

MATERIAL SAFETY DATA SHEET

RECORD NO.: P956

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SECTION 1. NAME AND PRODUCT

S1590

NAME: S1590

SYNONYMS: Styrylaminosilane quat 40%, in Methanol

CAS REG.NO.: 0034937-00-3 FORMULA: C17H31ClN2O3Si

SECTION 2. HAZARDOUS INGREDIENTS

S1590

COMPONENT	ACGIH TLV	OSHA PEL
3-(N-Styrylmethyl-2-aminoethylamino)propyltrimethoxy silaneHCl [34937-00-3]	NA	NA
Methanol [67-56-1] (+)(+++)	TWA(skn) 200ppm STEL(skn) 250 ppm	200ppm 250 ppm

LEGEND:

- (+) This chemical is subject to the reporting requirements of SARA Title III Section 313 and 40CFR Part 372, and is potentially at the maximum concentration listed.
- (++) SARA Title III Section 302 Extremely Hazardous Substance
- (+++) CERCLA Hazardous Substance
[00000-00-0] Chemical Abstracts Services Registry Number.

If no marks appear with a listed ingredient, then the ingredient is not included in any of the regulatory categories appearing in the Legend of this Material Safety Data Sheet.

SECTION 3. PHYSICAL DATA

S1590

APPEARANCE: Clear liquid

B.PT.(deg.C/mm): 65C

VAPOR PRESSURE(mm/deg.C): 95/20

M.PT.(deg.C): NA

VAPOR DENSITY(AIR=1): >1

% SOLUBLE IN WATER: >50%

SPECIF.GRAVITY: 0.90

% VOLATILE BY VOLUME: >55%

SECTION 4. FIRE AND EXPLOSION HAZARD

S1590

FLASH POINT: 13.0 C (Closed Cup)

FLAMMABLE LIMITS (STP IN AIR)

LOWER LIMITS: 6.0

UPPER LIMITS: 36.0

FIRE EXTINGUISHING MEDIA: CO2, foam, dry chemical

PERSONAL PROTECTION FOR FIGHTING FIRE: Fire fighters must wear positive-pressure, self-contained breathing apparatus and full protective clothing.

SECTION 5. REACTIVITY DATA

S1590

STABILITY (UNDER NORMAL CONDITIONS): Stable

CONDITIONS TO AVOID:

Contact with alkali.
Contact with water or moist air.
Exposure to heat.
Contact with oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID:

NA

HMIS RATINGS (Scale 0-4)

HEALTH: 2*

FLAMMABILITY: 3

REACTIVITY: 1

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SECTION 6. SPILL OR LEAK PROCEDURES

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S1590

IN CASE OF SPILL:

Absorb spilled material with suitable chemical binder.
Shovel absorbent into suitable waste container.
Do not contaminate soil, groundwater, or surface water.

DISPOSAL METHOD:

Incinerate. Follow all federal, state, and local regulations.

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SECTION 7. HEALTH HAZARD DATA

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S1590

TOXICITY:

Material generates Methanol on hydrolysis.

Methanol:

Toxicity Data; ihl-hmn TCLo: 86,000 mg/m3; ihl-hum TCLo: 300 ppm; ihl-rat LC50: 64,000 ppm/ 4 Hours; orl-hum LDLo: 428 mg/kg; orl-hum LDLo:143 mg/kg; orl-man TDLo: 3429 mg/kg; orl-wmn TDLo: 4000 mg/kg; orl-rat LD50: 5628 mg/kg; skn-rbt LD50: 15,800 mg/kg; unk-man LDLo: 868 mg/kg.

Irritation Data; eye-rbt 40 mg MOD IRR; skn-rbt500 mg/ 24 Hours MOD IRR.

Reproductive Toxicity Data;

ihl-rat TCLo: 20,000 ppm/ 7 Hours (1-22 Days Pregnant);
ihl-rat TCLo: 20,000 ppm/ 7 Hours (7-15 Days Pregnant);
ihl-rat TCLo: 10,000 ppm/ 7 Hours (7-15 Days Pregnant);
orl-rat TDLo: 7500 mg/kg (17-19 Days Pregnant).

Methanol is the subject of a TSCA CHIP, a NIOSH Criteria Document, a NIOSH Current Intelligence Bulletin, is a CERCLA Hazardous Substance (RQ= 5000#/2270kg.), is listed under RCRA (U154), and is a SARA Title III Section 313 Toxic Chemical.

ROUTES AND EFFECTS OF EXPOSURE:

EYES: Irritant.

SKIN: Irritant. Can be absorbed

INHALATION: Causes irritation or damage to lung. Can be absorbed

INGESTION: Toxic. Can be absorbed

NOTE:

Material generates Methanol(toxic) on contact with water or moisture on the skin, eyes, and mucous membranes.

Methanol is a tissue irritant that may be absorbed through the skin and produce systemic toxic effects. Vapors may be inhaled and metabolized to

Formaldehyde and Formic acid resulting in systemic acidosis, blindness, and ultimately death from respiratory arrest. Liquid produces effects similar to inhalation overexposure when ingested.

FIRST AID PROCEDURES:

EYES: Flush with clean water for at least 15 minutes and consult physician
SKIN: Flush with water
SKIN: Remove contaminated clothing and shoes
INHALATION: Remove victim to fresh air
INHALATION: Give CPR or oxygen if necessary
INGESTION: Get medical attention

---If symptoms persist, get medical attention---

---Never give anything by mouth to an unconscious person---

CARCINOGEN STATUS: NTP?: No IARC MONOGRAPH?: No OSHA REGULATED?: No

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SECTION 8. SPECIAL PROTECTION INFORMATION S1590
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VENTILATION:

Maintain adequate ventilation

RESPIRATORY PROTECTION:

If exposure exceeds TLV, use appropriate NIOSH approved respiratory protection

PROTECTIVE CLOTHING:

Use impervious gloves

Use impervious clothing as necessary to protect against skin contact

EYE PROTECTION:

Use chemical goggles

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SECTION 9. PRECAUTIONS OR OTHER COMMENTS S1590
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HANDLING AND STORAGE:

Store in a cool and dry place

Protect from heat, direct sunlight, and source of ignition

Containers require grounding during use

Store away from alkaline materials

Store away from oxidizing materials

Provide adequate ventilation

PROPER SHIPPING NAME: Flammable liquid, n.o.s.

TECHNICAL NAME: (Methanol)

HAZARD CLASS: 3 ID NO.: UN1993 PACKING GROUP: II RQ ERG: 27

HAZARD LABEL(S): Flammable liquid

Since empty containers retain product residue, follow hazard precautions even after container is emptied.

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