

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

**1.1 Product identifier**

**Material Name**

Perio-Mate 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**

Air polishing agent for plaque removal

**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
---------------------------------	----------------------------	-----------------	---------

56-40-6 200-272-2 --	Glycine	--	>99
68909-20-6 272-697-1 --	Silane treated silica	--	<1

**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**

Small fires: dry chemical, Carbon dioxide (CO<sub>2</sub>), water spray. Large fires: Water spray, water fog, regular foam.

**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 (CO<sub>2</sub>), ammonia, nitrogen oxides.

**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. Cool containers with flooding quantities of water until well after fire is out. 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. Equip the place with daylighting / lighting / ventilating facilities necessary to handle the product. Prevent dust accumulation. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Store in a tightly closed container. Keep away from incompatible materials.

### Incompatible Materials

Oxidizing agents

### 7.3 Specific end use(s)

Air polishing agent for plaque removal.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Component Exposure Limits

Glycine	56-40-6
Latvia	5 mg/m <sup>3</sup> TWA

#### 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**

<b>Appearance</b>	gray powder	<b>Physical State</b>	solid
<b>Odor</b>	odorless	<b>Color</b>	gray
<b>Odor Threshold</b>	Not available	<b>pH</b>	5.9 - 6.4
<b>Melting Point</b>	232 - 236 °C	<b>Boiling Point</b>	Not available
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not applicable	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not applicable	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density (air=1)</b>	Not applicable	<b>Specific Gravity (water=1)</b>	1.4 - 1.6
<b>Water Solubility</b>	Soluble in water 225 g/L	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not applicable	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	1.595 g/ml
<b>Physical Form</b>	powder	<b>Molecular Weight</b>	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**

Stable under normal conditions of use.

**10.3 Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4 Conditions to avoid**

Avoid sources of ignition, open flame, sparks, heat.

**10.5 Incompatible materials**

Oxidizing agents

**10.6 Hazardous decomposition products**

Carbon monoxide CO, Carbon dioxide (CO<sub>2</sub>), ammonia, nitrogen oxides.

**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:

**Glycine (56-40-6)**

Oral LD50 Rat 7930 mg/kg

**Product Toxicity Data**

**Acute Toxicity Estimate**

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**

None of this product's components are listed by IARC or DFG.

**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**

No LOLI ecotoxicity data are available for this product's components.

**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 07.

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	Not regulated	Not regulated	Not regulated	Not regulated	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	--	--	--	--	--	--

**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)**

No components of this material are listed.

**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**

**Glycine (56-40-6)**

ID Number 6704 , hazard class 1 - low hazard to waters

**Silane treated silica (68909-20-6)**

ID Number 1429 , not considered hazardous to water

**Denmark Regulations**

No components of this material are listed.

**Component Analysis - Inventory**

**Glycine (56-40-6)**

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

**Silane treated silica (68909-20-6)**

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	No	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.