

**Material Safety Data Sheet**

Product: DIAMOND UNIVERSAL

Revision:02

Date of last revision: 06/04/2019

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**1 –Product Identification****The name of the Substance or Mixture:** Diamond Universal**Internal Product ID code:**

0101026001 - Diamond Universal

**Main recommended uses for the substance or mixture:** Is a universal polishing paste, produced with micronized diamond, extra fine-granulated, for the exclusive use of dentist or prosthetics. The product offers excellent results in polishing and shining of the porcelain, dental enamel, resins, composites and other restorative materials. Because it is soluble in water, it eases the lubrication of the polishing process and the removal of the paste at the end of treatment. It is a uniform product, of high hardness, good strength and because it has medium viscosity the paste is not susceptible to the action of heat.

**Company:** Hager Worldwide, Inc.**Address:** 441 19th Street SE, Hickory, NC, 28602**Contact phone number:** 800-328-2335**Fax:** (800) 573-9392**E-mail:** [info@hagerworldwide.com](mailto:info@hagerworldwide.com)**2–Hazard Identifications****Classification of the substance or mixture****Physical Hazards:**

The Product is not classified as a hazard product, according the classification criteria for physical hazards, standardized by ABNT NBR 14725-2

**Hazards to human health:**

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Acute toxicity – Oral, Category 5.  
Corrosion/skin irritation, Category 2.  
Serious eye damage/ eye irritation, Category 2A.  
Skin sensitization, Category 2A  
Mutagenicity, Category 2  
Carcinogenicity, Category 2  
Systemic toxicity for certain organs – Single Exposure, Category 3.  
Systemic toxicity for certain organs – Repeated Exposure, Category 2.  
Aspiration Hazard, Category 1

**Hazards to the aquatic environment:**

The product is not classified as dangerous according to the criteria for classification of hazards to the aquatic environment, standardized by ABNT 14725-2;

**Labelling elements of GHS, including precautionary phrases.****Hazard Pictograms:****Word of warning:** Dangerous**Phrase of warning:****Physical Hazards:** Not applicable**Hazards to human health:**

It is harmful if swallowed  
It causes skin irritation  
It causes serious eye injuries  
It may cause skin allergic reaction  
Suspected of causing genetic defects.  
It may cause cancer  
It may cause breathing irritation

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It may cause drowsiness and dizziness  
It may cause damage to organs by repeated or prolonged exposure;  
It may be fatal if swallowed and enters airways

**Dangerous for the environment:** Not classified**Precautionary phrases:**

Wash thoroughly after handling.  
Wear protective gloves / protective clothing / eye protection / face protection;  
Obtain special instructions before use  
Do not handle the product before having read and understood all safety precautions.  
Use only outdoors or in a well-ventilated area.  
Store in a well-ventilated place. Keep container tightly closed.  
Do not breathe dust/smoke/gas/fog/vapors/aerosols

**Other hazards which do not result in a classification:** None known.**3-Composition and information on ingredients****Mixture.****I Ingredients or impurities that contribute to the danger**

<b>Components</b>	<b>CAS Number</b>	<b>Concentration (%)</b>
Vaseline	8042-47-5	70 – 80
Diethanolamide	68603-42-9	1 – 10
Colloidal Silica	7631-86-9	1 – 10
Polyoxyethylene	9005-64-5	0,1 – 1

The ingredients listed above, refer to the dangerous ingredients that meet the values of concentration cut/ limits for each danger category to the health and the environment, established by the norm ABNT NBR 14725-4 or that possess limits of established occupational exhibition.

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### 4-First aid measures to be used.

#### First aid measures to be used:

- **Inhalation:** Remove the person for ventilated place and maintain the person in rest in a position that doesn't hinder the breathing.
- **Skin Contact:** Wash the skin with water and soap. Remove the contaminated clothing immediately. Rinse with fresh water/take a shower. Wash the contaminated clothing before using it again. In case of skin irritation: consult a doctor
- **Eye contact:** Rinse the eyes carefully with water during a few minutes. In case of use of eye lenses, remove it and keep rinsing. In case of eye irritation: consult a doctor.
- **Ingestion:** Rinse the mouth. Do not provoke vomit. Contact a Toxicological Information Centre or a doctor.

**Acute and tardive main symptoms and effects:** It is harmful if swallowed. It causes severe skin irritation and eye injuries. It may also cause allergic reactions. Suspected to cause genetic defects. Suspected to cause cancer. It may cause breathing irritation. It may cause drowsiness and dizziness. It causes damage to organs by repeated or prolonged exposure. It may be fatal if swallowed and enters airways.

