

SAFETY DATA SHEETS

This SDS packet was issued with item:

070831578

N/A

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

(a) GHS product identifier

Patterson Aluminum Oxide

(e) Emergency phone number

CHEMTREC 1-800-424-9300

(b) Other means of identification

NA

(c) Recommended use of the chemical and restrictions on use

For professional dental applications.

(d) Supplier's details

Patterson Companies, Inc.
1031 Mendota Heights Road
Saint Paul, MN 55120
Phone: 1-800-328-5536

SECTION 2: Hazards identification

(a) GHS classification of the substance/mixture

Substance Name

1. Aluminum Oxide - Not classified as a hazardous substance.

(b) Label Elements

Hazard statements

None

Precautionary statements

None

Hazard Symbol(s)

NONE

Signal Word(s)

NONE

(c) Other hazards which do not result in classification

IF ON SKIN: Wash thoroughly with soap and warm water.

IF INHALED: Remove to fresh air.

IF SWALLOWED: Never give anything by mouth to an unconscious person. Rinse mouth with water.

IF IN EYES: Flush eyes with water.

SECTION 3: Composition/information on ingredients

(a) Chemical(s) Identity:

(b) Common Name:

Aluminum Oxide
Silicon Dioxide
Titanium Oxide

(c) CAS No.

1344-28-1
7631-86-9
13463-67-7

Mixture:

Concentration (Percentage)

96.40%
0.50%
2.70%

SECTION 4: First-aid measures

(a) Description of first aid measures:

IF ON SKIN (OR HAIR): Wash thoroughly with soap and warm water.

IF INHALED: Remove to fresh air.

IF SWALLOWED: Never give anything by mouth to an unconscious person. Rinse mouth with water.

IF IN EYES: Flush eyes with water.

IF ON CLOTHING: Wash clothing thoroughly.

(b) Most important symptoms and effects, both acute and delayed:

Unlikely events of shortness of breath, dizziness and nausea.

(c) Indication of any immediate medical attention and special treatment needed:

Unlikely events of shortness of breath, dizziness and nausea.

SECTION 5: Fire-fighting measures**(a) Suitable extinguishing media:**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

(b) Special hazards arising from the chemical or mixture: ND**(c) Special protective equipment and precautions for fire-fighters:**

Do not use halocarbon extinguishers. The product itself does not burn.

SECTION 6: Accidental release measures**(a) Personal precautions, protective equipment and emergency procedures:**

Avoid dust formation. Avoid breathing vapors, mist, or gas.

(b) Environmental precautions:

ND

(c) Methods and material for containment and cleaning up:

Sweep up and shovel. Keep in suitable, close containers for disposal.

SECTION 7: Handling and storage**(a) Precautions for safe handling:**

Provide appropriate exhaust ventilation at places where dust is formed.

(b) Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Incompatibilities include: Strong acids, strong bases, chlorine trifluoride, ethylene oxide, halogenated hydrocarbon, oxygen difluoride, sodium nitrate, vinyl compounds.

SECTION 8: Exposure controls/Personal protection**(a) Control parameters:**

Chemical	ACGIH		PEL TWA	OSHA PEL CEILING
	TLV	TLV-STEL		
Aluminum Oxide	10 mg/m ³	NE	10 mg/m ³	NE

(b) Appropriate Engineering Controls:

General industrial hygiene practice.

(c) Individual protection measures:

RESPIRATORY: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

EYE PROTECTION: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

PROTECTIVE GLOVES: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

OTHER PROTECTIVE EQUIPMENT: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

SECTION 9: Physical and chemical properties

(a) Appearance:	Powder.
(b) Odor:	NA
(c) Odor threshold:	NA
(d) pH:	9.4 - 10.1 at 20 °C (68 °F)
(e) Melting point / freezing point:	2,040 °C (3,704 °F)
(f) Initial boiling point and boiling range:	2,980 °C (5,396 °F)
(g) Flash point	NA
(h) Evaporation rate (BuAc=1):	NA
(i) Flammability:	NA
(j) Upper/lower flammability or explosive limits:	NA
(k) Vapor Pressure:	1 hPa (1 mmHg) at 2,158 °C (3,916 °F)
(l) Vapor density:	NA
(m) Relative density:	4.000 g/cm ³
(n) Solubility:	Insoluble.
(o) Partition coefficient: n-octanol/water:	ND
(p) Auto-ignition temperature:	NE
(q) Decomposition temperature:	ND
(r) Viscosity:	NA

