Material Name: Cleaning Powder SDS ID: NSK-SDS-007(EN RU) Rev000

SECTION 1: Identification of the chemical product and manufacturer or supplier information

1.1 Identification of chemical product

1.1.1 Technical name

Cleaning Powder

Product Description

1.1.2 Short recommendations for use (including restrictions on use)

Identified uses

Tooth surface polishing

Uses advised against

None known

1.2 Information about the Manufacturer and/or Supplier

1.2.1 Full official name of organization:

NSK Rus&CIS

1.2.2 Address:

2, Entuziastov bulvar

11th floor

Moscow 109544

Russia

1.2.3 Telephone/Emergency Phone #:

+7 495 967 96 07

1.2.4 Fax:

+7 495 967 96 08

1.2.5 E-mail:

info@nsk-nakanishi.ru

SECTION 2: Hazards identification

2.1 Hazards of the product in accordance with GOST 12.1.007-76 and GHS

None needed according to classification criteria.

2.2 Information about precautionary labelling according to GOST 31340-2007

2.2.1 Signal Word

None needed according to classification criteria

2.2.2 Hazard Symbols

None needed according to classification criteria.

2.2.3 Hazard statements

None needed according to classification criteria.

Precautionary statements

Prevention

None needed according to classification criteria.

Response

None needed according to classification criteria.

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Storage

None needed according to classification criteria.

Disposal

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

2.3 Other hazards

May form combustible dust concentrations in air.

SECTION 3: Composition / information on ingredients

3.1 Information about the product as a whole

3.1.1 Chemical name (according to IUPAC)

Not available.

3.1.2 Chemical formula

Not available.

3.1.3 General characteristics of composition (taking into account the brand assortment; method for producing)

Not available.

3.2. Components (name, CAS and EC numbers, mass fractions (totalling 100%), MAC (Maximum Allowable Concentrations) or TAEL (Tentative Allowable Exposure Level), hazard classifications and references to the sources of data)

Components	Mass fraction	Hygiene Standards i	n working zone area	CAS Number	EC Number
(name)	(wt %)	MAC or TAEL, mg/m3	Hazard Class		
Sodium bicarbonate	93	MAC 5 mg/m3		144-55-8	205-633-8
Flavor substance	4			N/A	
Silica, amorphous	3			7631-86-9	231-545-4

SECTION 4: First aid measures

4.1 Observed symptoms

4.1.1 If inhaled:

The dust may cause coughing and irritation.

4.1.2 In contact with skin:

Dust may cause mechanical irritation.

4.1.3 In contact with eyes:

May cause mechanical irritation and tearing.

4.1.4 If swallowed:

No significant adverse effects expected.

4.2 Measures to provide first aid

4.2.1 If inhaled:

Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Call a POISON CENTER or doctor/physician.

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4.2.2 In contact with skin:

Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

4.2.3 In contact with eyes:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

4.2.4 If swallowed:

Rinse mouth. Call a POISON CENTER or doctor/physician.

4.2.5 Contraindications:

No information available for the product.

Note to Physicians

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 General description of fire and explosion hazards (according to GOST 12.1.044-89)

May form combustible dust concentrations in air.

5.2 Indicators of fire and explosion hazards (nomenclature indicators according to GOST 12.1.044-89 and GOST 30852.0-2002)

May form combustible dust concentrations in air. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Dust can be a fire or explosion hazard. Possibility of explosion exists under dusty conditions.

5.3 Combustion and/or thermal degradation products and hazards caused by them

Irritating and toxic gases or fumes may be released during a fire. Carbon monoxide CO, Carbon dioxide (CO2).

5.4 Recommended extinguishing media

Use extinguishing agent suitable for type of surrounding fire.

5.5 Unsuitable extinguishing media

Do not use high-pressure water streams.

5.6 Personal protective equipment for fire fighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

5.7 Specific measures for extinguishing the fire

Apply extinguishing media carefully to avoid creating airborne dust. Move container from fire area if it can be done without risk. Keep unnecessary people away, isolate hazard area and deny entry. Even after fire is out, cool containers with flooding quantities of water. Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways. Avoid inhalation of material or combustion by-products.

SECTION 6: Accidental release measures

6.1 Measures to prevent harmful effects on people, the environment, buildings, surroundings and others in accident and emergency situations

6.1.1 Necessary general actions in accidents and emergency situations

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Non-sparking tools should be used when working with dust. Sweep up or gather material and place in appropriate container for disposal. Wash contaminated areas with soap and water. Collect material into suitable, loosely covered container for disposal. Prevent entry into waterways, sewers, basements, or confined areas.

6.1.2 Personal Protection Means for emergency situations

Wear personal protective clothing and equipment, see Section 8.

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6.2 Procedure for elimination of accidents and emergencies

6.2.1 Instructions in case of leaks, spills, deposits

Avoid release to the environment.

6.2.2 Instructions in case of fire

Apply extinguishing media carefully to avoid creating airborne dust. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

SECTION 7: Handling and storage

7.1 Safety measures when handling chemicals

7.1.1 Systems of engineering safety measures

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Do not eat, drink, or smoke when using this product. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. To avoid fire or explosion, ground and bond container and receiving equipment (and ground personnel) before transferring material. Avoid dusting when handling and avoid all possible sources of ignition (spark or flame). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

7.1.2 Measures for the protection of the environment

Avoid release to the environment.

7.1.3 Recommendations for safe moving and transportation

No information available.

7.2 Conditions for safe storage of chemicals

7.2.1 Conditions and terms of safe storage

None needed according to classification criteria.

Further information on storage conditions: Storage and handle in accordance with all current regulations and standards. Prevent dust accumulation. Keep away from heat, open flame, high temperature, water or moisture.

7.2.2 Containers and packaging (including the materials from which they are made)

Keep only in original container.

7.3 Safety measures and storage for domestic settings

Prevent dust accumulation. Store in cool, dry, and well ventilated area.

Incompatible Materials

No information.

SECTION 8: Exposure controls/personal protection

8.1. Mandatory working zone concentration limits (MACs or TAELs)

Russia:

Sodium bicarbonate	144-55-8
skin notation:	Skin notation (related to Sodium carbonates)
MAC:	5 mg/m3 MAC aerosol

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Silica, amorphous	7631-86-9
TWA:	1 mg/m3 TWA (containing >60% Silicon dioxide) condensation aerosol, total mass of aerosols; 2 mg/m3 TWA (containing 10-60% Silicon dioxide) condensation aerosol, total mass of aerosols; 1 mg/m3 TWA (also vitreous) disintegration aerosol, total mass of aerosols
STEL:	3 mg/m3 STEL (containing >60% Silicon dioxide) condensation aerosol, total mass of aerosols; 6 mg/m3 STEL (containing 10-60% Silicon dioxide) condensation aerosol, total mass of aerosols; 3 mg/m3 STEL (also vitreous) disintegration aerosol, total mass of aerosols
Fibrogenic substance:	Fibrogenic substance (in the form of condensation aerosol containing it >60%); Fibrogenic substance (also vitreous, in the form of disintegration aerosol)

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

8.2 Measures to ensure the content of harmful substances in the allowable concentrations

Ventilation

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of these products contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Engineering controls

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Environmental exposure controls

Avoid release to the environment.

8.3 Personal protective equipment

8.3.1 General recommendations

Use recommended personal protective equipment.

8.3.2 Respiratory protection

Consult with a health and safety professional for specific respirators appropriate for your use. Respirators depend on exposure level. SCBA with full face piece recommended during change outs and available in case of emergency.

8.3.3 Protective equipment

Wear suitable protective equipment.

Eye/face protection

Wear chemical safety goggles

Skin Protection

Possibility of explosion exists under dusty conditions. Wear fire-resistant protective clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves

8.3.4 Personal protection equipment

No additional information.

