

# SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Tetrakis(trichlorosilyl)silane**  
FORMULA:  $\text{Cl}_{12}\text{Si}_5$   
CAS NO: 50350-62-4  
SYNONYMS: DODECACHLORONEOPENTASILANE

Intended Use: For R&D use only.

### MANUFACTURER:

NOVA-KEM  
N115 W19392 EDISON DRIVE  
GERMANTOWN, WI 53022, USA

PHONE: 1-262-293-0251  
FAX: 1-262-253-1258

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC 1-800-424-9300

FOR TECHNICAL INFORMATION CONTACT: 1-262-293-0251

## SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION:

Pictogram



Signal Word

**DANGER**

### Hazard Statements

H315	Causes skin irritation
H319	Causes serious eye irritation

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

### Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P232	Protect from moisture
P233	Keep container tightly closed
P260	Do not breathe dust/fumes/gas/mist/vapors/spray
P264	Wash hands thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P231, P232	Handle under inert gas, protect from moisture
P363	Wash contaminated clothing before reuse
P301, P330, P313	IF SWALLOWED: Rinse mouth. Get medical advice.
P303, P361, P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304, P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305, P351, P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P370, P378	In case of fire: Use water spray, foam, carbon dioxide or dry powder for extinction
P402, P404	Store in a dry place. Store in a closed container

### OTHER HAZARDS

Additional precautionary phrases are located throughout the safety data sheet

### NFPA 704 RATINGS (SCALE 0-4):

Health: 3

Flammability: 2

Reactivity: 1

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  $\text{Cl}_{12}\text{Si}_5$

CHEMICAL NAME	CAS#	PURITY
TETRAKIS(TRICHLOROSILYL)SILANE	50350-62-4	95+%

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

**SKIN EXPOSURE:** Flush with plenty of water, then wash with soap and water.

**INHALATION:** Move victim into fresh air. Seek medical attention.

**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

## SECTION 5 FIREFIGHTING MEASURES

### EXTINGUISHING MEDIA:

Suitable Use water spray, foam, dry chemical or carbon dioxide.

### HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:

Hydrochloric acid and organic acid vapors may develop when material is exposed to water or open flame

### ADVICE FOR FIRE FIGHTERS

Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS

Wear suitable protective clothing, gloves, eye, and face protection. Use self-contained breathing apparatus and chemically protective clothing. Remove all sources of ignition. Evacuate personnel to safe areas.

### ENVIRONMENTAL PRECAUTIONS

Tetrakis(trichlorosilyl)silane

Do not allow material to enter drains or streams.

#### **METHODS AND MATERIALS**

Approach suspected leak areas with caution. Absorb with inert absorbent materials such as: Dry sand, vermiculite, activated charcoal. Use appropriate chemical waste container.

#### **RECOMMENDED DISPOSAL**

Hydrolyze material by mixing with water in a hood. Aqueous layer contains hydrochloric acid which should be neutralized. Organic layer may be incinerated. Alternately, absorb onto clay or vermiculite and dispose of absorbent material as solid waste.

## **SECTION 7 HANDLING AND STORAGE**

#### **PERSONAL PRECAUTIONS**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

#### **CONDITIONS FOR SAFE STORAGE**

Keep container tightly closed in a dry and well-ventilated place. Avoid contact with heat, sparks, or open flame. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect from humidity and water.

#### **INCOMPATIBILITIES:**

Exposure to air, moisture, oxidizing agents, alcohols, amines.

## **SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Be sure there is adequate ventilation. Be sure to provide readily accessible eye wash stations and safety showers.

#### **PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** If exposure exceeds TLV air-supplied or NIOSH approved combination organic vapor acid gas respirator.

**EYE/FACE PROTECTION:** Wear chemical safety goggles. Do not wear contact lenses.

**SKIN PROTECTION:** Rubber, neoprene or nitrile gloves. Launder clothing before reuse.

## **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**COLOR AND FORM:** White solid with acrid odor

**FORMULA MASS:** 565.86g/mol

**ODOR:** Acrid odor

**ODOR THRESHOLD:** No data available

**pH:** Not available

**MELTING POINT/ FREEZING POINT:** 55 °C

**BOILING POINT:** 190 °C @ 15 Torr

**FLASH POINT:** >110°C

**EVAPORATION RATE:** No data available

**VAPOR PRESSURE:** <0.1 Torr @ 25 deg. C

**VAPOR DENSITY:** >1

**SPECIFIC GRAVITY:** >1

**SOLUBILITY IN WATER:** Reacts

**AUTO-IGNITION TEMPERATURE:** No data available

**DECOMPOSITION:** No data available

**VISCOSITY:** No data available

## **SECTION 10 STABILITY AND REACTIVITY**

**STABILITY:** Stable under recommended storage conditions.

**HAZARDOUS POLYMERIZATION:** Will not polymerize.

**CONDITIONS TO AVOID:** Heat, flame, and sparks. Exposure to moisture.

**INCOMPATIBILITY:** Alcohols, amines, oxidizers

**DECOMPOSITION PRODUCTS:** Hydrogen chloride, silicon oxychlorides.

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** No data available.

**SKIN CORROSIVE/IRRITANT:** Will cause irritation which may be delayed several hours.

**SERIOUS EYE DAMAGE/IRRITATION:** Will cause immediate or delayed serious eye irritation.

**RESPIRATORY OR SKIN SENSITIZATION:** Inhalation of vapors may irritate the respiratory tract. Overexposure may produce coughing, headache and nausea.

**GERM CELL MUTAGENICITY:** No data available

**CARCINOGENICITY:** No data available

**REPRODUCTIVE TOXICITY:** No data available

**STOT-Single Exposure:** No data available

**STOT-Repeated Exposure:** No data available

**ASPIRATION HAZARD:** No data available

## SECTION 12 ECOLOGICAL DATA

**TOXICITY:** No data available

**PERSISTENCE AND DEGRADABILITY:** No data available

**BIOACCUMULATIVE POTENTIAL:** No data available

**MOBILITY IN SOIL:** No data available

**OTHER ADVERSE EFFECTS:** No data available

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable federal, state, and local regulations.

## SECTION 14 TRANSPORTATION DATA

**DOT SHIPPING NAME:** Chlorosilanes, corrosive, N.O.S. (tetrakis(trichlorosilyl)silane)

**DOT HAZARD CLASS:** 8

**DOT LABEL:** Corrosive

**DOT ID No:** UN2987

**PG:** II

Marine pollutant: No data available.

## SECTION 15 REGULATORY INFORMATION

**INDUSTRIAL SAFETY AND HEALTH ACT:** Title compound not listed.

**TOXIC CHEMICAL CONTROL ACT:** Title compound not listed.

**DANGEROUS MATERIAL SAFETY CONTROL ACT:** Title compound not listed.

**WASTES MANAGEMENT ACT:** Title compound not listed.

**OTHER REQUIREMENTS IN DOMESTIC AND OTHER COUNTRIES:** Title compound not listed.

## SECTION 16 OTHER INFORMATION

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, Nova-Kem makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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**SDS DEPT**