**Notes to a doctor:** Take up symptomatically

### 5 – Fire-fighting measures

#### Methods of extinguishment

- **Proper methods of extinguishment:** Sprayed water. Dry chemical. Alcohol-resistant foam. Carbon Dioxide.
- **Improper methods of extinguishment:** In case of fire, do not use water jet as this will cause the fire to spread.

**Specifics Substance and Mixture hazards:** The products are not reactive in the normal usage, transport and storage conditions.

**Special Methods of Firefighting:** Use normal procedures of firefighting and consider the danger of other materials involved.

**Protective measures for fire fighters:** Wear full protective clothing, including helmet, self-contained breathing apparatus or positive pressure breathing apparatus, protective clothing and face mask.

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**Specific Methods:** Use normal fire-fighting procedures and consider the danger of others involved materials.

**General fire hazard:** Do not observe any general fire risk or explosion.

**6 – Control Measures for spill or leakage.****Personal precautions, protective equipment e emergency procedures.**

- **For those who are not involved in emergency services:** Ensure adequate ventilation. Do not touch damaged containers or spilled material without suitable protective clothing (see section 8 – Exposure controls and personal protection). Keep people away from the wind in relation to the spill.
- **For those who are involved in emergency services:** Use the individual protective equipment recommended by section 8 (Individual protection and exposition management) of the MSDS.

**Precautions to natural environment:** Avoid release to the environment; collect spilled material.

**Cleaning methods:**

Stop the flow of material, there are no risks. Contain spilled material. Collect with a broom after absorbing the absorbent material (e.g.: vermiculite, dry sand or earth). After product recovery, rinse area with water.

Do not replace the spilled substance in the original package to reuse. To disposal, check the section 13 of the MSDS.

**Other topics related to spill and leakage:** Clean according to applicable regulations. Avoid heat, sparks, flame and other sources of ignition. Isolate spill or leak within a radius of 50 meters, at least in all directions. Ventilate area and wear specific protective equipment. Contain and absorb in absorbent material (e.g., vermiculite, dry sand or earth).

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**7 - Handling and storage****Precautions for safe handling**

Ensure good workplace ventilation. The procedures should be used before use. Do not use before and read all understood precautions. Limit as needed for handling and limit the number of exposed employers. Provide local or general exhaust in the area. Wear personal protective equipment. Floors, walls and other doors in the danger zone should be cleaned regularly. Do not inhale dust / smoke / gas / fog / vapors / aerosols. Avoid contact with eyes, skin or clothing.

**Safe storage conditions, including any incompatibility**

Store in a locked place, protected from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Safe packing materials**

Plastic packaging

**8-Exposure control and personal protection**

**Control Parameters:** Follow standard monitoring procedures.

**Occupational exposure limits:**

<b>Vaseline (CAS 8042-47-5)</b>		
Germany	AGS	5 mg/m <sup>3</sup> - Limit value - Eight hours
Germany	DFG	5 mg/m <sup>3</sup> - Limit value - Eight hours

<b>Colloidal Silica (CAS 7631-86-9)</b>		
USA	OSHA	80/ % silica total dust mg/m <sup>3</sup> - Limit value - Eight hours
Germany	DFG	4 mg/m <sup>3</sup> (inhalable aerosol) - Limit value - Eight hours

**Engineering control measures:** Ensure good ventilation of the workplace.

**Personal protection measures**

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- **Eye / face protection:** Chemical resistant wide-angle goggles. Facial protector.
- **Skin protection:** Wear protective gloves / protective clothing.
- **Other:** Chemical resistant apron.
- **Respiratory Protection:** Use a respirator with a combination cartridge of high efficiency filters and filters for organic vapors.
- **Precautionary pictograms**

**Wear safety glasses****Wear safety gloves**

- **Thermal hazards:** Decomposition when heated

**Hygiene measures**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Wash work clothes and protective clothing routinely to remove contaminants.

