

1FID: 00312995  
VER DATE: 1996-08-20

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MATERIAL SAFETY DATA SHEET      TIME: 19:02:29  
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SECTION 01: CHEMICAL PRODUCT & COMPANY ID

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PRODUCT PRIMARY NAME: 3M BRAND ADHESION PROMOTER #4298 AND #6396

ALL SYNONYMS : ADHESION PROMOTER

ADHESION PROMOTER 4298  
ADHESION PROMOTER 4298 & 6396  
ADHESION PROMOTOR 4298  
AUTOMOTIVE AFTERMARKET  
AUTOMOTIVE AFTERMARKET  
AUTOMOTIVE DIVISION  
AUTOMOTIVE ENGINEERED SYSTEMS DIVISION  
A4298 PREP PAD  
CN33068  
FLAMMABLE, CONTAINS SMALL AMOUNT (<1%) EPOXY  
GM VENTVISOR  
PROMOTER PEN-ADHESIVE  
VENTVISOR REFLECTOR  
00-21200-64192-3  
07-1193-7 (DOCUMENT)  
12368011  
12371542  
12378462  
21061473  
3M ADHESION PROMOTER 4298  
3M ADHESION PROMOTER 4298 & 6396  
3M ADHESION PROMOTOR 4298  
3M BRAND ADHESION PROMOTER #4298 (FORMER)  
3M BRAND ADHESION PROMOTER #4298 AND #6396  
3M BRAND ADHESION PROMOTER 4298 AND 6396  
3M BRAND ADHESION PROMOTOR 4298  
329135 (OLD FID)  
341330 (OLD FID)  
4298  
4298 ADHESION PROMOTER  
6396 ADHESION PROMOTER  
70-0705-3070-7  
9985568

SAFE USE CATEGORY AND DESCRIPTION: 02 -SOLVENTS - FLASH POINT: < 100 F

LAST UPDATED DATE: 1997-01-21

MANUFACTURER'S ID (MID): 000515671  
MANUFACTURER'S NAME: 3M CO  
MANUFACTURER'S EMERGENCY PHONE NUMBER/TEXT: US 651-733-1110  
MANUFACTURER'S MAILING ADDRESS:  
3M CENTER  
ST PAUL MN 55144-1000  
US

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SECTION 02: COMPOSITION & INGREDIENT INFO

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CAS#	FORMULATION	W/V	CHEMICAL NAME
000064175	R 5.0000/ 10.0000%	W	ETHYL ALCOHOL
000067561	< 0.0000/ 0.5000%	W	METHANOL
000067630	< 0.0000/ 1.0000%	W	ISOPROPYL ALCOHOL
000100414	R 3.0000/ 7.0000%	W	BENZENE, ETHYL-
000108907	< 0.0000/ 0.5000%	W	BENZENE, CHLORO-
000110827	R 45.0000/ 55.0000%	W	CYCLOHEXANE
000141786	R 1.0000/ 5.0000%	W	ACETIC ACID, ETHYL ESTER
001330207	R 25.0000/ 35.0000%	W	XYLENE
025068386	< 0.0000/ 0.5000%	W	PHENOL, 4,4'-ISOPROPYLIDENEDI-, TE TRAMER with 1-CHLORO-2,3-EPOXYPROP ANE
068609369	R 1.0000/ 5.0000%	W	2,5-Furandione, reaction products with polypropylene, chlorinated
989923650	R 1.0000/ 5.0000%	W	ACRYLATE POLYMER

SECTION 2 - OTHER INFORMATION: EXPOSURE LIMITS: 989923650, 68609369, 25068386: NONE. // \* SKIN NOTATION: LISTED SUBSTANCES INDICATED WITH '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.

THRESHOLD LIMIT VALUE: ACGIH: 110827: 300 PPM // 1330207: 100 PPM TWA, 150 PPM STEL // 64175: 1000 PPM TWA // 100414: 100 PPM TWA, 125 PPM STEL // 141786: 400 PPM TWA // 67630: 400 PPM TWA, 500 PPM STEL // 67561: 200 PPM TWA SKIN, 250 PPM STEL SKIN // 108907: 75 PPM TWA

PERMISSIBLE EXPOSURE LIMIT: OSHA: 110827: 300 PPM // 1330207: 100 PPM TWA, 150 PPM STEL // 64175: 1000 PPM TWA // 100414: 100 PPM TWA, 125 PPM STEL // 141786: 400 PPM TWA // 67630: 400 PPM TWA, 500 PPM STEL // 67561: 200 PPM TWA SKIN, 250 PPM STEL SKIN // 108907: 75 PPM TWA

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### SECTION 03: HAZARDS IDENTIFICATION

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EFFECTS OF OVEREXPOSURE - SKIN: MODERATE SKIN IRRITATION (AFTER PROLONGED OR REPEATED CONTACT): SIGNS/SYMPTOMS CAN INCLUDE REDNESS, SWELLING, ITCHING, AND DRYNESS.

EFFECTS OF OVEREXPOSURE - EYE: MODERATE EYE IRRITATION: SIGNS/SYMPTOMS CAN INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND HAZY VISION.

