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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: NORTEC® DENSE N
- · UFI: DQG0-T02Q-S00U-VXNW
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Concrete compaction
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

NORSA Vertriebs GmbH Schmiedeberger Str. 55

04849 Bad Düben

Germany

Tel. +49 34243 57 47 00 19 www.nortecsystem.de info@nortecsystem.de

· Informing department:

Tel. +49 34243 57 47 00 19 info@nortecsystem.de

· 1.4 Emergency telephone number:

Tel.: +49 (0) 700-24112112 (CAL) Tel.: +1 872 5888271(CAL)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard-determining components of labelling:

Silicic acid, sodium salt

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture of the substances listed below with harmless additions.

· Dangerous components:		
	Silicic acid, sodium salt	30 - 35%
EINECS: 215-687-4	 Eye Dam. 1, H318 Skin Irrit. 2, H315; STOT SE 3, H335 	
	sodium fluoride Acute Tox. 3, H301; Acute Tox. 1, H310 Skin Irrit. 2, H315; Eye Irrit. 2, H319	0.5 - 2%

· Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information Instantly remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of symptoms.
- · After skin contact Instantly wash with water and soap and rinse thoroughly.
- · After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

- · After swallowing Call a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed Coughing

Irritant effects.

• 4.3 Indication of any immediate medical attention and special treatment needed Symptomatic treatment

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: Do not inhale explosion gases or combustion gases.

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Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Particular danger of slipping on leaked/spilled product.

· 6.2 Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

Prevent from spreading (e.g. by damming-in or oil barriers).

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special precautions necessary if used correctly.
- · Information about protection against explosions and fires:

No special measures required.

The product is not flammable

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and containers:

Store only in the original container.

Provide alkali-resistant floor.

Prevent any penetration into the ground.

- Information about storage in one common storage facility: Do not store together with acids.
- Further information about storage conditions: Keep container tightly sealed.
- · Recommended storage temperature: 5-25 °C
- · Storage class

LGK 12

(German Technical Rule for Hazardous Substance – TRGS 510)

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Additional information about design of technical systems: No further data; see section 7.
- · Components with limit values that require monitoring at the workplace:

7681-49-4 sodium fluoride

OEL (Ireland) Long-term value: 2.5 mg/m³ as F, IOELV

IOELV (European Union) Long-term value: 2.5 mg/m³

as F

· Additional information: The lists that were valid during the compilation were used as basis.

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- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Ensure good ventilation/exhaustion at the workplace.

The usual precautionary measures should be adhered to general rules for handling chemicals.

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing.

Wash hands during breaks and at the end of the work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Breathing equipment:

Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

· Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

Protective gloves.

The protective gloves to be used must comply with the specifications of the (EU) 2016/425 and the resultant standard EN 374.

This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

Only use chemical-protective gloves with CE-labelling of category III.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Butyl rubber, BR

Thickness Breakthrough time

 (mm)
 (min)

 Nitril rubber
 0,38
 > 480

 Neoprene
 0,65
 > 240

 Butyl rubber
 0,36
 > 480

Avoid natural rubber gloves.

· Penetration time of glove material

Value for permeation: Level ≥ 120 min

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· As protection from splashes gloves made of the following materials are suitable:

Synthetic gloves

Value for the permeation: Level:

 \geq 3 (60 min)

· Eye protection: Tightly sealed safety glasses.

· Body protection:

Light weight protective clothing

Protective work clothing.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid

Viscous

Colour: Clear

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	(Contd. of page 4
· Odour: · Odour threshold:	Odourless Not determined.
· pH-value:	~11.4
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	Not determined : 110 ℃
· Flash point:	Not applicable
· Inflammability (solid, gaseous)	Not applicable.
· Decomposition temperature:	Not determined.
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive.
 Critical values for explosion: Lower: Upper: Oxidising properties 	Not applicable Not applicable None
· Vapour pressure:	Not determined.
 Density at 20 °C Relative density Vapour density Evaporation rate 	1.1-1.2 g/cm ³ Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not determined. Not determined.
· Solvent separation test	Not determined
· Solvent content: Organic solvents:	0.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with strong acids

Reacts with light alloys

Attacks materials containing glass and silicate

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Aluminium
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known

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SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Causes skin irritation.

· Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Additional toxicological information:

This statement was deduced from the properties of the single components.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Not determined
- · Carcinogenicity Not determined
- · Reproductive toxicity Not determined
- · STOT-single exposure

Not determined

May cause respiratory irritation.

- · STOT-repeated exposure Not determined
- · Aspiration hazard Not determined

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential An accumulation in organisms is not expected.
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxical effects: No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.

At present there are no ecotoxicological assessments.

This statement was deduced from the properties of the single components.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Disposal must be made according to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

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· European waste catalogue			
06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES		
06 02 00	wastes from the MFSU of bases		
06 02 99	wastes not otherwise specified		
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED		
15 01 00	packaging (including separately collected municipal packaging waste)		
15 01 02	plastic packaging		
HP4	Irritant - skin irritation and eye damage		
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity		

- · Uncleaned packagings:
- Recommendation:

Packagings that cannot be cleaned are to be disposed of in the same manner as the product. Non contaminated packagings can be used for recycling.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

· Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information		
· 14.1 UN-Number · ADR/RID, ADN, IMDG, IATA	Void	
· 14.2 UN proper shipping name · ADR/RID, ADN, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR/RID, ADN, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR/RID, IMDG, IATA	Void	
· 14.5 Environmental hazards:	Not applicable.	
· 14.6 Special precautions for user	Not applicable.	
 14.7 Transport in bulk according to Ann of Marpol and the IBC Code 	7 Transport in bulk according to Annex II Marpol and the IBC Code Not applicable.	
· Transport/Additional information:	Not dangerous according to the above specifications.	
· UN "Model Regulation":	Void	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms

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· Signal word Warning

· Hazard-determining components of labelling:

Silicic acid, sodium salt

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- National regulations
- · Decree to be applied in case of technical fault:

Class	Share in %
Ш	0.9

- · Water hazard class: Water hazard class 1 (Self-assessment): weakly water-endangering.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

· Relevant phrases

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 1: Acute toxicity – Category 1
Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

Sources

Internal physical tests, MSDS of the ingredients,

Information system on hazardous substances of the German Social Accident Insurance (GESTIS-database on hazardous substances), http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp applicable EEC directives:

- 1907/2006
- 1272/2008