

Safety Data Sheet SII6452.3 Date of issue: 03/01/2016 Version: 1.0

1.1 Droduct identifier				
1.1. Product identifier				
Product form	: Substance			
Physical state	: Liquid			
Substance name	: ISOBUTYLDICHLOROSILANE			
Product code	: SII6452.3			
Formula	: C4H10Cl2Si			
Synonyms	: 1-DICHLOROSILYL-2-METHYLPROPANE			
Chemical family	: ORGANOCHLOROSILANE			
1.2. Relevant identified uses of the	substance or mixture and uses advised against			
Use of the substance/mixture	: Chemical intermediate For research use only			
1.3. Details of the supplier of the sa	afety data sheet			
GELEST, INC. 11 East Steel Road Morrisville, PA 19067 USA T 215-547-1015 - F 215-547-2484 - (M-F): info@gelest.com - www.gelest.com	8:00 AM - 5:30 PM EST			
1.4. Emergency telephone number				
Emergency number	: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)			
SECTION 2: Hazards identification	on			
Skin Corr. 1B H314 Eye Dam. 1 H318 STOT SE 3 H335 Full text of H statements : see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)				
Eye Dam. 1 H318 STOT SE 3 H335 Full text of H statements : see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US)	 F Weight of the second s			
Eye Dam. 1 H318 STOT SE 3 H335 Full text of H statements : see section 16 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	 Danger H225 - Highly flammable liquid and vapor H314 - Causes severe skin burns and eye damage 			

Safety Data Sheet

		P363 - Wash contaminated clothing before reuse P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide, dry chemical to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed P403+P235 - Keep in a cool place P405 - Store locked up P501 - Dispose of contents/container to licensed waste disposal facility
2.3.	Other hazards	
Other hazards not contributing to the classification		: Hydrogen chloride may be formed by reaction with water and moisture in air. The US OSHA PEL (TWA) for hydrogen chloride is 5 ppm.
2.4.	Unknown acute toxicity (GHS US)	
	a availabla	

No data available

SECTION 3: Composition/Information on ingredients						
3.1. Substance						
Substance type : Mono-constituent						
Name : ISOE	Name : ISOBUTYLDICHLOROSILANE					
CAS No : 1823	36-87-8					
Name	Product identifier	%	GHS-US classification			
Isobutyldichlorosilane	(CAS No) 18236-87-8	97 - 100	Flam. Liq. 2, H225 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335			

3.2. Mixture

Not applicable

SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general	0	n case of accident or if you feel unwell, seek where possible). If possible show this sheet; if not		
First-aid measures after inhalation	move victim to fresh air and keep at rest i vell, seek medical advice.	n a position comfortable for breathing. If you feel		
First-aid measures after skin contact	sh with plenty of soap and water. Get imr	nediate medical advice/attention.		
First-aid measures after eye contact	nediately flush eyes thoroughly with wate sent and easy to do. Continue rinsing. Ge	r for at least 15 minutes. Remove contact lenses, if et immediate medical advice/attention.		
First-aid measures after ingestion	ver give anything by mouth to an unconso I unwell.	cious person. Get medical advice/attention if you		
4.2. Most important symptoms and eff	h acute and delayed			
Symptoms/injuries	uses severe skin burns and eye damage.			
Symptoms/injuries after inhalation	y cause respiratory irritation.			
Symptoms/injuries after skin contact	uses (s <mark>evere)</mark> skin burns.			
Symptoms/injuries after eye contact	uses serious eye damage.			
Symptoms/injuries after ingestion	y be harmful if swallowed.			
4.3. Indication of any immediate medical attention and special treatment needed				
No additional information available				
SECTION 5: Firefighting measures				

5.1. Extinguishing media		
Suitable extinguishing media	: Alcohol-resistant foam. Carbon die recommended to cover flames.	oxide. Dry chemical. Use of high expansion foam (100:1) is
Unsuitable extinguishing media	: Water.	
5.2. Special hazards arising from the s	ibstance or mixture	
Fire hazard	: Highly flammable liquid and vapor may develop when material is exp	r. Irritating fumes of hydrochloric acid and organic acid vapors bosed to water or open flame.
Explosion hazard	: May form flammable/explosive va	por-air mixture.
5.3. Advice for firefighters		
Firefighting instructions		y chemical fire. Use only dry media to extinguish flames. used to knock down hydrogen chloride vapors in areas
Protection during firefighting	: Do not enter fire area without prop Avoid all eye and skin contact and	per protective equipment, including respiratory protection. I do not breathe vapor and mist.
03/01/2016	EN (English US)	SDS ID: SII6452.3 2/7

