

MATERIAL SAFETY DATA SHEET

SECTION 1. ----- CHEMICAL IDENTIFICATION -----

CATALOG #: 537543

NAME: PROPYLENE GLYCOL METHYL ETHER ACETATE, 99%

(EASTMAN PM ACETATE)

SECTION 2. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS #: NONE

MF: C6H12O3

EC NO: 203-603-9

SYNONYMS

DOWANOL (R) PMA GLYCOL ETHER ACETATE * 1-METHOXY-2-ACETOXYPROPANE *

PGMEA * 2-PROPANOL, 1-METHOXY-, ACETATE (9CI) * PROPYLENEGLYCOL

MONOMETHYL ETHER ACETATE *

SECTION 3. ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS

COMBUSTIBLE (USA)

FLAMMABLE (EU)

IRRITANT

MAY FORM EXPLOSIVE PEROXIDES.

IRRITATING TO EYES.

TARGET ORGAN(S):

LIVER

KIDNEYS

COMBUSTIBLE.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF

WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

TEST FOR PEROXIDE FORMATION PERIODICALLY AND BEFORE

DISTILLATION.

DO NOT DISTILL TO DRYNESS.

SECTION 4. ----- FIRST-AID MEASURES -----

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS

AMOUNTS OF WATER.

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

EXTINGUISHING MEDIA

WATER SPRAY.

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

FLAMMABLE LIQUID.

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK.

CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS.

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES -----

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

COVER WITH DRY-LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS.

VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

EVACUATE AREA.

SHUT OFF ALL SOURCES OF IGNITION.

SECTION 7. ----- HANDLING AND STORAGE -----

REFER TO SECTION 8.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION -----

SAFETY SHOWER AND EYE BATH.

USE NONSPARKING TOOLS.

MECHANICAL EXHAUST REQUIRED.

WASH THOROUGHLY AFTER HANDLING.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

AVOID BREATHING VAPOR.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

NIOSH/MSHA-APPROVED RESPIRATOR.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

CHEMICAL SAFETY GOGGLES.

KEEP CONTAINER CLOSED.

KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.

STORE IN A COOL DRY PLACE.

MOIST MATERIAL OXIDIZES EXOTHERMICALLY IN AIR REACHING IGNITION

TEMPERATURE. EXOTHERMIC REACTION WITH LITHIUM INITIATES AT 260 C AND

RAPIDLY RISES TO 960 C.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL PROPERTIES

BOILING POINT: 145 C TO 146 C

FLASHPOINT 110 F

EXPLOSION LIMITS IN AIR:

UPPER 13,1 %

LOWER 1,3 %

VAPOR PRESSURE: 3,7 MMHG @ 20 C

SPECIFIC GRAVITY: 0.970

SECTION 10. -----STABILITY AND REACTIVITY -----

STABILITY

STABLE.

CONDITIONS TO AVOID

UPON EXPOSURE TO AIR, PRODUCT MAY SLOWLY DEGRADE, FORMING PEROXIDES,

WHICH CAN BE UNSTABLE.

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS

STRONG ACIDS

STRONG BASES

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

ACUTE EFFECTS

MAY CAUSE SKIN IRRITATION.

MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

CAUSES EYE IRRITATION.

MAY BE HARMFUL IF INHALED.

MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER

RESPIRATORY TRACT.

MAY BE HARMFUL IF SWALLOWED.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

CHRONIC EFFECTS

TARGET ORGAN(S):

LIVER

KIDNEYS

RTECS #: A18925000

ACETIC ACID, 2-METHOXY-1-METHYLETHYL ESTER

TOXICITY DATA

ORL-RAT LD50:8532 MG/KG DOWCC* MSD-1582

IPR-MUS LD50:750 MG/KG NTIS** AD691-490

SKN-RBT LD50:>5 GM/KG DOWCC* MSD-1582

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
THIS MATERIAL.

BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND
SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY
FLAMMABLE.

OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. ----- TRANSPORT INFORMATION -----

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. ----- REGULATORY INFORMATION -----

EUROPEAN INFORMATION

EC INDEX NO: 607-195-00-7

FLAMMABLE

IRRITANT

R 10

FLAMMABLE.

R 36

IRRITATING TO EYES.

S 25

AVOID CONTACT WITH EYES.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

OEL-AUSTRIA: MAK 50 PPM (275 MG/M3), JAN1999

OEL-DENMARK: TWA 50 PPM (270 MG/M3), JAN1999

OEL-SWEDEN: NGV 50 PPM (230 MG/M3), KTV 75 PPM (350 MG/M3, SKIN,
JAN1999

OEL-UNITED KINGDOM: TWA 50 PPM (274 MG/M3), STEL 150 PPM (822 MG/M3),
SEP2000

NOES 1983: HZD X9258; NIS 178; TNF 30459; NOS 109; TNE 345446; TFE
40133

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001

SECTION 16. ----- OTHER INFORMATION-----

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH,
FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING
OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR
PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

COPYRIGHT 2001 SIGMA-ALDRICH CO.

LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY