

Pursuant to Regulation (EC) No. 1907/2006 as amended by Regulation (EC) No. 2015/830 and Regulation (EC) No. 1272/2008

Safety Data Sheet

Compliant with Annex II of REACH - Regulation (EU) 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/ENTERPRISE

1.1. Product identifier.

Trade name: **NATIS Industrial**
Product code: **NP03**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Description/Use: **Heat-insulating product industrial sector**

1.3. Information about the supplier of the safety data sheet

Manufacturer and responsible person: **TKK NANOTECH LTD, 111, Power Road, Pc 211, London, England, W4 5PY**
For this safety data sheet: **Simon Hersch**
Correspondence address: **111, Power Road, Pc 211, London, England, W4 5PY**
Country/State of Residence: **England**

1.4. Emergency telephone number

For urgent information please contact:

Hospital / Address / Telephone

CAV "Children's Hospital Baby Jesus"

Dept. of Emergency and Acceptance DEA / Piazza Sant'Onofrio, 4 - Rome / 06 68593726

Az. Osp. Univ. Foggia / V.le Luigi Pinto, 1 - Foggia / 800183459

Az. Osp. "A. Cardarelli" / Via A. Cardarelli, 9 - Naples / 081-5453333

CAV Policlinico "Umberto I" / V.le del Policlinico, 155 - Rome / 06-49978000

CAV Policlinico "A. Gemelli" / Largo Agostino Gemelli, 8 - Rome / 06-3054343

Az. Osp. "Careggi" U.O. Medical Toxicology / Largo Brambilla, 3 - Florence / 055-7947819

CAV National Center for Toxicological Information / Via Salvatore Maugeri, 10 - Pavia / 0382-24444 Niguarda Ca' Granda Hospital / Piazza Ospedale Maggiore, 3 - Milan / 02-66101029

Pope John XXII Hospital Company / WHO Square, 1 - Bergamo / 800883300

Azienda Ospedaliera Integrata Verona / Piazzale Aristide Stefani, 1 - Verona / 800011858

SECTION 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified as hazardous under the provisions of Regulation (EC) 1272/2008 (CLP) (as amended and adapted). The product therefore requires a safety data sheet in accordance with the provisions of Regulation (EU) 2020/878.

Additional information concerning health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Classification and hazard statements:

Eye irritation, category 2: **H319 Causes severe eye irritation.**
Skin irritation, category 2: **H315 Causes skin irritation.**

2.2. Label elements.

Hazard labelling in accordance with Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

Danger pictograms:



Warnings: **Attention**

Pursuant to Regulation (EC) No. 1907/2006 as amended by Regulation (EC) No. 2015/830 and Regulation (EC) No. 1272/2008

Indications of danger:

H319
H315
EUH208Causes severe eye irritation.
Causes skin irritation.
Contains: POTASSIUM SALT
It may cause an allergic reaction.

Cautionary Advice:

P102
P101
P305+P351+P338 IF IN EYES:Keep out of reach of children.
In case of consulting a doctor, keep the product container or label available.
Rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so.
Continue rinsing.P280
P337+P313
P264Wear protective gloves and protect your eyes/face.
If eye irritation persists, consult a doctor.
Wash thoroughly after use.

VOC (Directive 2004/42/EC):

Fixing primers.

VOC expressed in g/litre of ready-to-use product: 1,00
Maximum limit: 30,00**2.3. Other hazards**

THE PREPARATION IS ALKALINE AND MAY CAUSE SKIN AND EYE IRRITATION.

According to the available data, the product does not contain PBT or vPvB substances in a proportion ≥ 0.1 %. The product does not contain substances with endocrine-disrupting properties in concentrations ≥ 0.1 %.**SECTION 3. Composition/information on ingredients**

It is an aqueous solution based on silicic acid and potassium salt

3.2. Mixtures**Contains:**

Identification

x = Conc. %.

Classification 1272/2008 (CLP)

CALCIUM CARBONATE

INDEX -

 $19 \leq x < 29$

EC 207-439-9

CAS 471-34-1

POTASSIUM SALT

INDEX

 $9 \leq x < 19$

Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335

EC -

Skin Irrit. 2 H315: $\geq 7\%$, Eye Irrit. 2 H319: $\geq 7\%$.

CAS 1312-76-1

The full text of the hazard statements (H) is given in section 16 of the sheet.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

Instructions in case of inhalation:

Move the subject to fresh air. If breathing is difficult, call a doctor immediately.

Instructions in case of skin contact:

Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, consult a doctor. Wash contaminated clothing before re-use.

Instructions in case of eye contact:

Remove any contact lenses. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids wide. Consult a doctor if the problem persists.

Instructions in case of ingestion:

Seek medical advice immediately. Induce vomiting only as directed by a doctor. Do not administer anything by mouth if the subject is unconscious and unless authorised by a doctor.

Pursuant to Regulation (EC) No. 1907/2006 as amended by Regulation (EC) No. 2015/830 and Regulation (EC) No. 1272/2008

4.2. Main symptoms and effects, both acute and delayed

No specific information is known about symptoms and effects caused by the product.

4.3. Indication of any immediate medical care and special treatment needed

Information not available

SECTION 5: FIRE-FIGHTING MEASURES**5.1. Extinguishing media.**

Suitable extinguishing media: carbon dioxide, foam, powder and water mist.

Unsuitable extinguishing media: none in particular.

5.2. Special hazards arising from the substance or mixture

EXPOSURE HAZARDS IN CASE OF FIRE: Avoid breathing in the products of combustion.

5.3. Instructions for firefighters**GENERAL INFORMATION**

Cool containers with jets of water to prevent decomposition of the product and the development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect extinguishing water, which must not be discharged into the sewage system. Dispose of contaminated extinguishing water and fire residue in accordance with current regulations.

EQUIPMENT

Normal fire-fighting clothing, such as an open-circuit self-contained breathing apparatus (EN 137), flame-resistant suit (EN469), flame-resistant gloves (EN 659) and firefighter's boots (HO A29 or A30).

SECTION 6: MEASURES IN CASE OF ACCIDENTAL RELEASE**6.1. Personal precautions, protective equipment and emergency procedures**

Stop the leak if there is no danger.

Wear appropriate protective equipment (including the personal protective equipment listed in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These instructions apply to both workers and emergency responders.

6.2. Environmental Precautions

Prevent the product from entering sewers, surface water and groundwater.

6.3 Methods and materials for containment and remediation

Vacuum the spilled product into a suitable container. Assess the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.

Ensure sufficient ventilation of the site affected by the leak. Disposal of the contaminated material must be carried out in accordance with the provisions of section 13.

6.4. Reference to other sections

Information on personal protection and disposal can be found in sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for handling**

Handle the product after consulting all other sections of this safety data sheet. Avoid dispersing the product in the environment. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Keep containers closed, in a well-ventilated place, out of direct sunlight. Keep containers away from any incompatible materials, see section 10.

7.3. Particular End Uses

Information not available

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION**8.1. 8.1. Control parameters.**

Information not available

8.2. Exposure controls

Since the use of appropriate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local exhaust ventilation.

When choosing personal protective equipment, seek advice from your chemical suppliers if necessary.

Personal protective equipment must bear the CE marking attesting to its conformity with current standards.

Provide emergency shower with visocular tray.

Hand protection:

Protect your hands with category III work gloves.

For the final choice of work glove material (ref. standard EN 374), the following must be considered: compatibility, degradation, breakage time and permeation.

In the case of preparations, the resistance of work gloves to chemicals must be checked before use as it cannot be predicted. Gloves have a wear time that depends on the duration and mode of use.

Eye/face protection:

It is advisable to wear airtight protective goggles (ref. standard EN 166).

Skin protection:

Wear long-sleeved work clothes and category II safety footwear for professional use (ref. Regulation 2016/425 and EN ISO 20344). Wash with soap and water after removing protective clothing.

Respiratory protection:

If the threshold value (e.g. TLV-TWA) of the substance or of one or more of the substances present in the product is exceeded, it is advisable to wear a mask with a type B filter, the class (1, 2 or 3) of which must be chosen in relation to the limit concentration of use. (ref. standard EN 14387). If gases or vapours of a different nature and/or gases or vapours with particles (aerosols, fumes, mists, etc.) are present, combined type filters must be used.

The use of respiratory protective equipment is necessary if the technical measures taken are not sufficient to limit the worker's exposure to the threshold values considered. The protection offered by masks is in any case limited.