Safety Data Sheet

SECTION 6: Accidental release	measures
6.1. Personal precautions, protecti	ve equipment and emergency procedures
General measures	: Eliminate every possible source of ignition. Use special care to avoid static electric charges.
6.1.1. For non-emergency personnel	
Protective equipment	: Wear protective equipment as described in Section 8.
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	Equip cleanup crew with proper protection. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Prevent entry to sewers and public waters.	Notify authorities if liquid enters sewers or public waters.
6.3. Methods and material for cont	ainment and cleaning up
For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.
6.4. Reference to other sections	
See Heading 8. Exposure controls and per	rsonal protection.
SECTION 7: Handling and stora	ge
7.1. Precautions for safe handling	
Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable. Keep away from heat/sparks/open flames/hot surfaces No smoking.
Precautions for safe handling	: Avoid all eye and skin contact and do not breathe vapor and mist. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only outdoo
Hygiene measures	or in a well-ventilated area. Use only non-sparking tools. : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild
	soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, in	cluding any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proceelectrical equipment.
Storage conditions	: Keep container tightly closed. Keep in a cool place. Store locked up.
Incompatible materials	: Acids. Alcohols. Oxidizing agent.
Storage area	: Store in a well-ventilated place. Store away from heat.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/	nersonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Appropriate engineering controls	: Provide local exhaust or general room ventilation.
Personal protective equipment	: Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Neoprene or nitrile rubber gloves.
Eye protection	: Chemical goggles or face shield. (Viton recommended). Contact lenses should not be worn.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor/acid gas (yellow cartridge)
	respirator.
SECTION 9: Physical and chemi	ical properties
9.1. Information on basic physical	
Physical state	: Liquid
Appearance	: Clear liquid.
Appearance Molecular mass	: Clear liquid. : 157.11 g/mol