SECTION 9: Physical and chemical properties

9.1 Physical State

Physical Form: white powder, lemon fragrance

9.2 Parameters characterizing the basic properties of the products

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Appearance	white powder	Physical State	solid
Odor	Lemon fragrance	Color	white
Odor Threshold	Not available	рН	7.9 - 8.4 (aqueous solution)
Melting Point	Not available	Boiling Point	Not available
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	Not available	Flammability (solid, gas)	Not available
Autoignition Temperature	(Not applicable)	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition temperature	(>= 50°C)
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	Not available
Water Solubility	Soluble in water	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Kinematic viscosity	Not available
Solubility (Other)	Not available	Density	Not available
Physical Form	white powder, lemon fragrance	Molecular Weight	Not available

SECTION 10: Stability and reactivity

10.1 Chemical stability

Decomposition product: sodium carbonate. May decompose on contact with heat, moisture Adsorption.

10.2 Reactivity

No reactivity hazard is expected.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.3 Conditions to be avoided

Avoid high temperature, heat, open flame, water or moisture.

Hazardous decomposition products

Carbon monoxide CO, Carbon dioxide (CO2).

Incompatible materials

No information.

SECTION 11: Toxicological information

11.1 General characteristics of exposure

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Acute and Chronic Toxicity

See below.

11.2 Routes of exposure

Inhalation

The dust may cause coughing and irritation.

Ingestion

No significant adverse effects expected.

Skin

Dust may cause mechanical irritation.

Eve

May cause mechanical irritation and tearing.

11.3 Affected organs, tissues and biological systems

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

11.4 Information about the health risks of exposure by direct contact with the product, as well as the consequences of these risks

Irritation/Corrosivity Data

Mechanical irritation may occur.

Aspiration hazard

Not expected to be an aspiration hazard.

Respiratory Sensitization

No information available for product.

Dermal Sensitization

No information available for the product.

11.5 Information about hazardous long-term effects of the product on the body

Mutagenic Data

No information available for the product.

Component Carcinogenicity

Silica, amorphous	7631-86-9	
IARC:	Monograph 68 [1997]; Supplement 7 [1987] (related to Silica, crystalline (general form)) (Group 1 (carcinogenic to humans))	
IARC:	Monograph 68 [1997]; Supplement 7 [1987] (Group 3 (not classifiable))	

Toxicity for reproduction

No information available for the product.

11.6 Acute toxicity data

Acute Toxicity Estimate

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Dermal	> 2000 mg/kg
Inhalation - Dust and Mist	>5 mg/l
Oral	> 2000 mg/kg

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Sodium bicarbonate (144-55-8)

Oral LD50 Rat 4220 mg/kg

Silica, amorphous (7631-86-9)

Oral LD50 Rat 7900 mg/kg (in olive oil ;no deaths occurred)

Dermal LD50 Rabbit >2000 mg/kg

Inhalation LC50 Rat >2.2 mg/L 1 h

SECTION 12: Ecological information

12.1 General description of the effects of exposure on the environment

No information available for the product.

12.2 Routes of exposure to the environment

No information available for product.

Bioaccumulative potential

No information available for product.

12.3 The most important characteristics of the environmental impact

12.3.1 Hygienic standards

Component	MAC of atmospheric air or TAEL of atmospheric air, mg/m3 (LHI, hazard class)	MAC water or Approximate Allowable Levels (AAL) water, mg/l, (LHI, hazard class)	MAC of fishery waters. or TAEL of fishery waters, mg/l (LHI, hazard class)	MAC or AAC (Approximate Allowable Concentration) of soil, mg/kg (LHI)
Sodium bicarbonate	0.1 mg/m3 TSEL	10 mg/l TAL Class 4 Present general sanitary		
Flavor substance				
Silica, amorphous	0.1 mg/m3 TSEL 0.1 mg/m3 MAC (ash, dust) 0.3 mg/m3 MAC (ash) 0.02 mg/m3 TSEL Class 3 Present (ash, dust) resorptive	10 mg/l TAL Class 4 Present general sanitary 10 mg/l MAC (as Si) Class 2 Present		

12.3.2 Ecotoxicity data

Component Analysis - Aquatic Toxicity

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Sodium bicarbonate	144-55-8
Fish:	LC50 96 h Lepomis macrochirus 8250 - 9000 mg/L [static]
Invertebrate:	EC50 48 h Daphnia magna 2350 mg/L IUCLID
Silica, amorphous	7631-86-9
Fish:	LC50 96 h Brachydanio rerio 5000 mg/L [static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata 440 mg/L IUCLID
Invertebrate:	EC50 48 h Ceriodaphnia dubia 7600 mg/L IUCLID

12.3.3 Migration and transformation in the environment due to biodegradation and other processes

Mobility in soil

No information available for product.