EFFECTS OF OVEREXPOSURE - INHALATION: CENTRAL NERVOUS SYSTEM DEPRESSION: SIGNS/SYMPTOMS CAN INCLUDE HEADACHE, DIZZINESS, DROWSINESS, INCOORDINATION, SLOWED REACTION TIME, SLURRED SPEECH, GIDDINESS AND UNCONSCIOUSNESS. IRRITATION (UPPER RESPIRATORY): SIGNS/SYMPTOMS CAN INCLUDE SORENESS OF THE NOSE AND THROAT, COUGHING AND SNEEZING.

EFFECTS OF OVEREXPOSURE - INGESTION: GASTROINTESTINAL EFFECTS: SIGNS/SYMPTOMS GENERALLY WILL INCLUDE ABDOMINAL PAIN. CENTRAL NERVOUS SYSTEM DEPRESSION: SIGNS/SYMPTOMS CAN INCLUDE HEADACHE, DIZZINESS, DROWSINESS, MUSCULAR WEAKNESS, INCOORDINATION, SLOWED REACTION TIME, FATIGUE, BLURRED VISION, SLURRED SPEECH, GIDDINESS, TREMORS AND CONVULSIONS. ASPIRATION PNEUMONITIS: SIGNS/SYMPTOMS CAN INCLUDE COUGHING, DIFFICULTY BREATHING, WHEEZING, COUGHING UP BLOOD AND PNEUMONITIS WHICH CAN BE FATAL.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NOT DETERMINED

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SECTION 04: FIRST AID MEASURES

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EMERGENCY FIRST AID PROCEDURES - SKIN: FLUSH SKIN WITH LARGE AMOUNTS OF WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

EMERGENCY FIRST AID PROCEDURES - EYES: IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER. GET IMMEDIATE MEDICAL ATTENTION.

EMERGENCY FIRST AID PROCEDURES - INHALATION: REMOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GET IMMEDIATE MEDICAL ATTENTION.

EMERGENCY FIRST AID PROCEDURES - INGESTION: IF SWALLOWED, CALL A PHYSICIAN IMMEDIATELY. ONLY INDUCE VOMITING AT THE INSTRUCTION OF A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

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SECTION 05: FIRE-FIGHTING MEASURES

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FLAMMABLE LEL: = 1.00

FLAMMABLE UEL: = 6.00

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. WATER MAY NOT EFFECTIVELY EXTINGUISH FIRE; HOWEVER, IT SHOULD BE USED TO KEEP FIRE EXPOSED CONTAINERS AND SURFACES COOL AND PREVENT EXPLOSIVE RUPTURE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: VAPORS MAY TRAVEL LONG DISTANCES ALONG THE GROUND OR FLOOR TO AN IGNITION SOURCE AND FLASH BACK.

NFPA CODES:

NFPA FLAMMABILITY CODE = 3

NFPA HEALTH CODE = 2

NFPA REACTIVITY CODE = 0

NFPA SPECIAL HAZARD TEXT: UNUSUAL REACTION HAZARD: NONE

AUTO-IGNITION TEXT: NOT DETERMINED

FLASH POINT TEMPS: = - 4.00F

FLASH POINT TEXT: CA.

FLASH POINT METHOD: OC

SECTION 5 - OTHER INFORMATION: FLAMMABLE LIMITS: CALCULATED // OSHA

FIRE HAZARD CLASS: CLASS IB FLAMMABLE LIQUID.

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SECTION 06: ACCIDENTAL RELEASE MEASURES

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SPILL OR LEAK PROCEDURES: SPILL RESPONSE: REFER TO OTHER SECTIONS OF THIS MSDS FOR INFORMATION REGARDING PHYSICAL AND HEALTH HAZARDS, RESPIRATORY PROTECTION, VENTILATION, AND PERSONAL PROTECTIVE EQUIPMENT.

IN THE U.S.A., CALL (612) 733-1110 OR (612) 733-6100 FOR 24-HOUR SPILL ASSISTANCE. VENTILATE AREA. EXTINGUISH ALL IGNITION SOURCES. CONTAIN SPILL. EVACUATE UNPROTECTED PERSONNEL FROM HAZARD AREA. COVER WITH ABSORBENT MATERIAL. COVER SPILL AREA WITH LIGHT WATER BRAND OR OTHER ATC FOAM. (FOR FURTHER INFORMATION ON ATC FOAM USAGE, CONTACT 3M FIRE PROTECTION SYSTEMS.) COLLECT 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 AN APPROVED METAL CONTAINER. SEAL THE CONTAINER.

ENVIRONMENTAL IMPACT: NOT DETERMINED.

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#### SECTION 07: HANDLING AND STORAGE

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE AWAY FROM HEAT. KEEP CONTAINER CLOSED WHEN NOT IN USE.

SECTION 7 - OTHER INFORMATION: FIRE AND EXPLOSION AVOIDANCE: KEEP CONTAINER TIGHTLY CLOSED. FLAMMABLE LIQUID AND VAPOR. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME, AND OTHER SOURCES OF IGNITION. NO SMOKING WHILE HANDLING THIS MATERIAL. AVOID STATIC DISCHARGE. OTHER PRECAUTIONARY INFORMATION: FOR INDUSTRIAL OR PROFESSIONAL USE ONLY.

