

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

1.1 Product identifier

Material Name

Cleaning Powder

Registration status

This material is imported in amounts < 1 tonne/annum. This product and its components are not subject to REACH.

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

Identified uses

Tooth surface polishing

Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

NSK Europe GmbH

Elly-Beinhorn-Strasse 8

65760 Eschborn

Germany

Phone: +49 6196 77606 0

E-mail: info@nsk-europe.de

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

None needed according to classification criteria.

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard symbols

None needed according to classification criteria.

Signal word

None needed according to classification criteria

Hazard statements

None needed according to classification criteria.

Precautionary statements

Prevention

None needed according to classification criteria.

Response

None needed according to classification criteria.

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

3.2 MIXTURE

CAS EC No Registration No	Component Name Synonyms	1272/2008 (CLP)	Percent
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144-55-8 205-633-8 --	Sodium bicarbonate	--	93
N/A -- --	Flavor substance	--	4
7631-86-9 231-545-4 --	Silica, amorphous	--	3

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

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.

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.

Eyes

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

Ingestion

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

4.2 Most Important Symptoms/Effects

Acute

Mechanical irritation may occur.

Delayed

No adverse effects expected.

4.3 Indication of Immediate Medical Attention and Special Treatment

No information on significant adverse effects.

Note to Physicians

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

5.2 Special hazards arising from the substance or mixture

Irritating and toxic gases or fumes may be released during a fire. 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.

Combustion

Carbon monoxide CO, Carbon dioxide (CO₂).

5.3 Advice for firefighters

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. May explode when heated. 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.

Protective Equipment and Precautions for Firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective clothing and equipment, see Section 8.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and Materials for Containment and Cleaning Up

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.

6.4 Reference to other sections

See Section 7 for Handling and Storage. See Section 8 for Personal Protective Equipment. See Section 13 for Disposal Guidance.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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.

7.2 Conditions for safe storage, including any incompatibilities

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.

Incompatible Materials

No information.

7.3 Specific end use(s)

Tooth surface polishing

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Component Exposure Limits

Sodium bicarbonate	144-55-8
Czech Republic	5 mg/m3 TWA
	10 mg/m3 Ceiling
Latvia	5 mg/m3 TWA

Silica, amorphous	7631-86-9
EU (Limit Values):	0.1 mg/m ³ TWA (respirable fraction) (related to Silica, crystalline (general form))
Austria:	4 mg/m ³ TWA [TMW] (also Silica manufactured through wet process) inhalable fraction
Bulgaria	0.07 mg/m ³ TWA respirable fraction (related to Silica, crystalline (general form))
Czech Republic	0.1 mg/m ³ TWA respirable fraction ; 4 mg/m ³ TWA as amorphous SiO ₂
Estonia	2 mg/m ³ TWA respirable dust
Finland:	5 mg/m ³ TWA
Germany (TRGS):	4 mg/m ³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) inhalable fraction
Germany (DFG):	4 mg/m ³ TWA MAK inhalable fraction
Ireland:	6 mg/m ³ TWA total inhalable dust ; 2.4 mg/m ³ TWA respirable dust
	18 mg/m ³ STEL (calculated) total inhalable dust ; 7.2 mg/m ³ STEL (calculated) respirable dust
Latvia	1 mg/m ³ TWA
Slovenia	0.3 mg/m ³ TWA respirable fraction, fume
United Kingdom:	6 mg/m ³ TWA inhalable dust ; 2.4 mg/m ³ TWA respirable dust
	18 mg/m ³ STEL (calculated) inhalable dust ; 7.2 mg/m ³ STEL (calculated) respirable dust

Component Biological Exposure Limits

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

Derived No Effect Levels (DNELs)

No DNELs available.

Predicted No Effect Concentrations (PNECs)

No PNECs available.

8.2 Exposure Controls

Engineering controls

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. 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).

Eye/face protection

Wear chemical safety goggles (EN 166).

Skin Protection

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

Respiratory Protection

If airborne contaminant levels exceed recommended exposure limits, use CEN/EN Standard applicable respiratory protection appropriate for employee exposure levels. Consult with a health and safety professional for specific respirators appropriate for your use.

Glove Recommendations

Wear appropriate chemical resistant gloves (EN 374).

