

Safety Data Sheet SIS6981.0 Date of issue: 29/12/2016 Version: 1.0

Enabling Your Technology	
SECTION 1: Identification of the sul	bstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Physical state	: Solid
Substance name	: SODIUM HEXAFLUOROSILICATE
Product code	: SIS6981.0
Formula	: F6Na2Si
Synonyms	SODIUM SILICOFLUORIDE ALKALI FLUOROSILICATES(Na) DISODIUM HEXAFLUOROSILICATE
Chemical family	: FLUOROSILICATE
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against
1.2.1. Relevant identified uses	
Use of the substance/mixture	: Chemical intermediate
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safety	data sheet
GELEST, INC. 11 East Steel Road Morrisville, PA 19067 USA T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 info@gelest.com - www.gelest.com	AM - 5:30 PM EST
GELEST INC.	
Fritz-Klatte-Strasse 8	
65933 Frankfurt	
Germany	
T +49 (0) 69 3535106-500 - F +49 (0) 69 35351	06-501 - (M-F): 8:00 AM - 4:00 PM
info@gelestde.com - www.gelestde.com	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)
<b>SECTION 2: Hazards identification</b>	
2.1. Classification of the substance or	mixture
Classification according to Regulation (EC)	No. 1272/2008 [CLP]
Acute toxicity (oral), Category 3	H301
Acute toxicity (dermal), Category 3	H311
Acute toxicity (inhalation:dust,mist) Category 3	H331
Full text of H statements : see section 16	
Adverse physicochemical, human health an No additional information available	d environmental effects
2.2 Label elements	
2.2. Label elements	
Labelling according to Regulation (EC) No. 7 Hazard pictograms (CLP)	

Signal word (CLP) Hazard statements (CLP)

Print date: 10/04/2019

: Danger

GHS06

SDS ID: SIS6981.0

: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

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## 2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type	: Mono-constituent	
Name	: SODIUM HEXAFLUOROSILICATE	
CAS-No.	: 16893-85-9	
EC-No.	: 240-934-8	

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hexafluorosilicate	(CAS-No.) 16893-85-9 (EC-No.) 240-934-8 (EC Index-No.) 009-012-00-0	98 - 100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331

## Full text of H-statements: see section 16

3.2. Mixtures		
Not applicable		
SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	medical ad	ntaminated clothing and shoes. In case of accident or if you feel unwell, seek vice immediately (show the label where possible). If possible show this sheet; if not now packaging or label.
First-aid measures after inhalation	: Remove pe CENTER/d	rson to fresh air and keep comfortable for breathing. Immediately call a POISON octor.
First-aid measures after skin contact	: Wash with	plenty of water/ Immediately call a POISON CENTER/doctor.
First-aid measures after eye contact		y flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if a easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Never give CENTER/d	anything by mouth to an unconscious person. Immediately call a POISON octor.
4.2. Most important symptoms and eff	fects, both acute	and delayed
Symptoms/effects after inhalation	and edema	respiratory irritation. May be harmful if inhaled. Overexposure causes inflammation of the larnyx and bronchii. Symptoms of exposure are a burning sensation, wheezing and laryngitis.
Symptoms/effects after skin contact	: May be har	mful in contact with skin. Material is extremely destructive to mucous membranes.
Symptoms/effects after eye contact	: Causes ser	ious eye irritation.
Symptoms/effects after ingestion	: Toxic if swa hazard.	llowed. Swallowing a small quantity of this material will result in serious health
Chronic symptoms	: May cause	osteofluorosis.
4.3. Indication of any immediate medi	cal attention and	special treatment needed
Note to Physician: Calcium gluconate is often fluorosilicates.	considered in top	ical exposures to hyrofluoric acid and may be appropriate for severe exposures to
<b>SECTION 5: Firefighting measures</b>		

5.1. Extinguishing media	
Suitable extinguishing media	: Not flammable.
Unsuitable extinguishing media	: None known.
5.2. Special hazards arising	from the substance or mixture
Fire hazard	<ul> <li>Irritating fumes vapors may develop when material is mixed with other materials and exposed to elevated temperatures or open flame.</li> </ul>