If the substance in question is odourless or its odour threshold is higher than the relevant TLV-TWA and in the event of an emergency, wear an open-circuit self-contained breathing apparatus (ref. standard EN 137) or a supplied-air respirator (ref. standard EN 138). For the correct choice of respiratory protective device, refer to EN 529.

Environmental exposure controls:

Emissions from production processes, including those from ventilation equipment, should be controlled in order to comply with environmental protection regulations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state:	thick liquid
Color:	White.
Smell:	TENUOUS- CHARACTERISTIC
Melting/freezing point::	not available
Boiling point:	100°C (water).
Flammability:	fireproof
Lower explosive limit	Not explosive
Upper explosive limit	Not explosive
Flash point	fireproof
Self-ignition temperature	not available
Decomposition temperature	not available
pH	11 (±0,5)
Kinematic viscosity	not available
Solubility	TOTAL IN WATER
Partition coefficient: n-octanol/water:	not available
Vapour pressure	not available
Density and/or relative density	0.62 kg/l
Relative vapour density	not available
Particle characteristics	not applicable

9.2. Other information**9.2.1. Information on physical hazard classes**

Information not available

9.2.2. Other safety features

VOC (Directive 2004/42/EC): 2.73 %- 1.00 g/litre

SECTION 10: STABILITY AND RESPONSIVENESS**10.1. Reactivity**

Reactivity:	There is no particular danger of reaction with other substances under normal conditions of use.
CALCIUM CARBONATE:	It decomposes at temperatures above 800°C/1472°F.

10.2. Chemical stability

Chemical stability:	The product is stable under normal conditions of use and storage.
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10.3. Possibility of hazardous reactions

Hazardous reactions:	Under normal use and storage conditions, no hazardous reactions are to be expected.
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10.4. Conditions to avoid

Conditions to avoid:	None in particular. However, observe the usual precautions with chemicals.
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10.5. Incompatible materials

CALCIUM CARBONATE	Incompatible with: acids.
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10.6. Hazardous decomposition products

CALCIUM CARBONATE:	Can develop: calcium oxides, carbon oxides.
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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Metabolism, kinetics, mechanism of action and other information	Information not available
Information on likely routes of exposure	Information not available
Immediate, delayed and chronic effects from short- and long-term exposures	Information not available
Interactive effects	Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no relevant components)
ATE (Oral) of the mixture:	Not classified (no relevant components)
ATE (Dermal) of the mixture:	Not classified (no relevant components)

CALCIUM CARBONATE

LD50 (Oral):	6450 mg/kg Rat
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SKIN CORROSION / SKIN IRRITATION	Causes skin irritation
SEVERE EYE DAMAGE/EYE IRRITATION	Causes severe eye irritation
RESPIRATORY OR SKIN SENSITISATION	Does not meet the classification criteria for this hazard class
GERM CELL MUTAGENICITY	Does not meet the classification criteria for this hazard class
CARCINOGENICITY	Does not meet the classification criteria for this hazard class
REPRODUCTIVE TOXICITY	Does not meet the classification criteria for this hazard class
SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE	Does not meet the classification criteria for this hazard class
SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE	Does not meet the classification criteria for this hazard class
DANGER IN THE EVENT OF ASPIRATION	Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

According to the available data, the product does not contain any substances listed in the main European lists of potential or suspected endocrine disruptors with effects on human health under evaluation.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Information not available

12.2. Persistence and degradability

CALCIUM CARBONATE

Solubility in water	0.1 - 100 mg/l
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12.3. Bioaccumulative potential

Information not available

Pursuant to Regulation (EC) No. 1907/2006 as amended by Regulation (EC) No. 2015/830 and Regulation (EC) No. 1272/2008

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

According to the available data, the product does not contain PBT or vPvB substances in a proportion $\geq 0.1\%$.

12.6 Endocrine-disrupting properties

According to the available data, the product does not contain any substances listed in the main European lists of potential or suspected endocrine disruptors with effects on the environment under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Reuse if possible. Product residues are to be regarded as special hazardous waste. The hazardousness of waste containing some of this product must be assessed in accordance with current legislation.

Disposal must be entrusted to an authorised waste management company, in accordance with national and possibly local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in accordance with national waste management regulations.