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	white powder	Physical State	solid
Odor	Lemon fragrance	Color	white
Odor Threshold	Not available	pH	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	powder	Molecular Weight	Not available

9.2 Other information

No additional information available for the product.

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazard is expected.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

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

10.5 Incompatible materials

No information.

10.6 Hazardous decomposition products
 Carbon monoxide CO, Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Product Toxicity Data

Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Oral	> 2000 mg/kg

Irritation/Corrosivity Data

Mechanical irritation may occur.

Respiratory Sensitization

No information available for product.

Dermal Sensitization

No information available for the product.

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic 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.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

Aspiration hazard

Not expected to be an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Component Analysis - Aquatic Toxicity

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

12.2 Persistence and degradability

No information available for product.

12.3 Bioaccumulative potential

No information available for product.

12.4 Mobility in soil

No information available for product.

12.5 Results of PBT and vPvB assessment

No information available for product.

12.6 Other adverse effects

No additional information available for the product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of waste in accordance with Directive 2008/98/EC, covering waste and dangerous waste.

Waste codes/waste designations according to LoW. EWC-code: 18 01 06*.

Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways.

Since emptied containers retain material residue, follow safe handling/label warnings even after container is emptied.

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

SECTION 14: Transport information

		ADR	RID	ICAO	IATA	ADN	IMDG
14.1	UN Number	Not regulated					
14.2	UN Proper Shipping Name	--	--	--	--	--	--
14.3	Transport Hazard Class(es)	--	--	--	--	--	--
14.4	Packing Group	--	--	--	--	--	--
14.5	Environmental Hazards	--	--	--	--	--	--
14.6	Special Precautions For User	--	--	--	--	--	--
14.7	Transport in Bulk According to Annex II of MARPOL and the IBC Code	--	--	--	--	--	--

14.8	Further information	--	--	--	--	--	--
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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: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH Candidate List of Substances of Very High Concern (SVHC) for Authorization (Article 59(1)) - Reg. (EU) No. 1907/2006

No components of this material are listed.

EU - REACH (1907/2006) - Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles
 No components of this material are listed.

EU - Substances Depleting the Ozone layer (1005/2009)

No components of this material are listed.

EU - Persistent Organic Pollutants (850/2004)

No components of this material are listed.

EU - Export and Import Restrictions (689/2008) - Chemicals and Articles Subject to Export Ban

No components of this material are listed.

EU - Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances

No components of this material are listed.

EU - Plant Protection Products (1107/2009/EC)

Sodium bicarbonate	144-55-8
Active Substances	Sodium hydrogen carbonate shall be used in accordance with the specific conditions included in the conclusions of the review report on Sodium hydrogen carbonate (SANTE/10667/2015) and in particular Appendices I and II thereof

EU - Biocides (528/2012/EU)

No components of this material are listed.

EU - Water Framework Directive (2000/60/EC)

No components of this material are listed.

EU - Limitation of Emissions of Volatile Organic Compounds Due to the Use of Organic Solvents in Certain Activities and Installations (1999/13/EC)

No components of this material are listed.

EU - Detergent Regulation (648/2004/EC)

No components of this material are listed.

Germany Regulations

Germany Water Classification - Product

hazard class 1 - low hazard to waters

* Self-classification

Germany Water Classification - Component

Sodium bicarbonate (144-55-8)

ID Number 374, hazard class 1 - low hazard to waters

Silica, amorphous (7631-86-9)

ID Number 849, not considered hazardous to water

Denmark Regulations

No components of this material are listed.

Component Analysis - Inventory
Sodium bicarbonate (144-55-8)

US	CA	EU	AU	PH	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	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	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	PH	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

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the substance/mixture.

SECTION 16: Other information

16.1 Indication of changes

New SDS

Preparation Date

29 June 2018

16.2 Key / Legend

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 Lists™ - ChemADVISOR's Regulatory Database; MAK

- Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; Ne- Non-specific; 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)

16.3 Key literature references and sources for data

Available upon request.

16.4 Methods Used for Classification of Mixture According to Regulation (EC) No 1272/2008

Available upon request.

16.5 Relevant H- and EUH-phrases (Number and full text) and Notes

None needed according to classification criteria

16.6 Training advice

Read the Safety Data Sheet before handling product.

16.7 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.