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5.3. Advice for firefighters		
Firefighting instructions	: Exercise caution when fighting any chemical fire.	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.	
SECTION 6: Accidental release me	easures	
6.1. Personal precautions, protective	equipment and emergency procedures	
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	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment. Prevent ent	ry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.	
6.3. Methods and material for contain	ment 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	: Sweep or shovel spills into appropriate container for disposal.	
6.4. Reference to other sections		
See Heading 8. Exposure controls and person	nal protection.	
<b>SECTION 7: Handling and storage</b>		
7.1. Precautions for safe handling		
Precautions for safe handling	: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Use only outdoors or in a well-ventilated area.	
Hygiene measures	: 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, inclu	ding any incompatibilities	
Storage conditions	: Keep container tightly closed. Store locked up.	
Incompatible materials	: Compatible with most materials.	
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/per	rsonal protection	
8.1. Control parameters		

Sodium hexafluorosilicate (16893-85-9)		
Latvia	OEL TWA (mg/m³)	0.2 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	2.5 mg/m <sup>3</sup> inorganic fluoride as F
Lithuania	IPRV (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>

## 8.2. Exposure controls

#### Appropriate engineering controls:

Handle in an enclosing hood with exhaust 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. Contact lenses should not be worn

## Skin and body protection:

Wear suitable protective clothing

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## **Respiratory protection:**

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination dust mask/acid gas (yellow cartridge) respirator.

SECTION 9: Physical and chemical p	roperties
9.1. Information on basic physical and ch	emical properties
Physical state	: Solid
Appearance	: Powder.
Molecular mass	: 188.06 g/mol
Colour	: White.
Odour	: No data available
Odour threshold	: No data available
Refractive index	: No additional information available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: >1
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive 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.	
10.3. Possibility of hazardous reactions	
Dissolves in strong acid or base.	
10.4. Conditions to avoid	
No additional information available	
10.5. Incompatible materials	
Compatible with most materials.	
10.6. Hazardous decomposition products	
Hydrogen fluoride.	
SECTION 11: Toxicological information	on
11.1. Information on toxicological effects	
Acute toxicity	: Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.
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SODIUM HEXAFLUOROSILICATE (16893-85-9 ATE CLP (oral)	125 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
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SODIUM HEXAFLUOROSILICATE (16893-85-	9)	
ATE CLP (dust,mist)		0.5 mg/l/4h
Sodium hexafluorosilicate (16893-85-9)		
LD50 oral rat		125 mg/kg RTECS Number: VV8410000
LD50 oral mouse		70 mg/kg
ATE CLP (oral)		125 mg/kg bodyweight
ATE CLP (dermal)		300 mg/kg bodyweight
ATE CLP (dust,mist)		0.5 mg/l/4h
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
	This product contains a con IARC, ACGIH, NTP, or EP	mponent that is not classifiable as to its carcinogenicity based on its A classification.

Sodium hexafluorosilicate (16893-85-9)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause respiratory irritation. May be harmful if inhaled. Overexposure causes inflammation and edema of the larnyx and bronchii. Symptoms of exposure are a burning sensation, coughing, wheezing and laryngitis.
Symptoms/effects after skin contact	: May be harmful in contact with skin. Material is extremely destructive to mucous membranes.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.
Chronic symptoms	: May cause osteofluorosis.
Reason for classification	: Expert judgment

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Harmful to aquatic life.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
Sodium hexafluorosilicate (16893-85-9)	
LC50 fish 1	65 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])
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. Results of PBT and vPvB assessmen	nt
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	S
13.1. Waste treatment methods	
Sewage disposal recommendations	: Do not dispose of waste into sewer.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.
Ecology - waste materials	: Avoid release to the environment.