Safety Data Sheet

Odor i. Acrid. Similar to hydrogen chloride. Odor threshold i. No data available Refractive index i. 1.427 pH i. No data available Relative evaporation rate (buryl acatae=1) i. No data available Relative evaporation rate (buryl acatae=1) i. No data available Freezing point c. 0 °C Boiling point c. 100 °C Auto-lighton temperature i. No data available Decomposition temperature i. No data available Decomposition temperature i. No data available Parmotion temperature i. No data available Vapor pressure i. 2 · 10 mm Hg @ 25 °C Relative vapor density at 20 °C i. 3 · 1 Relative vapor density at 20 °C i. No data available Codor temperature i. No data available Codor temperature i. No data available Codor temperature i. No data available Viscossity, instrantic i. No data available Particity i. No data available Relative information i. No data available							
Perfamilie: 1.427PH:: No data availableRelative exponsition rate (butyl accetate-1):: No data availableRelative exponsition rate (butyl accetate-1):: No data availableRelative point:: Co °CBaiing point:: 120-125 °CRelative point:: No data availableComposition temperature:: No data availableRecomposition temperature:: No data availableRemomenture:: No data availableRemomenture:: No data availableRemomenture:: No data availableRelative vapor density at 20 °C:: I (1000 °C)Soldially:: No data availableSoldially:: No data availableConcenture:: No data availableSoldially:: No data availableConcenture:: No data availableConcenture<	Odor	: Acrid. Similar to hydrogen chloride.					
pHcNo data availableRaidra evaparation rate (budy acadate)iNo data availableFreedra pointc0 °CFreedra pointc10 °CRaidra evaluateiNo data availableFreedra pointc10 °CRaidra evaluateiNo data availableDecomposition temperaturecNo data availablePlammability (sold, gas)ciPlammability (sold, gas)ciVapor pressureci<0 mm Hg 28 °C	Odor threshold	: No data available					
Partial everaporation rate (buly lacotate=1) in No data available Meiting point : : : Freeding point : : : Bailing point : : : Bailing point : : : Auto-spinton temperature : No data available Permoshilty (sold, gas) : Highly flammable liquid and vapor Vapor pressure : : Relative vapor density all 20 °C : : Soldility : : : Soldility : : : Soldility : : No data available Viscosity, vinnentic : No data available Viscosity, v	Refractive index	: 1.427					
Netling point i No data available Freezing point i 10 °C Flash point <td colspan="6"></td>							
Freezing point : 0 °C Boling point : 120 ~ 125 °C Bain point : 10 °C Auto-ignition temperature : No data available Composition temperature : No data available Flammability (solid, gas) : Highly flammable liquid and vapor Vapor pressure : No data available Flammability (solid, gas) : 1 Relative vapor density at 20 °C : 1 Relative donsity : 1.0236 Solubility : Reacts with water. Log Pow : No data available Log Kow : No data available Viscosity, vipamic : No data available Viscosity, vipamic : No data available Stolid in formation : No data available Stolid in formation : No data available Stolid in formation : No data available Stole in formation : No data available Stole in formation : No data available Stole in sealed containers stored under a dry inert atmosphere. ::::::::::::::::::::::::::::::::::::							
Boiling point : 120 - 125 °C Flash point : 10 °C Auto-junition temperature : No data available Decomposition temperature : No data available Hammability (suid) gas) : Highly flammability (suid) gas) : Relative density at 20 °C : > 1 Soubbility and reactive with water. : 10286 VOC content : > 5 % % Soubbility and reactive with water. : 10286 Viscosity, dynamic : No data available Viscosity, dynamic : No data available Oviscosity, dynamic : No data available Viscosity, dynamic : No data available Oviscosity, dynamic : No data available Oviscosity, dynamic : No data available							
Final point : 10 °C Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : Highly flammabie liquid and vapor Yapor pressure : < 10 mm Hig @ 25°C	Freezing point						
Auto-ignition temperatureI. No data availableDecomposition temperatureI. No data availableParmability (olic) gass)I. Highly flammabile fauld and vaporVapor pressureI. 10295Valou for anoliny al 20 °CI. 1.2295VOC contantI. 2.25 %SolubilityI. Reacts with water.Log FowI. No data availableLog FowI. No data availableViscosity, kinematicI. No data availableViscosity, kinematicI. No data availableViscosity, kinematicI. No data availableViscosity, dinamicI. No data availableViscosity, dinamic availableI. No data availableViscosity, dinamic availableI. No data availableViscosity, dinamic availableI. No data availableViscosity, dinami availableI. No data availableSelficiton InformationI. No data availableI. O. AreactivityI. No data availableSelficiton Information availableI. No data availableI. Selficiton Information availableI. No data availableI. Selficiton Information availableI. No data availableI. Selficiton InformationI. ReactivityI. Selficiton	Boiling point						
Decomposition temperature i. No data available Flammability (solid, gas) i. Highly fammable liquid and vapor Vapor pressure i. 0.10 mm Hg g2 SrC Relative vapor density at 20 °C i. 5.1 Relative vapor density at 20 °C i. 5.1 Relative vapor density at 20 °C i. 5.1 Relative vapor density at 20 °C i. 5.2 Solubility i. 2.2.5 % Solubility i. 8.2.5 % Solubility i. 8.2.5 % Solubility i. 8.2.5 % Solubility i. 8.2.5 % Solubility i. 8.2.6 % whater. Log Pow i. No data available Viscosity, vinematic i. No data available Viscosity, vinematic i. No data available Solubility o. No data available Solubility on freeactivity i. No data available Solubility on freeactivity	Flash point	: 10 °C					
Flammability (solid, gas) i: Highly flammable liquid and vapor Vapor pressure : < 10 mm Hg & 25°C	Auto-ignition temperature	: No data available					