**9 - Physical and chemical properties**

**Appearance (physical state, shape and color):** Gray homogeneous paste

**Odor and limit:** Odorless

**pH:** Not available

**Melting point / freezing point:** Not available

**Initial boiling point and boiling point range:** Not available

**Flash point:** Not available. Product non-flammable

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**Evaporation rate:** Not available**Flammability (solid, gas):** Not available. Product non-flammable.**Upper / lower flammability or explosive limits:** Not available. Product non-flammable.**Vapor pressure:** Not available**Vapor density:** Not available**Relative density:** Not available**Solubility:** Not available**Partition coefficient: n-octanol / water:** Not available**Auto-ignition temperature:** Not available**Decomposition temperature:** Not available**Viscosity:** Between 18.000 – 45.000 cP.**10 - Stability and reactivity****Reactivity****The substance may react dangerously with:**

Oxygen difluoride, hydrogen fluoride, sodium (when heated), xenon hexafluoride. Risk of explosion when in contact with chloride, strong oxidizing agents, hydrogen peroxide, halogens, potassium permanganate, sodium peroxide, nitriles, peroxides, perchloric acid, nitrile perchlorate, perchlorates, nitric acid / sulfuric acid, silver perchlorate

**Chemical stability:** The product is stable under normal conditions.**Conditions to avoid:**

Contact with oxygen difluoride, hydrogen fluoride, sodium (when heated), xenon hexafluoride. Risk of explosion when in contact with chloride, strong oxidizing agents, hydrogen peroxide, halogens, potassium permanganate, sodium peroxide, nitriles, peroxides, perchloric acid, nitrile perchlorate, perchlorates, nitric acid / sulfuric acid, silver perchlorate



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**Incompatible materials / substances:** No data on conditions to be avoided was found.**Hazardous Decomposition Products:** Not available**11 - Toxicological information****Acute oral toxicity:** Category 5.**Acute dermal toxicity:** Not classified.**Acute inhalation toxicity:** Not classified.

Product	Species	Test results *
DIAMOND UNIVERSAL (Mixture)	-	Oral (LD50) 4001,6 mg/Kg

\* Acute toxicity of the mixture, calculated by the equation of the additivity described in ANBT NBR 14725-2.

**Skin corrosion / irritation:** Category 2.**Serious eye damage / eye irritation:** Category 2A.**Respiratory or skin sensitization:** Not classified.**Germ cell mutagenicity:** Not classified**Carcinogenicities:** Category 1A**Reproductive toxicity:** Not classified.**Specific target organ toxicity, single exposure:** Not classified.**Specific target organ toxicity, repeated exposure:** Not classified.**Aspiration hazards:** Not classified.**12 – Ecological Information**

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**Ecotoxicity****Toxicity to aquatic environment - Acute:** Category 1.**Toxicity to aquatic environment - Chronic:** Category 1.**Persistence and degradability:** No data available**Bioaccumulative potential:** No data available**Mobility in soil:** No data available**Other adverse effects:** No other adverse environmental effects (eg, ozone depletion, photochemical potential, endocrine disruption, global warming potential) are expected from this component.**13- Treatment and disposition considerations****Remains of products:** This material, and its container, must be disposed of safely. Dispose of in accordance with local responsible authority; for treatment and disposal methods, federal, state and municipal laws must be consulted, among them: Law No. 12305, of August 2, 2010 (National Policy on Solid Waste).**Used packaging:** Dispose of in a safe manner in accordance with local regulations; for treatment and disposal methods, federal, state and municipal laws must be consulted, among them: Law No. 12305, of August 2, 2010 (National Policy on Solid Waste).**Local regulations:** For treatment and disposal methods, federal, state and municipal laws, should be consulted, among them: Law No. 12305, of August 2, 2010 (National Policy on Solid Waste).**14- Transport information**

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**Road Transportation**

Not regulated as Dangerous Goods

**Waterway Transportation**

Not regulated as Dangerous Goods

**Air Transport**

Not regulated as Dangerous Goods

**15 - Regulations****Federal regulations****Chemicals - Safety, health and environmental information:**

- ABNT NBR 14725-1:2009 Corrected Version:2010: Terminology;
- ABNT NBR 14725-2:2009 Corrected Version:2010: Hazard classification system;
- ABNT NBR 14725-3:2012 Version Corrected:2015: Labeling;
- ABNT NBR 14725-4:2014: Material Safety Data Sheet (MSDS).

**National Policy on Solid Waste**

- Lei nº12.305, de 02 de agosto de 2010.

**Road transport:**

- Resolução no 5232, de 14 de dezembro de 2016- Approves the Supplementary Instructions to the Regulation of the Terrestrial Transportation of Dangerous Goods- AGÊNCIA NACIONAL DE TRANSPORTES TERRESTRES.

