MATERIAL SAFETY DATA SHEET

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

CATALOG #: M6514

NAME: GAMMA-METHACRYLOXYPROPYL-
TRIMETHOXYSILANE

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

CAS #: 2530-85-0

MF: C10H20O5SI

EC NO: 219-785-8

ADDITIONAL INFORMATION

CONTAINS METHYL ALCOHOL, CHEMICAL ABSTRACTS REGISTRY NUMBER 67-56-1.

SYNONYMS

DYNASYLAN MEMO * KBM 503 * KH 570 * M 8550 * METHACRYLIC ACID, 3-
(TRIMETHOXYSILYL)PROPYL ESTER * GAMMA-
METHACRYLOXYPROPYLTRIMETHOXYSILANE * MOPS-M * NUCA 174 * 2-PROPENOIC
ACID, 2-METHYL-, 3-(TRIMETHOXYSILYL)PROPYL ESTER * SILANE, (3-
HYDROXYPROPYL)TRIMETHOXY-, METHACRYLATE * SILICONE A-174 * 3-
(TRIMETHOXYSILYL)-1-PROPANOL METHACRYLATE * TRIMETHOXYSILYL-3-
PROPYLESTER KYSELINY METHAKRYLOVE (CZECH) * UNION CARBIDE A-174 *

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

LABEL PRECAUTIONARY STATEMENTS

IRRITANT

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

COMBUSTIBLE.

TARGET ORGAN(S):

EYES

KIDNEYS

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

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
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
UNDER FIRE CONDITIONS, MATERIAL MAY DECOMPOSE TO FORM FLAMMABLE AND/OR EXPLOSIVE MIXTURES IN AIR.
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - - - -
EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - - - - HANDLING AND STORAGE- - - - - - - - -
REFER TO SECTION 8.

SECTION 8. - - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.
IRRITANT.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - - APPEARANCE AND ODOR
LIQUID

PHYSICAL PROPERTIES

BOILING POINT: 255 C

MELTING POINT: -48 C

FLASHPOINT 226F

107.7°C

EXPLOSION LIMITS IN AIR:

UPPER 5.4 %

LOWER 0.9 %

VAPOR PRESSURE: 10 MMHG @ 130 C

SOLUBILITY:

WATER -Z1076

SLOWLY REACTS W

SPECIFIC GRAVITY: 1.045

EVAPORATION RATE: < 1

VAPOR DENSITY: 8.6 G/L

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

STABILITY

STABLE.

CONDITIONS TO AVOID

MAY DECOMPOSE ON EXPOSURE TO MOIST AIR OR WATER.

INCOMPATIBILITIES

HEAT

AVOID CONTACT WITH ALKALI.

WATER REACTIVE MATERIAL.

OXIDIZING AGENTS

HEAVY METAL SALTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE

SILICON OXIDE

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

MAY OCCUR.

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

ACUTE EFFECTS

CONTACT WITH MOISTURE LIBERATES METHANOL. INGESTION OF METHANOL MAY

CAUSE BLINDNESS, NAUSEA, HEADACHE, VOMITING, GASTROINTESTINAL UPSET,
DIZZINESS, IRREGULAR BREATHING, WEAKNESS, CONFUSION, DROWSINESS, UNCONSCIOUSNESS, AND DEATH.

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

CAUSES SKIN IRRITATION.

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.

VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

CHRONIC EFFECTS

TARGET ORGAN(S):

EYES

KIDNEYS

RTECS #: UC02300000

1-PROPANOL, 3-(TRIMETHOXYSILYL)-, METHACRYLATE

IRRITATION DATA

SKN-RBT 500 MG/24H MLD 85JCAE -,1235,1986

EYE-RBT 500 MG/24H MLD 85JCAE -,1235,1986

TOXICITY DATA

ORL-RAT LD50:22600 UL/KG UCDS** 11/9/1967

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 - - - - - - - - - -

THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.

OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

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

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

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

EUROPEAN INFORMATION

IRRITANT

R 36/37/38

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S 26

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.

S 28

AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.

TLV AND SOURCE

FOR METHYL ALCOHOL - SKIN:

ACGIH TLV-TWA: 200 PPM (260 MG/M3); STEL: 250 PPM (310 MG/M3).

OSHA PEL: 8 H TWA 200 PPM (260 MG/M3); STEL: 250 PPM (310 MG/M3).

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

NOHS 1974: HZD T0118; NIS 3; TNF 64; NOS 6; TNE 966

NOES 1983: HZD T0118; NIS 36; TNF 2492; NOS 27; TNE 31238; TFE 7749

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

EPA TSCA 8(A) PRELIMINARY ASSESSMENT INFORMATION, FINAL RULE

FEREAC 47,26992,82

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

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

U.S. INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

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