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SECTION 14. Tropped information	in
SECTION 14: Transport informatio	
14.1. UN number	
In accordance with ADR / RID / IMDG / IATA /	ADN
14.1. UN number	
UN-No. (ADR)	: 2674
UN-No. (IMDG)	: 2674
UN-No. (IATA)	: 2674
UN-No. (ADN)	: 2674
UN-No. (RID)	: 2674
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: SODIUM FLUOROSILICATE
Proper Shipping Name (IMDG)	: SODIUM FLUOROSILICATE
Proper Shipping Name (IATA)	: Sodium fluorosilicate
Proper Shipping Name (ADN)	: SODIUM FLUOROSILICATE
Proper Shipping Name (RID)	: SODIUM FLUOROSILICATE
Transport document description (ADR)	: UN 2674 SODIUM FLUOROSILICATE, 6.1, III, (E)
Transport document description (IMDG)	: UN 2674 SODIUM FLUOROSILICATE, 6.1, III
Transport document description (IATA)	: UN 2674 Sodium fluorosilicate, 6.1, III
Transport document description (ADN)	: UN 2674 SODIUM FLUOROSILICATE, 6.1, III
Transport document description (RID)	: UN 2674 SODIUM FLUOROSILICATE, 6.1, III
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: 6.1
Danger labels (ADR)	: 6.1
	6
IMDG	
Transport hazard class(es) (IMDG)	: 6.1
Danger labels (IMDG)	: 6.1
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	6
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: 6.1
Hazard labels (IATA)	: 6.1
	<u>^</u>
	6
ADN	
Transport hazard class(es) (ADN)	: 6.1
Danger labels (ADN)	: 6.1

