TED PELLA, INC.
Microscopy Products for Science and Industry

Safety Data Sheet

815-10, 815-14, 815-22, 815-30 Aluminum Oxide Grinding Powders: 240 grit, 320 grit, 400 grit, and 600 grit size

Issue Date (08-01-15)

Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: Aluminum Oxide Grinding Powders

Synonym: Al_2O_3

Company Name

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day

CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

2.1 Classification of the substance or mixture: This substance is identified as non-hazardous according to the GHS-Classification system. **The following hazard and hazard labeling information applies to the inhalation of dry dust.**

GHS Pictograms:

Irritant

GHS Categories:

GHS07 – Irritant	Eye Irritant 2B	H320: Causes eye irritation.
	Acute Tox. Inhal. 5	H332: May be harmful if inhaled.

2.2 Label elements

Signal Word: NA

Hazard Statements

H320: Causes eye irritation.

H332: May be harmful if inhaled.

Precautionary Statements

P261:	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P305+P351+P338:	IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313:	If eye irritation persists, get medical advice / attention.
P304+P340+P312:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor / physician if you feel unwell.

2.3 Other Hazards

Health Effects:
NFPA Hazard Rating: Health: 1; Fire: 0; Reactivity: 0
HMIS® Hazard Rating: Health: 1; Fire: 0; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: ND

Emergency overview:
Appearance: White to tan solid, odorless
Immediate effects: Redness, pain, irritation.
Potential health effects
Primary Routes of entry: Eyes, inhalation, skin
Signs and Symptoms of Overexposure:

Eyes: Redness, pain.
Skin: Prolonged contact with large amounts of dust may cause mechanical irritation.
Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Ingestion: Abdominal pain.
Inhalation: May cause irritation to respiratory tract, sneezing, coughing, burning sensation of throat which constricting sensation of the larynx and difficulty in breathing.

Chronic Exposure: Respiratory difficulties/may damage lungs.
Chemical Listed as Carcinogen or Potential Carcinogen: No.
See Toxicological Information (Section 11)
Potential environmental effects
See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) **(Cas. No)**	**%**	**OSHA PEL mg/m3**	**ACGIH TLV mg/m3**	**NTP** Carcinogen	**IARC** Carcinogen	**OSHA regulated** Carcinogen
Aluminum Oxide (1344-28-1)	99.0-100.0%	15	15	No	No	No
Proprietary, non-hazardous ingredients (N/A)	0.0-1.0%	ND	ND	No	No	No

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Section 4: First Aid Measures
If accidental overexposure is suspected

Eye(s) Contact:	Immediately rinse with water while holding eyes open for prolonged period of time. Seek medical attention if material is embedded in eye or if irritation persists. If irritation persists: Get medical advice/attention.
Skin Contact:	Rinse immediately with plenty of water. Gently wash with plenty of soap and water. Obtain medical attention if irritation persists.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
Ingestion:	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Drink large quantities of water with Milk of Magnesia or other medical antacid. Never give anything by mouth to an unconscious person.

Note to physician
Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Will not burn.
Flash Point: NA
Flammable Limits: NA
Auto-ignition point: NA
Fire Extinguishing Media: Use ABC type extinguisher for surrounding fires.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and clothing for chemical fires. Wear normal firefighting equipment.
Unusual Fire and Explosion Hazards: None
Hazardous combustion products: ND
DOT Class: ND

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Keep upwind. Keep out of low lying areas. Ventilate closed spaces before entering.
Environmental Precautions: Prevent further leakage or spillage and comply with local, state and federal regulations.
Methods / Materials for Containment & Clean-up: If product is dry, avoid generation of dust during clean-up of spills. Recover the dried product by vacuuming, shoveling or sweeping. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Liquid product can be wiped or mopped up and disposed of accordingly.
Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be taken in Handling and Storage:

Handling: Do not breathe dust. Avoid generation of dust during clean-up of spills. Recover the product by vacuuming, shoveling or sweeping. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Wear suitable protective clothing, gloves and eye/face protection. If airborne dust is generated, use the appropriate NIOSH-approved respiratory protection.

Safe Storage: Strongly hygroscopic, keep in a dry place. Store in original tightly closed container. Keep away from food, drink and animal feeding stuffs. Use care in handling / storage. Store in accordance with local/regional/national/ international regulation. Keep out of reach of children. Always use oldest stock first.

Storage temperature: ND
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Adequate general and local exhaust ventilation.

Personal Protection Equipment

Respiratory protection: Use an appropriate NIOSH approved respirator if airborne dust concentrations exceed the appropriate PEL or TLV.
Protective gloves: Nitrile/chemical resistant gloves are recommended. Frequent change is advisable.
Skin protection: Appropriate protective work clothing.
Eye protection: Chemical goggles or safety goggles.
Additional clothing and/or equipment: Safety eyewash station present.

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties
Appearance and Physical State: White to tan solid
Odor (threshold): odorless (NA)
Specific Gravity (H_2O=1): NA
Vapor Pressure (mm Hg): 1
Vapor Density (air=1): NA
Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1):
Boiling Point: 2980 ºC
Melting point: 2040 ºC
pH: 9.4-10.1 @ 20 ºC
Solubility in Water: insoluble
Molecular Weight: 101.96 g/mol

Section 10: Stability and Reactivity
Stability: Stable under normal conditions
Conditions to Avoid: Exposure to moisture
Materials to Avoid (Incompatibility): Strong acids, strong bases, oxygen, nitrates, and halogens.
Hazardous Decomposition Products: ND
Hazardous Polymerization: Will not occur

Section 11: Toxicological Information
Results of component acute toxicity test performed—Aluminum Oxide [1344-285-1]:
Oral LD50 (rat): >10,000 mg/kg
Acute toxicity: May cause irritation or burns to eyes, skin and respiratory system.
Skin corrosion/irritant: Irritating to skin
Serious eye damage/irritant: Minimal risk of damage to eyes
Human experience: ND
This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information
Ecological Information: This product is not expected to be toxic to the environment. Adopt environmental controls to prevent the product from being released into the environment.
Chemical Fate Information: Not readily biodegradable. Not expected to bioaccumulate.

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: ND
Moisten product to be swept.
Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information
US DOT Information: Proper shipping name: Not regulated
IATA: Proper shipping name: Not regulated
IMO: Proper shipping name: Not regulated
Marine Pollutant: No
Canadian TDG: Proper shipping name: Not regulated
IMDG Page: ND
Limitations: Not regulated/no reportable quantities.

Section 15: Regulatory Information

United States Federal Regulations
SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.
SARA Title III (Section 313) – contains components subject to annual release reporting requirements; (Section 311/312 Hazards): Acute Health Hazard, Chronic Health Hazard.
RCRA:
TSCA: All components are listed on the TSCA inventory.
CERCLA: None of the components are listed under CERCLA
State Regulations
California Proposition 65: This product contains no chemicals regulated under California Proposition 65.
International Regulations
Canada WHMIS: ND
Europe EINECS Numbers: ND

Section 16: Other Information
Label Information: See section 2
European Risk and Safety Phrases: S36 – Wear suitable protective clothing; S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice; S38 – In case of insufficient ventilation, wear suitable respiratory equipment.
European symbols needed: ND
Canadian WHMIS Symbols: ND
Abbreviations used in this document
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

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