRAVITY:	0.800 Water = 1
PERCENT VOLATILE:	70.00 %
VOLATILE ORGANICS:	520.00 gm/1
pH:	NZA
VISCOSITY:	3425.0 centistakes
APPEARANCE AND ODOR: Amber,	liquid, hexane odor
3. FIRE AND EXPLOSION HAZARD DAT	A
FLASH POINT: Flammable limits - lel: Flammable limits - uel: Autoignition temperature:	1.20 % 6.90 %
EXTINGUISHING MEDIA.	

AUTOIGNITION TEMPERATURE: ... N/D EXTINGUISHING MEDIA: CO2, foam, dry chemical SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should be equipped with self-contained breathing apparatus when fighting fires involving this material. UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely Flammable. Overheated, closed containers adjacent to fire could explode due to internal pressure buildup. NFPA-HAZARD-CODES: HEALTH 3 FIRE 3 REACTIVITY 0 UNUSUAL REACTION HAZARD: None

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

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REACTIVITY DATA
STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
N/A
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
C0, C02 and smoke particles when subjected to excessive heat or flame.
ENVIRONMENTAL INFORMATION

SPILL RESPONSE: Extinguish all ignition sources. Ventilate the area. Observe precautions from other sections. Contain the spill. Cover with absorbent materials as needed. Collect the spilled material using non-sparking tools. Place in a U.S. Department of Transportation approved metal container, and seal.

RECOMMENDED DISPOSAL: Incinerate absorbed and bulk product after mixing with flammable material in a licensed hazardous waste facility. Disposal should be in accordance with applicable regulations. U.S. EPA Hazardous Waste Number: D001 (Ignitable).

ENVIRONMENTAL DATA: Volatile Organic Compound (VOC): Maximum VOC = 520 grams/liter. Maximum VOC minus Water minus Exempt Solvents = 520 grams/liter. VOC's were calculated according to Rule 443.1 of the South Coast Air Quality Management District (SCAQMD).

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

6. SUGGESTED FIRST AID

EYE CONTACT: Immediately flush eyes with plenty of water for at least 10 minutes. Call a physician. SKIN CONTACT: Wash affected area with soap and water. INHALATION: Provide fresh air. If breathing difficulties persist, call a physician. IF SWALLOWED: Do not induce vomiting. If conscious, give two glasses of milk or water to drink. Call a physician or poison control center. OTHER FIRST AID: NONE

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

3M General Offices

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7. PRECAUTIONARY INFORMATION

FOR INDUSTRIAL OR PROFESSIONAL USE ONLY. Keep away from heat, sparks, flame, and other sources of ignition. The vapors released from this product can be ignited easily. Avoid prolonged breathing of vapor/spray (airborne adhesive particulate). Use only in areas with sufficient ventilation to maintain vapor/spray concentrations below recommended limits. Provide local exhaust ventilation if necessary. Keep container tightly capped when not in use. Avoid eye and skin contact. Use eye (e.g., safety glasses, chemical goggles) and skin (e.g., impervious gloves) protection to prevent contact. Keep out of the reach of children.

ADDITIONAL EXPOSURE LIMITS

	E	XPOSURE	LIMITS	
INGREDIENTS	VALUE	UNIT	TYPE	AUTH
n-hexane	180	mg/m3	TWA	ACGIH
n-hexane	50	ppm	TWA	OSHA
n-hexane	180	mg/m3	TWA	OSHA
kaolin	10	mg/m3	TWA	OSHA
titanium dioxide	10	mg∕m3	TWA	OSHA

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists - OSHA: Occupational Safety and Health Administration

8. HEALTH HAZARD DATA

EYE CONTACT: Liquid may cause severe eye irritation and vapor may cause eye irritation.

SKIN CONTACT: Prolonged or repeated skin contact may defat skin leading to irritation and dermatitis. n-Hexane may be absorbed through the skin in harmful amounts.

INHALATION: Vapor overexposure may cause respiratory system irritation and temporary nervous system impairment (light-headedness). Repeated or extreme overexposure to n-hexane may cause nervous system damage. Symptoms of overexposure may include headache, dizziness, weakness, fatigue, nausea, loss of coordination and stupor.

INGESTION: May cause digestive system irritation and nervous system impairment. Symptoms include nausea, diarrhea, dizziness, sleepiness, decreased reaction time and slurred speech. Solvent aspiration into the lungs as a result of vomiting may cause lung damage, which can be fatal.

NOTE: Titanium dioxide is a potential cancer hazard based on animal studies at extremely high, repeated exposures. This effect is not expected under the conditions of product intended use.

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SECTION CHANGE DATES

ENVIRON. DATA SECTION CHANGED SINCE JULY 28, 1989 ISSUE

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

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.