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44.1       Packing group         Packing group (MDG)       :         Packing provide that and the maximum       :         Packing instructions for user       Overland         Overland transport       :         Packing instructions (ADR)       :         Packing instructions (ADR)       :         Packing instructions (ADR)       :         Packing and bulk container special       :         Paching paconstors for carriage - Buak (ADR) <t< th=""><th></th><th></th><th></th><th></th></t<>				
Transport hazard class(eq) (RID) : 6.1 Darager labels (RID) : 6.1				
Transport hazard class(eq) (RID) : 6.1 Darager labels (RID) : 6.1				
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Transport hazard dass(eq) (RID) : 6.1 Jarager labels (RID) : 6.1				
Danger labels (RID)       : 6.1         ************************************		: 6.1		
Packing group (ADR)       III         Packing group (MDG)       III         Packing group (ADR)       III         Packing group (ADN)       III         Packing instructions for user       Vo         Overland transport       IIII         Packing instructions (ADR)       IIII         Packing instructions (ADR)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Danger labels (RID)			
Packing group (ADR)       III         Packing group (MDG)       III         Packing group (ADR)       III         Packing group (ADN)       III         Packing instructions for user       Vo         Overland transport       IIII         Packing instructions (ADR)       IIII         Packing instructions (ADR)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
Packing group (ADR)       III         Packing group (MDG)       III         Packing group (ADR)       III         Packing group (ADN)       III         Packing instructions for user       Vo         Overland transport       IIII         Packing instructions (ADR)       IIII         Packing instructions (ADR)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
Packing group (ADR)       III         Packing group (MDG)       III         Packing group (ADR)       III         Packing group (ADN)       III         Packing instructions for user       Vo         Overland transport       IIII         Packing instructions (ADR)       IIII         Packing instructions (ADR)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
Packing group (ADR)       III         Packing group (MDG)       III         Packing group (ADR)       III         Packing group (ADN)       III         Packing instructions for user       Vo         Overland transport       IIII         Packing instructions (ADR)       IIII         Packing instructions (ADR)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		6		
Packing group (ADR)       III         Packing group (MDG)       III         Packing group (ADR)       III         Packing group (ADN)       III         Packing instructions for user       Vo         Overland transport       IIII         Packing instructions (ADR)       IIII         Packing instructions (ADR)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	14.4. Packing group	¥.		
Packing group (MDG)       III         Packing group (ADN)       III         Packing group (ADN)       III         Packing group (ADN)       III         Packing group (RDD)       III         Packing group (RDD)       III         Packing group (RDD)       III         Packing for the environmental hazards       IIII         Pagerous for the environmental hazards       IIIII         Packing for the environmental hazards       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Packing group (ADR)	: 111		
Packing group (ADN)       III         Packing group (RID)       III         Packing group (RID)       III         14.5. Environmental hazards       INO         Dargerous for the environment       INO         Uter information       INO         Dither information       INO         Dither information       INO         Special procurtons for user       Interface         Overland transport       Interface         Dissification cook (ADR)       Interface         Seaching provisions (ADR)       Interface         Packing provisions (ADR)       Interface         Overland transport       Interface         Diversion (ADR)       Interface         Packing provisions (ADR)       Interface         Packing provisions (ADR)       Interface         Interface       Interface         ADR)       Interface         Packing provisions (ADR)       Interface         Interface       Interface         Interface       Interface         Interface       Interface         Interface       Interface         Interface       Interface         Interface       Interface         Inteaching interface       Inteface <td>Packing group (IMDG)</td> <td>: III</td> <td></td> <td></td>	Packing group (IMDG)	: III		
Packing group (RID)       : III         14.5.       Environmental hazards         Jangerous for the environment       : No         Janerous for the environment       : No         Janerous for the environment       : No         John in the environment       : No         John in the environment       : No         John in the environment       : No         Overland transport       : No supplementary information available         14.6.       Special precautions for user         Overland transport       : Skg         Scategred quantities (ADR)       : E1         Packing provisions (ADR)       : E1         Packing provisions (ADR)       : MP10         Ortable tank and bulk container special       : TP33         Packadog (ADR)       : TU15, TE19         Ortable tank and bulk container special       : TP33         Packadog (ADR)       : 2         Special provisions (ADR)       : 2         Special provisions (ADR)       : 2         Special provisions for carriage - Dading,       : CV13, CV28         Special provisions for carriage - Operation ADR       : 60         Dranspe plates       : 60         Dranspe plates       : 2X         Transport by sea <t< td=""><td>Packing group (IATA)</td><td>: 111</td><td></td><td></td></t<>	Packing group (IATA)	: 111		