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#### SECTION 08: EXPOSURE CONTROLS - PROTECTION

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EYE PROTECTION: AVOID EYE CONTACT WITH VAPOR, SPRAY, OR MIST. WEAR SAFETY GLASSES WITH SIDE SHIELDS.

SKIN PROTECTION: AVOID SKIN CONTACT. WEAR APPROPRIATE GLOVES WHEN HANDLING THIS MATERIAL. A PAIR OF GLOVES MADE FROM THE FOLLOWING MATERIAL(S) ARE RECOMMENDED: FLUOROELASTOMER (VITON).

RESPIRATORY PROTECTION: AVOID PROLONGED BREATHING OF VAPORS. SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS AND IN ACCORDANCE WITH OSHA REGULATIONS: HALF-MASK ORGANIC VAPOR RESPIRATOR, FULL-FACE ORGANIC VAPOR RESPIRATOR.

VENTILATION: LOCAL EXHAUST IS REQUIRED FOR OPERATIONS USING LARGE AMOUNTS OF MATERIAL. USE IN A WELL-VENTILATED AREA. PROVIDE SUFFICIENT VENTILATION TO MAINTAIN EMISSIONS BELOW RECOMMENDED EXPOSURE LIMITS. IF EXHAUST VENTILATION IS NOT ADEQUATE, USE APPROPRIATE RESPIRATORY PROTECTION.

SECTION 8 - OTHER INFORMATION: PREVENTION OF ACCIDENTAL INGESTION: DO NOT INGEST.

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#### SECTION 09: PHYSICAL & CHEMICAL PROPERTIES

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THEORETICAL VOC WITHOUT WATER: VOLATILE ORGANIC COMPOUNDS: CA. 750 GMS/LITER SOUTH COAST AIR QUALITY MGMT. DIST METHOD CALCULATED. VOC LESS WATER & EXEMPT SOLVENTS: CA. 755 GMS/LITER SOUTH COAST AIR QUALITY. MGMT DIST METHOD CALCULATED.

BOILING POINT TEMPS: R 170.00F TO 280.00F  
BOILING POINT TEXT: ESTIMATED, BASED ON COMPOSITION

MELTING/FREEZE POINT TEXT: NOT APPLICABLE

SPECIFIC GRAVITY VALUES: = 0.8200  
SPECIFIC GRAVITY TEXT: CA., G/ML

VAPOR DENSITY VALUES: =  
VAPOR DENSITY TEXT: G/CC, CALCULATED AT 100 DEG C  
VAPOR PRESSURE VALUES/UOM: = 68.0000MMHG  
VAPOR PRESSURE TEXT: CALCULATED AT 25 DEG C

PERCENT VOLATILE BY WEIGHT TEXT: CA. 94%

EVAPORATION RATE VALUES: = 6.40  
EVAPORATION RATE TEXT: XYLENE = L, CALCULATED

SOLUBILITY IN WATER VALUES/UOM: = 10.0000  
SOLUBILITY IN WATER TEXT: CA.

PH OF PRODUCT AS RECEIVED (NEAT)/VALUE: = 5.5000  
PH OF PRODUCT AS RECEIVED (NEAT)/TEXT: CA.

APPEARANCE: LIQUID, YELLOW

ODOR: SOLVENT ODOR

VISCOSITY TEXT: 30 - 40 CENTIPOISE

PHYSICAL STATE: LIQ

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#### SECTION 10: STABILITY & REACTIVITY

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STABILITY INDICATOR: Y  
STABILITY - TEXT: STABLE

INCOMPATIBLE MATERIALS: HEAT, SPARKS AND/OR FLAMES.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE AND CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION INDICATOR: N  
HAZARDOUS POLYMERIZATION TEXT: WILL NOT OCCUR

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#### SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: INCINERATE IN A PERMITTED HAZARDOUS WASTE INCINERATOR. COMBUSTION PRODUCTS WILL INCLUDE HYDROGEN CHLORIDE. SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL. IN THE EVENT OF AN UNCONTROLLED RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE QUALIFIES AS A REPORTABLE QUANTITY. U.S. EPA HAZARDOUS WASTE NUMBER = D001 (IGNITABLE)

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#### SECTION 15: REGULATORY INFORMATION

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SARA 311/312 HAZARD INDICATORS:

IMMEDIATE HEALTH INDICATOR =		Y	
DELAYED HEALTH INDICATOR =		Y	
FIRE INDICATOR =	Y		
SUDDEN PRESSURE RELEASE INDICATOR =			N
REACTIVITY INDICATOR =		N	

SECTION 15 - OTHER INFORMATION: THE NEW JERSEY TRADE SECRET NUMBER FOR THE ACRYLATE POLYMER IS 04499600-5984P. 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: CYCLOHEXANE, XYLENE, ETHYLBENZENE, METHYL ALCOHOL, CHLOROBENZENE.