Napor pressure:::<	Decomposition temperature	: No data available					
Relative vapor density at 20 °C i > 1 Relative density i 1.0295 VOC content i > 25 % Solubility i Reacts with water. Log Pow i No data available Log Kow i No data available Viscosity, dynamic i No data available Viscosity, dynamic i No data available Conting properties i No data available Explosive properties i No data available Conting properties i No data available Stationg properties i No data available Stationg properties i No data available Stational information available i Not dasaidianalinformation available	Flammability (solid, gas)	: Highly flammable liquid and vapor					
Relative density1.0295VOC content: > 25 %Solubility: Reacts with water.Log Pow: No data availableLog Now: No data availableViscosity, kinematic: No data availableViscosity, kinematic: No data availableViscosity, kinematic: No data availableCondition properties: No data availableExplosito Inimis: No data availableScotion Inition Information available:Io.1. Reactivity: No data availableIo.2. Chemical stability of hazardous reactions:Reacts with water and moisture in ari, liberating hydrogen chloride.:Io.3. Incompatibe materials:Acids. Aconds Coldical information: Causes evert skin hums and eye damage.Acids. Aconds Coldical Information: Causes evert skin hums and eye damage.Schoros evid Amagelificition: Causes evere	Vapor pressure	: <10 mm Hg @ 25°C					
VOC content : > 25 % Solubility : Reacts with water. Log Pow : No data available Log Kow : No data available Viscosity, kinematic : No data available Viscosity, kinematic : No data available Viscosity, kinematic : No data available Explosion innits : No data available Oxidizing properties : No data available Oxidizing properties : No data available Stability and reactivity : No data available No additional information available : Stability and reactivity : No data available 10.1 Reactivity : No additional information synalable : 10.2 Chemical stability of hazardous reactions Reacts with water and moisture in air, Iberating Hydrogen chloride. : 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, Iberating Hydrogen chloride. : 10.4. Compatible materiale Acids. Alcohols. Oxidizing agent. : 10.5. Incompatible materiale Acids. Alcohole. Organia acid vapors. : <td>Relative vapor density at 20 °C</td> <td>: >1</td>	Relative vapor density at 20 °C	: >1					
Solubility:Reacts with water.Log Pow:No data availableLog Kow:No data availableViscosity, kinematic:No data availableViscosity, kinematic:No data availableViscosity, dynamic:No data availableExplosive properties:No data availableExplosive properties:No data availableStatistic properties::Statistic properties::<	Relative density	: 1.0295					
Log Pow i No data available Log Kow i No data available Viscosity, kinematic i: No data available Viscosity, kinematic i: No data available Explosion Iminis i: No data available Oxidizing properties i: No data available Scooling, forgeneties i: No data available Scooling properties i: No data available Scooling, forgeneties i: No data available Stable in sealed contr	VOC content	: > 25 %					
Log Kow:No data availableViscosity, kinematic:No data availableViscosity, kinematic:No data availableExplositve properties:No data availableExplositing properties:No data availableDatiding properties:No data availableSector Not Stability and reactivityImport Not Stability and reactivityNo additional information availableImport Not Stability Amport Not Not Not Not Stability10.1. RecactivityImport Not Not Not Not Not Not Not Not Not No	Solubility	: Reacts with water.					
Niscosity, dynamic i. No data available Viscosity, dynamic i. No data available Explosive properties i. No data available Explosity properties i. No data available Explosity properties i. No data available S.2 Other information No additional information available Internation SECTION 10: Stability and reactivity Internation No additional information available Internation Stable in scaled containers stored under a dry inert atmosphere. Internation 10.2. Chemical stability Chemical stability Stable in scaled containers stored under a dry inert atmosphere. Internation 10.3. Possibility of hazardous reactions Internation Reactivity Reactivity Internation 10.4. Conditions to avoid Internation Heat. Open flame. Sparks. Internation anterials Internation Acids. Alcohols. Oxidzing agent. Internation on toxicological effects Internation Acids. Alcohols. Oxidzing agent. Internation Internation Internation Stin corrosion/irritation Chuses severe skin burns and eye damage. Serious e	Log Pow	: No data available					
Viscosity' dynamic in No data available Explosion properties in No data available Oxidizing properties in No data available Explosion limits in No data available 3.2 Other information No additional information available SECTION 10: Stability and reactivity 10.1. Reactivity No additional information available 10.2. Chemical stability Stable in sealed containers stored under a dry ineft atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat: Open flame. Sparks. 10.5. Incompatible materials Acids: Alcohols. Oxidzing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity in X Not classified Skin corrosion/irritation in Causes server skin burns and eye damage. Respiratory or skin sensitization in Not classified Germ cell mutagenicity in Not classified Reproductive toxicity in Not classified Reproductive toxicity in Not classified Specific target organ toxicity (single exposure) if May cause respiratory irritation. Specific target organ toxicity (single exposure) if May cause respiratory irritation. Specific target organ toxicity (single exposure) if May cause respiratory irritation. Specific target organ toxicity (single exposure) if May cause respiratory irritation. Specific target organ toxicity (single exposure) if May cause respiratory irritation.	Log Kow	: No data available					
Explosive properties : No data available Oxiding properties : No data available Explosion limits : No data available Explosion limits : No data available 9.0 Other information No additional information available Internation SECTION 10: Stability and reactivity Internation No additional information available Internation 10.1 Reactivity No additional information available Internation 10.2. Chemical stability Stable in sealed containers stored under a dry inert atmosphere. Internation 10.3. Possibility of hazardous reactions Internation Reacts with water and moisture in air, liberating hydrogen chloride. Internation Id.4. Conditions to avaid Internation attration Id.5. Incompatible materials Internation accomposition products Acides Alcohols. Oxidizing agent. Internation accological effects Id.6. Hazardous decomposition products Internation accological effects Acute toxicity : Not classified Scincorrison/irritation : Causes serious eye damage. Serious eye damage/irritation	Viscosity, kinematic	: No data available					
Oxidizing properties : No data available Explosion limits : No data available 9.2 Other information No additional information available	Viscosity, dynamic	: No data available					
Explosion limits : No data available 9.2. Other information No additional information available SECTION 10: Stability and reactivity 10.1. Reactivity No additional information available 10.2. Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.2. Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols, Oxidizing agent. 10.5. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Serious eye damage/irritation : Causes serious eye damage. Germ cell mutagenicity : Not classified Respiratory or skin sensifization : Not classified Geren cell mutagenicity : N	Explosive properties	: No data available					
9.2. Other information No additional information available SECTION 10: Stability and reactivity 10.1. Reactivity No additional information available 10.2. Chemical stability Stable in scaled containers stored under a dry inert atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes server skin burns and eye damage. Serious eye damage/irritation : Causes server skin burns and eye damage. Reapiratory or skin sensitization : Not classified Gern cell mutagenicity : Not classified Carcinogenicity : Not classified Repoluctive toxicity : Not classified Specific target organ toxicity (repeated : Not classified <td>Oxidizing properties</td> <td>: No data available</td>	Oxidizing properties	: No data available					
No additional information available SECTION 10: Stability and reactivity 10.1 Reactivity No additional information available 10.2 Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.3 Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4 Conditions to avoid Heat. Open flame. Sparks. 10.5 Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity i. Not classified Skin corrosion/irritation i. Causes serious eye damage. Respiratory or skin sensitization i. Not classified Germ cell mutagenicity i. Not classified Germ cell mutagenicity i. Not classified Repoductive toxicity i. Not classified Specific target organ toxicity (repeated i. Not classified Specific target organ toxicity (repeated i. Not classified <td< td=""><td>Explosion limits</td><td>: No data available</td></td<>	Explosion limits	: No data available					
SECTION 10: Stability and reactivity 10.1. Reactivity No additional information available 10.2. Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes serious eye damage. Serious eye damage/irritation : Causes serious eye damage. Serious eye damage/irritation : Not classified Germ cell mutagenicity : Not classified Germ cell mutagenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (repeated cy is Not classified Specific target organ toxicity (repeated cy is Not classified Specific target organ toxicity (repeated cy is Not classified <	9.2. Other information						
10.1. Reactivity No additional information available 10.2. Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. Sector NI1: Toxicological information Stain corrosion/irritation i Not classified Skin corrosion/irritation : Causes servere skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Gern cell mutagenicity : Not classified Gern cell mutagenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (isingle exposure) : Mot classified Specific target organ toxicity (repeated : Mot classified Specific target organ toxicity (repeated : Mot classified	No additional information available						
10.1. Reactivity No additional information available 10.2. Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. Sector NI1: Toxicological information Stain corrosion/irritation i Not classified Skin corrosion/irritation : Causes servere skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Gern cell mutagenicity : Not classified Gern cell mutagenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (isingle exposure) : Mot classified Specific target organ toxicity (repeated : Mot classified Specific target organ toxicity (repeated : Mot classified	SECTION 10: Stability and reactivity						
No additional information available 10.2 Chemical stability Stable in sealed containers stored under a dry inert atmosphere. 10.3 Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4 Conditions to avoid Heat. Open flame. Sparks. 10.5 Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6 Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information Stin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Gern cell mutagenicity : Not classified Reproductive toxicity : Not classified Reproductive toxicity : Not classified Gern cell mutagenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (repeated : Not classified </td <td></td> <td></td>							
