


INTATRADE
 MATERIAL SAFETY DATA SHEET
 according to 1907/2006/EC, Article 31

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1. IDENTIFICATION OF SUBSTANCE AND OF THE COMPANY

Product name: **3-Isocyanatopropyltriethoxysilane**
 Product code: RS05279
 Company: INTATRADE Chemicals GmbH
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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture	Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 1), H330 Acute toxicity, Dermal (Category 4), H312 Skin corrosion (Category 1B), H314 Respiratory sensitisation (Category 1), H334 For the full text of the H-Statements mentioned in this Section, see Section 15. Classification according to EU Directives 67/548/EEC or 1999/45/EC T+ Very toxic R26 C Corrosive R34 Xn Harmful R21/22, R42 For the full text of the R-phrases mentioned in this Section, see Section 15.
Label elements	Labelling according Regulation (EC) No 1272/2008 
Pictogram	
Signal word	Danger
Hazard statement(s)	H302 + H312 Harmful if swallowed or in contact with skin H314 Causes severe skin burns and eye damage. H330 Fatal if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statement(s)	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P284 Wear respiratory protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/ physician.
Supplemental Hazard Statements	none
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Lachrymator.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms :	Triethoxy(3-isocyanatopropyl)silane
Formula :	C ₁₀ H ₂₁ NO ₄ Si
Molecular weight :	247,36 g/mol
CAS-No. :	24801-88-5
EC-No. :	246-467-6
Hazardous ingredients according to Regulation (EC) No 1272/2008	Acute Tox. 4; Acute Tox. 1; Acute Tox. 4; Skin Corr. 1B; Resp. Sens. 1; H302 + H312, H314, H330, H334
Hazardous ingredients according to Directive 1999/45/EC	T+, R26 - R21/22 - R34 - R42
For the full text of the H-Statements and R-Phrases mentioned in this Section,	see Section 15

4. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	Carbon oxides, Nitrogen oxides (NO _x), silicon oxides
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store under inert gas. Moisture sensitive.
Storage class (TRGS 510):	Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters	Components with workplace control parameters
Exposure controls	
Appropriate engineering controls	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
Personal protective equipment	
Eye/face protection	Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body Protection	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form:	liquid
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	283 °C - lit.
Flash point	77 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available

Relative density	0,999 g/mL at 25 °C
Water solubility	No data available
Partition coefficient: noctanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Other safety information	No data available

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Oxidizing agents, Alcohols
Hazardous decomposition products	Other decomposition products - No data available
In the event of fire:	see section 5

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 Oral - Rat - 707 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Dyspnea. Gastrointestinal:Other changes. LC50 Inhalation - Rat - 4 h - 360 mg/m3 Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation. Lungs, Thorax, or Respiration:Fibrosis, focal (pneumoconiosis). Blood: Hemorrhage. LD50 Dermal - Rabbit - 1.260 mg/kg Remarks: Behavioral:Irritability. Lungs, Thorax, or Respiration:Acute pulmonary edema. Prolonged skin contact may cause skin irritation and/or dermatitis.
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	Eyes - Rabbit Result: Severe eye irritation
Respiratory or skin sensitisation	Germ cell mutagenicity No data available
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity – single exposure	No data available
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	RTECS: VV6691000 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product	This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

14. TRANSPORT INFORMATION

UN number	ADR/RID: 3390 IMDG: 3390 IATA: 3390
UN proper shipping name	
ADR/RID:	TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. (Triethoxy(3-isocyanatopropyl)silane)
IMDG:	TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. (Triethoxy(3-isocyanatopropyl)silane)
IATA:	Toxic by inhalation liquid, corrosive, n.o.s. (Triethoxy(3-isocyanatopropyl)silane)
Passenger Aircraft:	Not permitted for transport
Cargo Aircraft:	Not permitted for transport
Transport hazard class(es)	ADR/RID: 6.1 (8) IMDG: 6.1 (8) IATA: 6.1 (8)
Packaging group	ADR/RID: I IMDG: I IATA: -
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture	No data available
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out
Full text of H-Statements referred to under sections 2 and 3.	Acute Tox. Acute toxicity H302 Harmful if swallowed. H302 + H312 Harmful if swallowed or in contact with skin H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H330 Fatal if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Full text of R-phrases referred to under sections 2 and 3	Resp. Sens. Respiratory sensitisation Skin Corr. Skin corrosion T+ Very toxic R21/22 Harmful in contact with skin and if swallowed. R26 Very toxic by inhalation. R34 Causes burns. R42 May cause sensitisation by inhalation.

16. OTHER INFORMATION

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Intatrade Chemicals GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.