Other Ecological Information

No additional information available for the product.

SECTION 13: Disposal considerations

13.1 Safety measures when handling waste arising from use, storage, transportation Dispose in accordance with all applicable regulations.

13.2 Information about the places and methods of decontamination, recycling or disposal of waste products, including packaging

Dispose of solid waste/container in accordance with local/state/national/international regulations.

13.3 Recommendations regarding removal of waste generated when using products in everyday life Recycle if possible.

SECTION 14: Transport information

		ADR	RID	ICAO	IATA	ADN	IMDG
14.1	UN Number	Not regulated					
14.2	UN Proper Shipping Name						
14.3	Appropriate Transport Vehicles	Transported in accordance with the shipping rules applicable to the given mode of transport.	Transported in accordance with the shipping rules applicable to the given mode of transport.	Transported in accordance with the shipping rules applicable to the given mode of transport.	Transported in accordance with the shipping rules applicable to the given mode of transport.	Transported in accordance with the shipping rules applicable to the given mode of transport.	Transported in accordance with the shipping rules applicable to the given mode of transport.
14.4	Transport Hazard						

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	Class(es)						
14.5	Classification of dangerous goods according to the UN Recommendations on the Transport of Dangerous Goods	Not classified as dangerous good.	-Not classified as dangerous good.				
14.6	Transport labeling	None	None	None	None	None	None
14.7	Emergency cards						

International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk

SECTION 15: Information on National and International Legislation

15.1 National legislation

15.1.1 Laws of the Russian Federation

Limiting Quantities of Hazardous Substances

None of this product's components are on the list.

15.1.2 Information about the documents regulating the requirements for protection of humans and the environment

Maximum Allowable Concentrations of Pollutants in Air

Silica, amorphous	7631-86-9
Class 3 - Moderately Dangerous Substances:	Present (ash, dust)
Average Daily Values:	0.1 mg/m3 MAC (ash, dust)
Limiting Nuisance Values:	resorptive
Maximum Values:	0.3 mg/m3 MAC (ash)

Tentative Safe Exposure Levels (TSELs) of Harmful Substances

Sodium bicarbonate	144-55-8
Residential Settings:	0.1 mg/m3 TSEL
Silica, amorphous	7631-86-9
Residential Settings:	0.02 mg/m3 TSEL

Tentative Allowable Exposure Levels (TAEL)

Sodium bicarbonate	144-55-8
South Died South	111 00 0

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Class 4 - Low Dangerous Substances:	Present
Limiting Nuisance Values:	general sanitary
Drinking, Domestic and Recreation Purposes:	10 mg/l TAL

Maximum Allowable Concentrations of Chemicals in Soil

The Russian Ministry of Health has not developed maximum allowable concentrations for any of this product's components.

Approximate Allowable Concentrations (AAC) of Chemical Substances in Soil

The Russian Ministry of Health has not developed approximate allowable concentrations for any of this product's components.

15.2 International conventions and agreements

Montreal Protocol

No components of this material are listed.

Stockholm Convention

No components of this material are listed.

Component Analysis - Inventory

Sodium bicarbonate (144-55-8)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

Flavor substance (N/A)

US	CA	EU	AU	РН	JP - ENCS	JP -	KR KECI - Annex 1		KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

Silica, amorphous (7631-86-9)

US	CA	EU	AU	РН	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

SECTION 16: Other information

16.1 Safety Passport Revision Information

New SDS: 3 July 2018

Key / Legend

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ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU -Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG -Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN -European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA -Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH -Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIstsTM - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne- Nonspecific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH-Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA -Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada)

16.2 List of sources used for Safety Passport compilation

Available upon request.

Further Information

Disclaimer:

The information set forth in this Safety Data Sheet does not purport to be all-inclusive and should be used only as a guide. While the information and recommendations set forth herein are believed to be accurate, the company makes no warranty regarding such information and recommendations and disclaims all liability from reliance thereon.

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