14.5.       Environmental hazards         Dangerous for the environment       :       No         Vairie pollutiant       :       No         Diver information       :       No         21AssEductions for user       Overland transport         21AssEdification code (ADR)       :       T5         21AssEdification code (ADR)       :       Etil         Packing instructions (ADR)       :       Etil         Packing instructions (ADR)       :       T1         Park and bulk container instructions       :       T1         Park and bulk container special       :       T19         Patiable tank and bulk container special       :       T19         Patiable tank and bulk container special       :       T015, TE19         Patiable tank and bulk container special       :       CV1, VC2, AP7         Special provisions for carriage - Loading, including the provisions for carriage - Operation       :       S9	Packing group (ADN)			
Dangerous for the environment       :       No         Warine pollutant       :       No         Dther information       :       No supplementary information available         Associations for user       Overland transport         Dissification code (ADR)       :       T5         Dasking provisions (ADR)       :       E10         Packing provisions (ADR)       :       P002, IBC08, LP02, R001         Ward packing provisions (ADR)       :       T1         Portable tank and bulk container instructions       :       T1         Portable tank and bulk container special       :       TP33         Portable tank and bulk container special       :       SGAH, L4BH         Tank code (ADR)       :       SGAH, L4BH         Fank special provisions for Carriage       :       AT         Portable tank and bulk container special       :       YC13, VC2, AP7         Special provisions for carriage - Loading, inclusions for carriage - Operation       :         Special provisions for carriage - Operation       :       S9         Parage plates       :       :       :         VID       :       :       :         Cocde	Packing group (RID)	: 111		
Warine pollutant       :       No         Differ information       :       No supplementary information available         44.6. Special precautions for user       :         Overland transport       :       T5         Dissification code (ADR)       :       T5         Supplementary information available       :       Skg         Excepted quantities (ADR)       :       :         Vised packing provisions (ADR)       :       :         Vised packing provisions (ADR)       :       :         Oratable tank and bulk container special       :       T1         Portable tank and bulk container special       :       T13         Portable tank and bulk container special       :       T14         Fank code (ADR)       :       :       SCAH, L4BH         Fank code (ADR)       :       :       C4         Fank code (ADR)       :       :       C4         Packing invisions for carriage - Loading,       :       :       CV13, CV28         Special provisions for carriage - Loading,       :       :       :         Packing intruction code (ADR)       :       :       :         Special provisions for carriage - Operation       :       :       :				
Deter information : No supplementary information available   14.6. Special precautions for user   Overfland transport : T5   Classification code (ADR) : Skg   Excepted quantities (ADR) : E1   Packing instructions (ADR) : E1   Packing instructions (ADR) : MP10   Portable tank and bulk container instructions : T1   Portable tank and bulk container special : T933   Portable tank and bulk container special : T933   Portable tank and bulk container special : SGAH, L4BH   Flank code (ADR) : GAL   Park code (ADR) : Q1U5, TE19   Aphicle for tank carriage : AT   Fransport category (ADR) : Q1U5, VC2, AP7   Special provisions for carriage - Loading, : CV1, VC2, AP7   Special provisions for carriage - Loading, : CV1, VC2, AP7   Special provisions for carriage - Operation : G0   Drange plates : G0   Drange plates : ZX   Tunnel restriction code (ADR) : E   AC code : ZX   Tank special provisions for carriage : Loading, : ZX   Tunnel restriction code (ADR) : E   : AC code : ZX   Tank poet plates : E   : AC code : Skg   : Special provisions for carriage : Loading, : SU   : Drange plates : E   : AC code : ZX   : Tank poet plates : E   : AC code : Skg   : Code plates	Dangerous for the environment			
14.6.       Special precautions for user         Overland transport       T5         Classification code (ADR)       5 kg         Excepted quantities (ADR)       E1         Packing instructions (ADR)       P002, IBC08, LP02, R001         Niked quantities (ADR)       MP10         Portable tank and bulk container instructions       T1         ADR       TP33         Portable tank and bulk container special       TP33         Portable tank and bulk container special       TU15, TE19         Abr Core (ADR)       Z         Periative tank carriage       AT         Transport category (ADR)       Z         Special provisions for carriage - Loading,       CV13, CV28         ADR       Signal (ADR)       Signal (ADR)         Transport category (ADR)       E         ADR       G0         Drange plates       G0         Drange plates       E         ACC code       ZX         Transport by sea       ZX         Excepted quantities	Marine pollutant			
Overland transport:Classification code (ADR):T5Excepted quantities (ADR):5 kgexcepted quantities (ADR):E1acking instructions (ADR):MP10Orable tank and bulk container instructions:T1Orable tank and bulk container special:TP33Orable tank and bulk container special:TP33Orable tank and bulk container special:TP33Orable tank and bulk container special:TV15, TE19ARN::SGAH, L4BHFank code (ADR)::CV13, TE19/Abit dot carriage::ATFransport category (ADR)::2Special provisions for carriage - backing, :::CV13, CV28/Abit dot instruction code (ADR)::S9/ADR::::/ADR::::/ADR::::/ADR::::/ADR::::/ADR::::/ADR:::::/ADR:::::/ADR:::::/ADR:::::/ADR:::::/ADR:::::/ADR <td:< td="">::::<td>Other information</td><td>: No supplementary informatio</td><td>n available</td><td></td></td:<>	Other information	: No supplementary informatio	n available	