SECTION 10: Stability and reactivity

(a) Reactivity:	Not reactive
(b) Chemical stability:	Stable.
(c) Possibility of hazardous reactions:	Hazardous Polymerization will not occur.
(d) Conditions to avoid:	Exposure to moisture.
(f) Hazardous decomposition products:	ND.

SECTION 11: Toxicological information

Acute toxicity	NE
Skin corrosion/irritation	NE
Serious Eye Damage / Irritation	NE
Respiratory or skin sensitization	NE
Germ cell mutagenicity	NE
Carcinogenicity	NE
Reproductive toxicity	NE
STOT-single exposure	NE
STOT-repeated exposure	NE
Aspiration Hazard	NE

- (a) Exposure route:
Inhalation, Ingestion, Skin.
- (b) Symptoms related to the physical, chemical and toxicological characteristics:
Cough, chest pain, difficulty breathing, gastrointestinal disturbance.
- (c) Delayed and immediate effects and also chronic effects from short and long tem exposure:
ND.
- (d) Numerical measures of toxicity:
NE

SECTION 12: Ecological information

- (a) **Ecotoxicity:**
NE
- (b) **Persistence and degradability:**
NE
- (c) **Bioaccumulative potential**
NE
- (d) **Mobility in soil:**
NE
- (e) **Other adverse effects:**
NE

SECTION 13: Disposal considerations

Product:

Recommendation

WASTE DISPOSAL METHOD: Dispose of properly in accordance with Federal, State, and Local regulations.

SECTION 14: Transport information

- (a) **UN Number**
NE
- (b) **UN Proper shipping name**
NE
- (c) **Transport hazard class(es)**
NE
- (d) **Packing Group**
NE
- (e) **Environmental hazards**
NE
- (f) **Transport in bulk**
NE
- (g) **Other Information**
NE

SECTION 15: Regulatory information

SARA Reporting Requirements:

There may be reporting requirements for this product.

SARA Threshold Planning Quantity:

There may be specific Threshold Planning Quantities for the components of this product.

TSCA Inventory Status:

The components of this product are listed on the TSCA Inventory.

Other Federal Requirements:

This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics).

Other Canadian Regulations:

ND.

State Regulatory Information:

This product may contain components that are covered under specific state criteria.

SECTION 16: Other information

PREPARED BY: Kathryn Harris
GAR QMS SDS REFERENCE: A033

HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:

Health	0
Flammability	0
Reactivity	0
Other	NA

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

Health	0
Flammability	0
Reactivity	0
Special Information	NA

REVISION NUMBER: 150403

CHANGES FROM PREVIOUS VERSION:

INITIAL VERSION

ABBREVIATIONS

NA Not Applicable	LD Lethal Dose
ND Not Determined	TC Toxic Concentration
NE Not Established	TD Toxic Dose
ppm parts per million	BOD Biological Oxygen Demand
G Gallon	COD Chemical Oxygen Demand
mg Milligram	Lo Lowest
L Liter	ThOD Theoretical Oxygen Demand
gm Gram	TLm Threshold Limit
mol Mole	IC Inhibitory Concentration
kg Kilogram	DOC Dissolved Organic Carbon
μ Micro	H Hours
mm Millimeter	M Months
p Pico	D Days
Pa Pascals	Y Years
c cent	W Weeks
LC Lethal Concentration	
ACGIH American Conference of Governmental Industrial Hygienist	
CPR Controlled Product's Regulation	
DSL Canadian Domestic Substances List	
NDSL Canadian Non-domestic Substance List	
IARC International Agency for Research for Cancer	
NOEL No Observed Effect Level	
NOAEL No Observed Adverse Effect Level	
OSHA Occupational Safety and Health Administration	
PEL Permissible Exposure Limit	
TLV Threshold Limit Value	

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OF CHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED. THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.