SECTION 14: TRANSPORTATION INFORMATION

The product is not to be regarded as dangerous in the sense of the regulations in force for the transport of dangerous goods by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1. UN or ID Number

not applicable

14.2. UN proper shipping name

not applicable

14.3 Transport Hazard Classes

not applicable

14.4. Packaging Group

not applicable

14.5. Environmental Hazards

not applicable

14.6. Special precautions for users

not applicable

14.7. Bulk Maritime Transport in accordance with IMO Acts

Not relevant information

Pursuant to Regulation (EC) No. 1907/2006 as amended by Regulation (EC) No. 2015/830 and Regulation (EC) No. 1272/2008

SEZIONE 15. Informazioni sulla regolamentazione

15.1. Health, safety and environmental regulations and legislation specific to the substance or mixture

Seveso Category - Directive 2012/18/EU: None
 Restrictions on the product or contained substances according to Annex XVII Regulation (EC) 1907/2006 Product Point 3

Substances contained Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors: not applicable

Candidate List Substances (Art. 59 REACH)

According to the available data, the product does not contain SVHC substances in a proportion $\geq 0.1\%$.

Substances subject to authorisation (Annex XIV REACH) None

Substances subject to export notification Regulation (EU) 649/2012: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None

Health Checks

Workers exposed to this chemical agent hazardous to health must be subject to health surveillance carried out in accordance with the provisions of Article 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the worker's health and safety has been assessed as insignificant, in accordance with Article 224(2).

VOC (Directive 2004/42/EC) : Fixing primers.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the mixture / for the substances listed in section 3.

SECTION 16: OTHER INFORMATION

Text of the hazard statements (H) cited in sections 2-3 of the sheet:

Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H319	Causes severe eye irritation.
H315	Causes skin irritation.
H335	May irritate the respiratory tract.

LEGEND:

- ADR:	European Agreement concerning the Transport of Dangerous Goods by Road
- CAS:	Chemical Abstract Service number
- EC:	Identification number in ESIS (European Substances Database)
- CLP:	Regulation (EC) 1272/2008
- DNEL:	Derived level without effect
- EC50:	Concentration affecting 50% of the test population
- EmS:	Emergency Schedule
- GHS:	Globally Harmonised System for the Classification and Labelling of Chemicals
- IATA DGR:	International Air Transport Association Dangerous Goods Regulations
- IC50:	50 per cent immobilisation concentration of the test population
- IMDG:	International Maritime Dangerous Goods Code
- IMO:	International Maritime Organisation
- INDEX:	Identification number in Annex VI of the CLP
- LC50:	Lethal concentration 50%
- LD50:	Lethal dose 50%.
- OEL:	Occupational Exposure Level
- PBT:	Persistent, Bioaccumulative and Toxic according to REACH
- PEC:	Predictable environmental concentration
- PEL:	Expected Exposure Level
- PNEC:	Predictable no-effect concentration

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- REACH:	Regulation (EC) 1907/2006
- RID:	Regulations for the International Carriage of Dangerous Goods by Rail
- STA:	Acute Toxicity Estimate
- TLV:	Threshold Limit Value
- TLV CEILING:	Concentration not to be exceeded at any time during work exposure.
- TWA:	Weighted Average Exposure Limit
- TWA STEL:	Short-term exposure limit
- VOC:	Volatile Organic Compound
- vPvB:	Very persistent and very bioaccumulative according to REACH
- WGK:	Aquatic Hazard Class (Germany).

GENERAL BIBLIOGRAPHY:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
 2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
 3. Regulation (EU) 2020/878 (All. II REACH Regulation)
 4. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
 5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
 6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
 7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
 8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
 9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
 10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
 11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)
 22. Delegated Regulation (EU) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA Agency Website
 - Database of model SDSs of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note to the user:

The information contained in this sheet is based on the knowledge available to us at the date of the last version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

It should not be interpreted as a guarantee of any specific product properties.

Since the use of the product is not under our direct control, it is the user's responsibility to observe the applicable laws and regulations regarding hygiene and safety. We accept no liability for improper use.

Provide adequate training for personnel involved in the use of chemicals.

CLASSIFICATION CALCULATION METHODS

Chemical Physical Hazards: The classification of the product was derived from the criteria set out in the CLP Regulation Annex I Part 2. The methods for assessing the chemical-physical properties are given in section 9.

Health hazards: The classification of the product is based on the calculation methods in Annex I of CLP Part 3, unless otherwise stated in section 11.

Environmental hazards: The classification of the product is based on the calculation methods in Annex I of CLP Part 4, unless otherwise stated in section 12.