Classification code (ADR) : 5 imited quantities (ADR) : 5 cocepted quantities (ADR) : E1 acking instructions (ADR) : MP10 Portable tank and bulk container instructions : T1 Portable tank and bulk container special : TP33 rowsions (ADR) : SGAH, L4BH Tank code (ADR) : SGAH, L4BH Tank pocial provisions (ADR) : TU15, TE19 /ehicle for tank carriage : AT Transport classification number (Kemler No.) : CV13, CV28 Special provisions for carriage - Loading, : CV13, CV28 Special provisions for carriage - Operation : S9 ADR ADR ADR Punel restriction code (ADR) : E EAC code : 2X Transport by sea Limited quantities (IMDG) : E 1 Packing instructions (IMDG) : BC08 Excepted quantities (IMDG) : BC08 Excepted quantities (IMDG) : BC08 Excepted quantities (IMDG) : BC08	4.6. Special precautions for user			
Classification code (ADR) : T5 Limited quantities (ADR) : Skg Excepted quantities (ADR) : E1 Packing instructions (ADR) : MP10 Portable tank and bulk container instructions : T1 Portable tank and bulk container instructions : T1 Portable tank and bulk container instructions : T1 Portable tank and bulk container special : TP33 rowisions (ADR) : SGAH, L4BH Fank code (ADR) : SGAH, L4BH Fank code (ADR) : SGAH, L4BH Fank code (ADR) : TU15, TE19 /ehicle for tank carriage : AT Fransport category (ADR) : VC1, VC2, AP7 Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP7 Special provisions for carriage - Deading, : CV13, CV28 Special provisions for carriage - Operation : S9 ADR ADR ADR Punel restriction code (ADR) : E EAC code : 2X Transport by sea Limited quantities (IMDG) : E 1 Packing instructions (IMDG) : BC08 Excepted quantities (IMDG) : BC08	Overland transport			
Limited quantities (ADR)       : 5kg         Excepted quantities (ADR)       : E1         Packing instructions (ADR)       : P002, IBC08, LP02, R001         Wised packing provisions (ADR)       : MP10         Portable tank and bulk container instructions       : T1         ADR       : TP33         Ortable tank and bulk container special       : TP33         Torvisions (ADR)       : SGAH, L4BH         Fank special provisions (ADR)       : U15, TE19         /ehicle for tank carriage       : AT         Transport category (ADR)       : 2         Special provisions for carriage - Bulk (ADR)       : VC1, VC2, AP7         Special provisions for carriage - Loading, provisions for carriage - Operation       : S9         ADR)       : CV13, CV28         Invading and handling (ADR)       : S9         ADR       : GO         Drange plates       : GO         Drange plates       : ZX         Transport by sea       : ZX         Transport by sea       : ZX         Transport by sea       : S kg         Excepted quantities (IMDG)		: T5		
Excepted quantities (ADR) : E1 Packing instructions (ADR) : PO02, IBC08, LP02, R001 Viked packing provisions (ADR) : MP10 Portable tank and bulk container instructions : T1 Portable tank and bulk container special : TP33 Portable tank carriage : SGAH, L4BH Pank special provisions for carriage - Bulk (ADR) : VC1, VC2, AP7 Popcial provisions for carriage - Loading, : CV13, CV28 Popcial provisions for carriage - Operation : S9 Pocial provisions for carriage - Operation : S9 Pocial provisions for carriage - Operation : S9 Pocial provisions for carriage - Operation : S9 Portable tank container No.) : 60 Porange plates :				
Wixed packing provisions (ADR)       :       MP10         Portable tank and bulk container instructions       :       T1         ADR)       :       TP33         provisions (ADR)       :       SGAH, L4BH         Fank code (ADR)       :       SGAH, L4BH         Fank special provisions (ADR)       :       TU15, TE19         Vehicle for tank carriage       :       AT         Fransport category (ADR)       :       2         Special provisions for carriage - Bulk (ADR)       :       VC1, VC2, AP7         Special provisions for carriage - Loading, incloading and handling (ADR)       :       CV13, CV28         Inolading and handling (ADR)       :       CV13, CV28         Inolading and handling (ADR)       :       60         Orange plates       :       60         Inolading and handling (MDG)       :       E         EAC code       :       2X         Tansport by sea       :       5 kg         imited quantities (IMDG)       :       5 kg         Excepted quantities (IMDG)       :       5 kg         Excepted quantities (IMDG)       :       E 1         Packing instructions (IMDG)       :       BC08         Excepted quantities (IMDG)	Excepted quantities (ADR)			
Portable tank and bulk container instructions : T1 ADR) : TP33 Portable tank and bulk container special : SGAH, L4BH Fank special provisions (ADR) : SGAH, L4BH Fank special provisions (ADR) : TU15, TE19 /ehicle for tank carriage - Bulk (ADR) : VC1, VC2, AP7 Special provisions for carriage - Loading, : CV13, CV28 Junicading and handling (ADR) : S9 ADR) : S9 ADR Hazard identification number (Kemler No.) : 60 Drange plates : 60 Drange plates : E EAC code : 2X Transport by sea Jimited quantities (IMDG) : 5 kg Excepted quantities (IMDG) : 5 kg Excepted quantities (IMDG) : E E Packing instructions (IMDG) : BC08	Packing instructions (ADR)	: P002, IBC08, LP02, R001		
ADR) Portable tank and bulk container special : TP33 Portable tank and bulk container special : TP33 Park code (ADR) : SGAH, L4BH Fank special provisions (ADR) : TU15, TE19 /ehicle for tank carriage : A T Pransport category (ADR) : 2 Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP7 Special provisions for carriage - Loading, : CV13, CV28 Inloading and handling (ADR) Special provisions for carriage - Operation : S9 ADR) Hazard identification number (Kemler No.) : 60 Drange plates : <b>60</b> Drange plates : <b>60</b> <b>60</b> <b>10</b> <b>11</b> <b>11</b> <b>12</b> <b>11</b> <b>12</b> <b>11</b> <b>12</b> <b>12</b> <b>13</b> <b>13</b> <b>14</b> <b>15</b> <b>15</b> <b>15</b> <b>15</b> <b>15</b> <b>15</b> <b>15</b> <b>16</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>17</b> <b>1</b>	Mixed packing provisions (ADR)	: MP10		