International stability Stable in sealed containers stored under a dry inert atmosphere. International store in air, liberating hydrogen chloride. Internation atternation Internation on toxicological effects Acute toxicity i Not classified Serious eye damage/irritation c Causes serious eye damage. Serious eye damage/irritation i Not classified Gern cell mutagenicity i Not classified Gern cell mutagenicity i Not classified Specific target organ toxicity (single exposure) i May cause respiratory irritation. Specific target organ toxici							
Stable in sealed containers stored under a dry inert atmosphere. 10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity i Not classified Skin corrosion/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (repeated consult in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consult is in the classified specific target organ toxicity (repeated consultis in the classified specific target organ toxicity (r							
10.3. Possibility of hazardous reactions Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Reproductive toxicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Mot classified Specific target organ toxicity (repeated exposure) : Mot classified		part atmosphere					
Reacts with water and moisture in air, liberating hydrogen chloride. 10.4. Conditions to avoid Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity i Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/iritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Gern cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified Specific target organ toxicity (repeated exposure) : Not classified	· · ·	ien annosphere.					
10.4. Conditions to avoid Heat. Open flame. Sparks. Incompatible materials Acids. Alcohols. Oxidizing agent. Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. Sectron 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity Image: Not classified Skin corrosion/irritation Image: Clauses severe skin burns and eye damage. Serious eye damage/irritation Image: Clauses severe skin burns and eye damage. Respiratory or skin sensitization Image: Not classified Gern cell mutagenicity Image: Not classified Carcinogenicity Image: Not classified Reproductive toxicity Image: Not classified Specific target organ toxicity (single exposure) Image: May cause respiratory irritation. Specific target organ toxicity (repeated exposure) Image: Not classified Specific target organ toxicity (repeated exposure) Image: Not classified Specific target organ toxicity (repeated exposure) Image: Not classified		kudaa aaa aklarida					
Heat. Open flame. Sparks. 10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified	-	nydrogen chionde.					
10.5. Incompatible materials Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified							
Acids. Alcohols. Oxidizing agent. 10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified	Heat. Open flame. Sparks.						
10.6. Hazardous decomposition products Hydrogen chloride. Organic acid vapors. SECTION 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified	10.5. Incompatible materials						
Hydrogen chloride. Organic acid vapors.SECTION 11: Toxicological information11.1 Information on toxicological effectsAcute toxicity: Not classifiedSkin corrosion/irritation: Causes severe skin burns and eye damage.Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified	Acids. Alcohols. Oxidizing agent.						
SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity : Not classified Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Causes serious eye damage. Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified	10.6. Hazardous decomposition products						
11.1. Information on toxicological effects Acute toxicity: Not classifiedAcute toxicity: Causes severe skin burns and eye damage.Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified	Hydrogen chloride. Organic acid vapors.						
11.1. Information on toxicological effects Acute toxicity: Not classifiedAcute toxicity: Causes severe skin burns and eye damage.Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified	SECTION 11: Toxicological informat	ion					
Acute toxicity: Not classifiedSkin corrosion/irritation: Causes severe skin burns and eye damage.Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (repeated exposure): Not classifiedSpecific target organ toxicity (repeated exposure): Not classified							
Skin corrosion/irritation:Causes severe skin burns and eye damage.Serious eye damage/irritation:Causes serious eye damage.Respiratory or skin sensitization:Not classifiedGerm cell mutagenicity:Not classifiedCarcinogenicity:Not classifiedReproductive toxicity:Not classifiedSpecific target organ toxicity (single exposure):Not classifiedSpecific target organ toxicity (repeated exposure):Not classified							
Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified		Causes severe skin burns and eve damage.					
Respiratory or skin sensitization: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified							
Germ cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified							
Carcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified							
Reproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause respiratory irritation.Specific target organ toxicity (repeated exposure): Not classified							
Specific target organ toxicity (single exposure) : May cause respiratory irritation. Specific target organ toxicity (repeated exposure) : Not classified							
Specific target organ toxicity (repeated : Not classified exposure)							
exposure)							
Aspiration hazard : Not classified							
Potential Adverse human health effects and : NOTE: Material may form a siloxane polymer on the skin, eyes or in the lungs.	•						
symptoms							

