Material Name: Perio-Mate powder

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

1.1 Identification of chemical product

1.1.1 Technical name

Perio-Mate Powder

Product Description

1.1.2 Short recommendations for use (including restrictions on use)

Identified uses

Air polishing agent for plaque removal

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)

2-aminoacetic acid

3.1.2 Chemical formula

C2H5NO2

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 (name)	Mass fraction	Hygiene Standards	in working zone area	CAS Number	EC Number	
	(wt %)	MAC or TAEL, mg/m3	Hazard Class			
Glycine	>99	MAC 5 mg/m3		56-40-6	200-272-2	
Silane treated silica	<1			68909-20-6	272-697-1	

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), ammonia, nitrogen oxides.

5.4 Recommended extinguishing media

Small fires: dry chemical, Carbon dioxide (CO2), water spray. Large fires: Water spray, water fog, regular foam.

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. 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.

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 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. 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.

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

Oxidizing agents

SECTION 8: Exposure controls/personal protection

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

Russia:

ixussia.	
Glycine	56-40-6
MAC:	5 mg/m3 MAC aerosol

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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: gray odorless powder

9.2 Parameters characterizing the basic properties of the products

Appearance	gray powder	Physical State	solid	
Odor	odorless	Color	gray	
Odor Threshold	Not available	рН	5.9 - 6.4	
Melting Point	232 - 236 °C	Boiling Point	Not available	
Boiling Point Range	Not available	Freezing point	Not available	
Evaporation Rate	Not applicable	Flammability (solid, gas)	Not available	
Autoignition Temperature	Not applicable	Flash Point	Not available	

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Lower Explosive Limit	Not available	Decomposition temperature	Not available		
Upper Explosive Limit	Not available	Vapor Pressure	Not applicable		
Vapor Density (air=1)	Not applicable	Specific Gravity (water=1)	1.4 - 1.6		
Water Solubility	Soluble in water 225 g/L	Partition coefficient: n-octanol/water	Not available		
Viscosity	Not applicable	Kinematic viscosity	Not available		
Solubility (Other)	Not available	Density	1.595 g/ml		
Physical Form	gray odorless powder	Molecular Weight	Not available		

9.2 Other information

No additional information available for the product.

SECTION 10: Stability and reactivity

10.1 Chemical stability

Stable under normal conditions of use.

10.2 Reactivity

No reactivity hazard is expected.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.3 Conditions to be avoided

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

Hazardous decomposition products

Carbon monoxide CO, Carbon dioxide (CO2), ammonia, nitrogen oxides.

Incompatible materials

Oxidizing agents

SECTION 11: Toxicological information

11.1 General characteristics of exposure

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.

Eye

May cause mechanical irritation and tearing.

11.3 Affected organs, tissues and biological systems

Specific Target Organ Toxicity - Single Exposure

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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

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

Toxicity for reproduction

No information available for the product.

11.6 Acute toxicity data

Acute Toxicity Estimate

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:

Glycine (56-40-6)

Oral LD50 Rat 7930 mg/kg

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	MAC water or Approximate Allowable	111	MAC or AAC (Approximate
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	atmospheric air, mg/m3 (LHI, hazard class)	Levels (AAL) water, mg/l, (LHI, hazard class)	of fishery waters , mg/l (LHI, hazard class)		Allowable Concentration) of soil, mg/kg (LHI)
Glycine	0.02 mg/m3 TSEL				
Silane treated silica					

12.3.2 Ecotoxicity data

Component Analysis - Aquatic Toxicity

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

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

${\bf 13.1}\ Safety\ measures\ when\ handling\ waste\ arising\ from\ use,\ storage,\ transportation$

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			Not regulated	Not regulated	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.

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14.4	Transport Hazard 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	one 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

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

Tentative Safe Exposure Levels (TSELs) of Harmful Substances

Glycine	56-40-6
Residential Settings:	0.02 mg/m3 TSEL

Tentative Allowable Exposure Levels (TAEL)

The Russian Ministry of Health has not developed tentative allowable exposure levels for any of this product's components.

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

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Montreal Protocol

No components of this material are listed.

Stockholm Convention

No components of this material are listed.

Component Analysis - Inventory

Glycine (56-40-6)

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

Silane treated silica (68909-20-6)

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	No	Yes	Yes

SECTION 16: Other information

16.1 Safety Passport Revision Information

New SDS: 3 July 2018

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 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 -

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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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