provisions (ADR):SGAH, L4BHFank code (ADR):TU15, TE19/ehicle for tank carriage:ATTransport category (ADR):2Special provisions for carriage - Bulk (ADR):VC1, VC2, AP7Special provisions for carriage - Loading, inloading and handling (ADR):CV13, CV28Special provisions for carriage - Operation ADR):S9Adata::60Drange plates::EAC code::EAC code <td:< td="">:Jinted quantities (IMDG)<td:< td="">:Secial protisions (IMDG)<td:< td="">:Secial provisions (IMDG)<td:< td="">:Backing instructions (IMDG)::Backing instructions (IMDG)::Secial provisions (ADR)::Backing instructions (IMDG)::Secial provisions for carriage - Operation::Secial provisions for carriage - Oper</td:<></td:<></td:<></td:<>	Portable tank and bulk container instructions (ADR)			
Fank special provisions (ADR):TU15, TE19/ehicle for tank carriage:ATfransport category (ADR):2Special provisions for carriage - Bulk (ADR):VC1, VC2, AP7Special provisions for carriage - Loading, unloading and handling (ADR):CV13, CV28Special provisions for carriage - Operation ADR):S9AdR::60Drange plates::EAC code::EAC code::Limited quantities (IMDG)::Secaid instructions (IMDG)::Packing instructions (IMDG)::BC packing instructions (IMDG):<	provisions (ADR)			
Vehicle for tank carriage       : AT         Transport category (ADR)       : 2         Special provisions for carriage - Bulk (ADR)       : VC1, VC2, AP7         Special provisions for carriage - Loading, inloading and handling (ADR)       : CV13, CV28         Special provisions for carriage - Operation ADR)       : S9         ADR)       : d0         Tarage plates       : <b>60</b> Drange plates       : <b>60</b> Transport by sea       : E         Limited quantities (IMDG)       : E         Excepted quantities (IMDG)       : 5 kg         Excepted quantities (IMDG)       : E1         Packing instructions (IMDG)       : P002, LP02         BC packing instructions (IMDG)       : BC08				
Transport category (ADR)       : 2         Special provisions for carriage - Bulk (ADR)       : VC1, VC2, AP7         Special provisions for carriage - Loading, inloading and handling (ADR)       : CV13, CV28         Special provisions for carriage - Operation ADR)       : S9         ADR)       : 60         Orange plates       : 60         Drange plates       : 2         EAC code       : E         EAC code       : 2X         Transport by sea       : 5 kg         Limited quantities (IMDG)       : 5 kg         Excepted quantities (IMDG)       : E 1         Packing instructions (IMDG)       : E 1         Packing instructions (IMDG)       : BC08				
Special provisions for carriage - Bulk (ADR)       :       VC1, VC2, AP7         Special provisions for carriage - Loading, unloading and handling (ADR)       :       CV13, CV28         Special provisions for carriage - Operation ADR)       :       S9         ADR)       :       60         Drange plates       :       60         Drange plates       :       :         Funnel restriction code (ADR)       :       E         EAC code       :       :       2674         Transport by sea       :       :       :        imited quantities (IMDG)       :       5 kg         Excepted quantities (IMDG)       :       E1         Packing instructions (IMDG)       :       E102         Packing instructions (IMDG)       :       IBC08	-			
Special provisions for carriage - Loading, Inloading and handling (ADR) : :   Special provisions for carriage - Operation ADR) : :   Special provisions for carriage - Operation ADR) : :   Hazard identification number (Kemler No.) : :   60 : :   Drange plates : :   Funnel restriction code (ADR) : :   E : :   EAC code : :   : : :				
Special provisions for carriage - Operation : S9   ADR) : :   Hazard identification number (Kemler No.) : :   Orange plates : :   Drange plates : :   Funnel restriction code (ADR) : :   E : :   EAC code : :   Transport by sea : :  imited quantities (IMDG) : :   Stacepted quantities (IMDG) : :   Packing instructions (IMDG) : P002, LP02   BC packing instructions (IMDG) : IBC08	Special provisions for carriage - Loading,			
Hazard identification number (Kemler No.)       :       60         Drange plates       :       60         Drange plates       :       60         2674       :       2674         Funnel restriction code (ADR)       :       E         EAC code       :       2X         Transport by sea       :       :         Limited quantities (IMDG)       :       5 kg         Excepted quantities (IMDG)       :       E1         Packing instructions (IMDG)       :       P002, LP02         BC packing instructions (IMDG)       :       IBC08	Special provisions for carriage - Operation (ADR)	: S9		
60         2674         2674         Funnel restriction code (ADR)       : E         EAC code       : 2X         Transport by sea       : 2X         Limited quantities (IMDG)       : 5 kg         Excepted quantities (IMDG)       : 5 kg         Packing instructions (IMDG)       : P002, LP02         BC packing instructions (IMDG)       : IBC08	Hazard identification number (Kemler No.)	: 60		
Funnel restriction code (ADR):EEAC code:2XTransport by sea::Limited quantities (IMDG):5 kgExcepted quantities (IMDG):E1Packing instructions (IMDG):P002, LP02BC packing instructions (IMDG):IBC08	Orange plates	60		
EAC code: 2XTransport by sea:Limited quantities (IMDG): 5 kgExcepted quantities (IMDG): E1Packing instructions (IMDG): P002, LP02BC packing instructions (IMDG): IBC08		2674		
Transport by sea         Limited quantities (IMDG)       : 5 kg         Excepted quantities (IMDG)       : E1         Packing instructions (IMDG)       : P002, LP02         BC packing instructions (IMDG)       : IBC08	Funnel restriction code (ADR)	: E		
Limited quantities (IMDG): 5 kgExcepted quantities (IMDG): E1Packing instructions (IMDG): P002, LP02BC packing instructions (IMDG): IBC08	EAC code	: 2X		
Limited quantities (IMDG): 5 kgExcepted quantities (IMDG): E1Packing instructions (IMDG): P002, LP02BC packing instructions (IMDG): IBC08	- Transport by sea			
Excepted quantities (IMDG): E1Packing instructions (IMDG): P002, LP02BC packing instructions (IMDG): IBC08	Limited quantities (IMDG)	: 5 kg		
Packing instructions (IMDG)       : P002, LP02         BC packing instructions (IMDG)       : IBC08	Excepted quantities (IMDG)	-		
	Packing instructions (IMDG)			
Print date: 10/04/2019 EN (English) SDS ID: <b>SIS6981.0</b> 7/4	IBC packing instructions (IMDG)	: IBC08		
	Print date: 10/04/2019	EN (English)	SDS ID: SIS6981.0	7/9