Safety Data Sheet

Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes (severe) skin burns.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
Reason for classification	: Expert judgment
SECTION 12: Ecological information	
SECTION 12: Ecological information 12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
Other adverse effects	: This substance may be hazardous to the environment.
Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.
SECTION 13: Disposal consideration	s
13.1. Waste treatment methods	
Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of
	contents/container to licensed waste disposal facility.
Additional information	 Handle empty containers with care because residual vapors are flammable. Avoid release to the environment.
Ecology - waste materials	. Avoid release to the environment.
14.1. UN number	
14.1. UN number UN-No.(DOT)	: 2986 UN2986
SECTION 14: Transport information 14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name	
14.1.UN numberUN-No.(DOT)DOT NA no.14.2.UN proper shipping name	
14.1.UN numberUN-No.(DOT)DOT NA no.14.2.UN proper shipping name	UN2986
UN.No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s.
14.1.UN numberUN-No.(DOT)DOT NA no.	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive
UN.No.(DOT) DOT NA no. UN-No.(DOT) DOT NA no. UN proper shipping name Proper Shipping Name (DOT) Class (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136
UN.No.(DOT) DOT NA no. UN-No.(DOT) DOT NA no. UN proper shipping name Proper Shipping Name (DOT) Class (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive
UN.No.(DOT) DOT NA no. UN-No.(DOT) DOT NA no. UN proper shipping name Proper Shipping Name (DOT) Class (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive
UN.No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive
UA.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive 3 - Flammable liquid
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive 3 - Flammable liquid . Il - Medium Danger
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx)	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid I - Medium Danger None
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive 3 - Flammable liquid
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) 14.3. Additional information	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid II - Medium Danger None 206
UN.No.(DOT) DOT NA no. UN-No.(DOT) DOT NA no. UN proper shipping name Proper Shipping Name (DOT) Class (DOT)	UN2986 : Chlorosilanes, corrosive, flammable, n.o.s. (JOBUTYLDICHLOROSILANE) : 8 - Class 8 - Corrosive material 49 CFR 173.136 : 8 - Corrosive 3 - Flammable liquid . Flammable liquid . I - Medium Danger : None : 206 : 243
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) Emergency Response Guide (ERG) Number Other information Emergency Response Guide (ERG) Number	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (JOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid I - Medium Danger None 206 243
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) Other information Emergency Response Guide (ERG) Number Other information Transport by sea	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid I - Medium Danger None 206 243 155 No supplementary information available.
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) IDOT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) Tansport by sea DOT Vessel Stowage Location	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid I - Medium Danger None 206 243 155 No supplementary information available. C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vess
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) Emergency Response Guide (ERG) Number Other information Emergency Response Guide (ERG) Number	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid I - Medium Danger None 206 243 155 No supplementary information available.
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) IDOT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) Tansport by sea DOT Vessel Stowage Location	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid I - Medium Danger None 206 243 155 No supplementary information available. C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vess
14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) DOT Packaging Exceptions (49 CFR 173.xxx) DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) OT Packaging Bulk (49 CFR 173.xxx) DOT Vessel Stowage Location DOT Vessel Stowage Location DOT Vessel Stowage Other	 UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (ISOBUTYLDICHLOROSILANE) 8 - Class 8 - Corrosive material 49 CFR 173.136 8 - Corrosive 3 - Flammable liquid If - Medium Danger None 206 243 155 No supplementary information available. C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vess 40 - Stow "clear of living quarters"

Safety Data Sheet

DOT Quantity Limitations Cargo aircraft only (49 : 30 L CFR 175.75)

SECTION 15: Regulatory informa	tion				
15.1. US Federal regulations					
ISOBUTYLDICHLOROSILANE (18236-87-8)					
TSCA Exemption/Exclusion	CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States				
Isobutyldichlorosilane (18236-87-8)					
Not listed on the United States TSCA (Toxic Substances Control Act) inventory					
15.2. International regulations					

No additional information available

15.3. US State regulations

ISOBUTYLDICHLOROSILANE(18236-87-8)					
U.S California - Proposition	n 65 - Carcinogens List	No			
U.S California - Propositior Toxicity	n 65 - Developmental	No			
U.S California - Proposition 65 - Reproductive Toxicity - Female		No	No		
U.S California - Proposition 65 - Reproductive Toxicity - Male		No			
Isobutyldichlorosilane (18236-87-8)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	P	.S California - roposition 65 - eproductive Toxicity - emale	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)

No

SECTION 16: Other information

No

Abbreviations and acronyms

No

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

No

Full text of H-phrases::

I I I I I I I I I I I I I I I I I I I	
H225	Highly flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation

HMIS III Rating

Health

: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability	
Physical	

- : 4 Severe Hazard : 1 Slight Hazard
- Prepared by safety and environmental affairs.

Date of issue: 03/01/2016 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

ISOBUTYLDICHLOROSILANE Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

© 2016 Gelest Inc. Morrisville, PA 19067

