Chem-Impex International Inc.

Tel: (630) 766-2112 E-mail: <u>sales@chemimpex.com</u> Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA Fax: (630) 766-2218 Web site: <u>www.chemimpex.com</u> Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

| CATALOG #: | 36362 |
|---------------------------------|---|
| NAME: | Chlorotrihexylsilane |
| SYNONYMS: | |
| 24 HOUR EMERGENCY TELEPHONE: | (800) 535-5053(USA) 352-323-3500 (INTERNATIONAL) |
| TO REQUEST AN MSDS: | (800) 869-9290 |
| CUSTOMER SERVICE: | (630) 766-2112 |

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) SKIN CORROSION (CATEGORY 1B), H314 SERIOUS EYE DAMAGE (CATEGORY 1), H318

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORD

HAZARD STATEMENT(S)

| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. |
|------|--|
| H318 | CAUSES SERIOUS EYE DAMAGE. |

PRECAUTIONARY STATEMENT(S)

| P264 | WASH SKIN THOROUGHLY AFTER HANDLING. |
|----------------------|---|
| P280 | WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE |
| | PROTECTION/ FACE PROTECTION. |
| P301 + P330 + P331 | IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE |
| | VOMITING. |
| P303 + P361 + P353 | IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY |
| | ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ |
| | SHOWER. |
| P304 + P340 + P310 | IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP |
| | COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A |
| | POISON CENTER/DOCTOR. |
| P305 + P351 + P338 + | IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL |
| P310 | MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND |
| | EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A |
| | POISON CENTER/DOCTOR. |
| P363 | WASH CONTAMINATED CLOTHING BEFORE REUSE. |
| P405 | STORE LOCKED UP. |
| P501 | DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED |
| | WASTE DISPOSAL PLANT. |
| HAZARDS NOT | NONE |
| | |

OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| MF: $C_{18}H_{39}ClSi$ MW:319.04CAS-NO.3634-67-1PURITY: $\geq 97\%$ (GC)COMPONENTCLASSIFICATIONCONCENTRATION | Chlorotrihexylsilane | | |
|--|----------------------|--------------------------------------|---------------|
| MW: 319.04 CAS-NO. 3634-67-1 | COMPONENT | CLASSIFICATION | CONCENTRATION |
| MW: 319.04 | PURITY: | ≥97% (GC) | |
| 10 39 | CAS-NO. | 3634-67-1 | |
| MF: $C_{18}H_{39}ClSi$ | MW: | 319.04 | |
| | MF: | C ₁₈ H ₃₉ ClSi | |

| SKIN CORR. 1B; EYE DAM. 1; | <= 100 % |
|----------------------------|----------|
| H314, H318 | |

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

| GENERAL ADVICE | CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA. |
|--|---|
| 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. CONSULT A PHYSICIAN. |
| IN CASE OF EYE CONTACT | RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN. CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL. |
| 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 2.2) AND/OR IN SECTION 11. |
| INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED | NO DATA AVAILABLE |

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

| SUITABLE | USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY |
|---|---|
| EXTINGUISHING MEDIA | CHEMICAL OR CARBON DIOXIDE. |
| SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE | CARBON OXIDES, HYDROGEN CHLORIDE GAS, SILICON OXIDES |
| ADVICE FOR | WEAR SELF CONTAINED BREATHING APPARATUS FOR |
| FIREFIGHTERS | FIRE FIGHTING IF NECESSARY. |
| FURTHER INFORMATION | NO DATA AVAILABLE |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES | USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. FOR PERSONAL PROTECTION SEE SECTION 8. |
|--|--|
| ENVIRONMENTAL PRECAUTIONS | DO NOT LET PRODUCT ENTER DRAINS. |
| METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP | SOAK UP WITH INERT ABSORBENT MATERIAL AND DISPOSE OF AS HAZARDOUS WASTE. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL. |
| REFERENCE TO OTHER SECTIONS | FOR DISPOSAL SEE SECTION 13. |

SECTION 7. HANDLING AND STORAGE

| PRECAUTIONS FOR SAFE HANDLING | AVOID INHALATION OF VAPOUR OR MIST. FOR PRECAUTIONS SEE SECTION 2.2. |
|--|---|
| CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES | 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. MOISTURE SENSITIVE. |
| | Store at RT |
| SPECIFIC END USE(S) | APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

| APPROPRIATE | HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL |
|-------------|--|
| ENGINEERING | HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE |
| CONTROLS | BREAKS AND AT THE END OF WORKDAY. |

PERSONAL PROTECTIVE EQUIPMENT

- EYE/FACETIGHTLY FITTING SAFETY GOGGLES. FACESHIELD (8-PROTECTIONINCH MINIMUM). USE EQUIPMENT FOR EYE PROTECTION
TESTED AND APPROVED UNDER APPROPRIATE
GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN
166(EU).
- SKIN PROTECTIONHANDLE 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.
- BODY PROTECTIONCOMPLETE 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.
- RESPIRATORYWHERE RISK ASSESSMENT SHOWS AIR-PURIFYINGPROTECTIONRESPIRATORS ARE APPROPRIATE USE A FULLFACE
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 OFDO NOT LET PRODUCT ENTER DRAINS.ENVIRONMENTALEXPOSURE