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IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Segregation (IMDG)	: SG35
Properties and observations (IMDG)	: Solids which react with acids, evolving hydrogen fluoride and silicon tetrafluoride, irritating and corrosive gases. Toxic if swallowed, by skin contact or by dust inhalation.
- Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y645
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 670
PCA max net quantity (IATA)	: 100kg
CAO packing instructions (IATA)	: 677
CAO max net quantity (IATA)	: 200kg
ERG code (IATA)	: 6L
- Inland waterway transport	
Classification code (ADN)	: T5
Special provisions (ADN)	: 802
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
- Rail transport	
Classification code (RID)	: T5
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAH, L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Bulk (RID)	: VC1, VC2, AP7
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 60
14.7 Transport in bulk according to Ann	ex II of Marpol and the IBC Code

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

SODIUM HEXAFLUOROSILICATE is not on the REACH Candidate List

SODIUM HEXAFLUOROSILICATE is not on the REACH Annex XIV List

SODIUM HEXAFLUOROSILICATE is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

SODIUM HEXAFLUOROSILICATE is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

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#### 15.1.2. National regulations

Germany		
Reference to AwSV	:	Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 519)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Netherlands		
SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	The substance is not listed
Denmark		
Danish National Regulations	:	Young people below the age of 18 years are not allowed to use the product
		Pregnant/breastfeeding women working with the product must not be in direct contact with the product

#### 15.2. **Chemical safety assessment**

No additional information available

## **SECTION 16: Other information**

#### Abbreviations and acronyms:

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; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information

: Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:			
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3		
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3		
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3		
H301	Toxic if swallowed.		
H311	Toxic in contact with skin.		
H331	Toxic if inhaled.		

#### SDS EU (REACH Annex II) - Custom

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 obtained in the document has been gamered non reference materials and/or detest, inc. test data and is to the best informed ge and beine of detest, 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 and reliable. 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.

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