**Water transport:**

- DPC - Diretoria de Portos e Costas (Transporte em águas brasileiras) Normas de Autoridade Marítima (NORMAM);
- NORMAM 01/DPC: Embarcações Empregadas na Navegação em Mar Aberto;

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- NORMAM 02/DPC: Embarcações Empregadas na Navegação Interior.

**Air transport:**

- ANAC - Agência Nacional de Aviação Civil - Resolução nº129 de 8 de dezembro de 2009;
- RBAC N°175 - (Regulamento Brasileiro da Aviação Civil) - Transporte de Artigos Perigosos em Aeronaves Civis;
- IS N° 175-001 - INSTRUÇÃO SUPLEMENTAR - IS.

**International regulations****Multimodal transport:**

- *Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria* (“Orange Book”); das Nações Unidas.

**Road transport:**

- IMO - *International Maritime Organization* (Organização Marítima Internacional) *International Maritime Dangerous Goods Code (IMDG Code)*.

**Air transport:**

- ICAO - *International Civil Aviation Organization* (Organização da Aviação Civil Internacional) - Doc 9284-NA/905;
- IATA - *International Air Transport Association* (Associação Internacional de Transporte Aéreo) *Dangerous Goods Regulation (DGR)*.

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**16–Other information****Important information, but not specifically described in the previous section**

This Safety Data Sheet was prepared and issued by a Chemistry professional registered in the Regional Chemistry Council (CRQ IV region), as determined by the Federal Law (Normative Resolution 252 of April 19, 2013).

This MSDS has been prepared in accordance with the latest version of the Brazilian Standard ABNT NBR 14725, in force on the date of revision of this document, based on the current knowledge of the chemical and provides information on protection, safety, health and the environment.

The FISPQ does not take into account all situations that may occur in a work environment, being only part of the information necessary for the elaboration of a health, safety and environment

program.

Decree No. 2657 of 1998, establishes the obligation to supply the FISPQ to the worker; in its Article 8, this Decree provides:

"Employers using hazardous chemicals should receive contain essential detailed information on their identification, their supplier, their classification, their hazard, precautionary measures and emergency procedures. "

Ordinance No. 229 of 2011 / MTE (which amends Regulatory Standard "NR 26" and deals with Safety Signaling) requires the manufacturer or supplier to prepare and make available the MSDS for every product.

Numerous legislations are related to the requirement of MSDS and other chemical safety documents. Among them there is also the Law of Environmental Crimes 9,605 / 1998, as well as the Law 8.098 / 1990 of the Code of Consumer Protection, for example.

**Subtitles and abbreviations:**

ABNT: Brazilian Association of Technical Standards

BCF: bioconcentration factor.

CE50: Effective Concentration

50%

CL50: Lethal Concentration 50%

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DL50: Lethal Dose 50%

IARC: *International Agency for Research on Cancer*

MTE: Ministry of Labor and  
Employment

MSDS: *Material Safety Data Sheet*

NBR: Brazilian Standard

NR: Regulatory Standard

ONU: United Nations Organization

OSHA: *Occupational Safety and Health Administration*

VLE: Exposure Limit Value

UN: *United Nations*

USA: *United States of America*

vol. = volume

**References:**

1. *PubChem - Open Chemistry Database;*
2. *Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA) GESTIS Substance Database;*
3. *GESTIS International Limit Values;*
4. *ECHA - European Chemicals Agency;*
5. Ficha de Informação do ácido fosfórico - CETESB
6. ABNT NBR 14725-1:2009 Versão Corrigida:2010: Terminologia;
7. ABNT NBR 14725-2:2009 Versão Corrigida:2010: Sistema de classificação de perigo;
8. ABNT NBR 14725-3:2012 Versão Corrigida:2015: Rotulagem;
9. ABNT NBR 14725-4:2014: Ficha de informações de segurança de produtos químicos (FISPQ);

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10. Resolução no 5232, de 14 de dezembro de 2016- Aprova as Instruções Complementares ao Regulamento do Transporte Terrestre de Produtos Perigosos - AGÊNCIA NACIONAL DE TRANSPORTES TERRESTRES.
  11. *Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria* (“Orange Book”); das Nações Unidas;
  12. IMO - *International Maritime Organization* (Organização Marítima Internacional) *International Maritime Dangerous Goods Code (IMDG Code)*;
  13. IATA - *International Air Transport Association* (Associação Internacional de Transporte Aéreo) *Dangerous Goods Regulation (DGR)*.