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| INFORMATION ON BASIC | |
|------------------------|---------------------|
| APPEARANCE | Colorless liquid |
| ODOUR | NO DATA AVAILABLE |
| ODOUR THRESHOLD | NO DATA AVAILABLE |
| PH | NO DATA AVAILABLE |
| MELTING | |
| POINT/FREEZING POINT | |
| INITIAL BOILING POINT | 153 - 154 °C/5 mmHg |
| AND BOILING RANGE | |
| FLASH POINT | 113 °C |
| EVAPORATION RATE | NO DATA AVAILABLE |
| FLAMMABILITY (SOLID, | NO DATA AVAILABLE |
| GAS) | |
| UPPER/LOWER | NO DATA AVAILABLE |
| FLAMMABILITY OR | |
| EXPLOSIVE LIMITS | |
| VAPOUR PRESSURE | NO DATA AVAILABLE |
| VAPOUR DENSITY | NO DATA AVAILABLE |
| RELATIVE DENSITY | 0.871 |
| WATER SOLUBILITY | NO DATA AVAILABLE |
| PARTITION COEFFICIENT: | NO DATA AVAILABLE |
| N- OCTANOL/WATER | |
| AUTO-IGNITION | NO DATA AVAILABLE |
| TEMPERATURE | |
| DECOMPOSITION | NO DATA AVAILABLE |
| TEMPERATURE | |
| VISCOSITY | NO DATA AVAILABLE |
| EXPLOSIVE PROPERTIES | NO DATA AVAILABLE |
| OXIDIZING PROPERTIES | NO DATA AVAILABLE |
| OTHER SAFETY | NO DATA AVAILABLE |
| INFORMATION | |

SECTION 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 NO DATA AVAILABLE

INCOMPATIBLE STRONG OXIDIZING AGENTS, STRONG BASES MATERIALS

HAZARDOUS HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES, DECOMPOSITION HYDROGEN CHLORIDE GAS, SILICON OXIDES PRODUCTS **OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE** IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY

NO DATA AVAILABLE

INHALATION: NO DATA AVAILABLE

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

NO DATA AVAILABLE

CORROSION/IRRITATION

SERIOUS EYE NO DATA AVAILABLE **DAMAGE/EYE IRRITATION**

RESPIRATORY OR SKIN NO DATA AVAILABLE **SENSITISATION**

GERM CELL NO DATA AVAILABLE MUTAGENICITY

CARCINOGENICITY IARC:

ACGIH:

SKIN

NTP:

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. NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EOUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH. NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.

| OSHA: | NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS. |
|--|---|
| 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: NOT AVAILABLE |
| | 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 |

SECTION 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 | PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED |

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCTOFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS
TO A LICENSED DISPOSAL COMPANY. CONTACT A
LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE
TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE
MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN
IN A CHEMICAL INCINERATOR EQUIPPED WITH AN
AFTERBURNER AND SCRUBBER.

CONTAMINATEDDISPOSE OF AS UNUSED PRODUCT.PACKAGING

SECTION 14. TRANSPORT INFORMATION

| CHLOROSILANES, CORROSIVE, N.O.S. (Chlorotrihexylsilane) 2987 8 |
|--|
| II |
| NO |
| CHLOROSILANES, CORROSIVE, N.O.S. (Chlorotrihexylsilane) 2987 |
| 2987 8 II F-A, S-B |
| CHLOROSILANES, CORROSIVE, N.O.S. |
| (Chlorotrihexylsilane) 2987 8 II NOT PERMITTED FOR TRANSPORT |
| |

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS ACUTE HEALTH HAZARD

MASSACHUSETTS RIGHT TONO COMPONENTS ARE SUBJECT TO THEKNOW COMPONENTSMASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

| | CAS-NO. | REVISION DATE |
|----------------------|-----------|----------------------|
| Chlorotrihexylsilane | 3634-67-1 | |

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. Chlorotrihexylsilane 3634-67-1

CALIFORNIA PROP. 65 COMPONENTS

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

REVISION DATE

SECTION 16. OTHER INFORMATION

| FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3. | | |
|---|--|--|
| H314 | CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. | |
| H318 | CAUSES SERIOUS EYE DAMAGE. | |

| MSDS LEGEND | | |
|--|--|--|
| MW: | MOLECULAR WEIGHT | |
| MF: | MOLECULAR FORMULA | |
| VOC: | VOLATILE ORGANIC COMPOUNDS | |
| ACGIH: | AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL | |
| | HYGINISTS | |
| CAS: | CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER | |
| OSHA: | OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION | |
| PEL: | PERMISSIBLE EXPOSURE LIMIT (OSHA) | |
| TLV: | THRESHOLD LIMIT VALUE (ACGIH) | |
| IMPORTANT: | | |
| THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST | | |
| INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF | | |

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REVISION DATE: 01/27/2017