

# Safety Data Sheet

## Vitrified Abrasive Products

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### 1. Product and Company Identification

GHS Product Identifier:

Product Numbers: 522163, 522164, 522165, 522173, 522174, 522175, 522176, 522224, 522225, 522263, 522264, 522265, 522273, 522274, 522275, 522313, 522314, 522315, 522333, 522334, 522335, 522372, 522373, 522374, 522375, 522406, 522407, 522409, 522411, 522412, 522414, 522436, 522437, 522439, 522502, 522506, 522514

Manufacturer/Supplier

Supplier: JET EQUIPMENT & TOOLS  
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### 2. Hazards Identification

#### INHALATION ACUTE EXPOSURE EFFECTS

Dust may be slightly irritating to eyes and respiratory tract at high concentrations.

#### INHALATION CHRONIC EXPOSURE EFFECTS

May affect breathing capacity. For products containing Amorphous Silica, Fused, there is limited evidence in animals that excessive and prolonged exposure to this chemical may cause pulmonary fibrosis.

#### EYE CONTACT ACUTE EXPOSURE EFFECTS

Dust may irritate eyes.

#### SKIN CONTACT ACUTE EXPOSURE EFFECTS

Some may experience skin irritation from dust.

#### INGESTION ACUTE EXPOSURE EFFECTS

No known adverse effects, but ingestion not recommended.

### 3. Composition/Information on Ingredients

SUBSTANCE DESCRIPTION	PERCENT	CAS #
Aluminum Oxide, Non-fibrous	30.000-97.000	1344-28-1
Amorphous Silica, Fused	2.000-35.000	60676-86-0
OTHER Not Applicable		

### 4. First Aid Measures

**Inhalation:** If exposed to dust from grinding: Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if breathing is difficult or irritation persists.

**Skin contact:** Wash dust from skin with soap and water. Launder contaminated clothing before reuse.

**Eye contact:** Do not rub. Flush eyes thoroughly with plenty of water, holding open eyelids. Get medical attention if irritation persists. Obtain immediate medical attention for foreign body in the eye.

**Ingestion:** If grinding dust is swallowed, seek medical attention.

**Most important symptoms/effects, acute and delayed:** Eye and skin contact with grinding dust may cause mechanical irritation. Inhalation of dust may cause dizziness, headache, and other central nervous system effects. Prolonged inhalation of dust or fumes from this product may cause perforation of the nasal septum and lung damage. Exposure to dust generated from processing the base material or coatings may present additional health hazards. This product contains titanium dioxide, which are suspected of causing cancer based on animal studies. Risk of cancer depends on duration and level of exposure.

**Indication of immediate medical attention and special treatment, if necessary:** Immediate medical attention is generally not required.

## 5. Fire Fighting Measures

**Suitable (and unsuitable) extinguishing media:** Use any media that is appropriate for the surrounding materials.

**Specific hazards arising from the chemical:** This product is not combustible; however, consideration must be given to the potential fire or explosion hazards from the base material being processed. Many materials create flammable or explosive dusts or turnings when machined or ground.

**Special protective equipment and precautions for firefighters:** Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

## 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** N/A

**Methods and materials for containment and cleaning up:** N/A

## 7. Handling and Storage

Always HANDLE AND STORE wheels in a CAREFUL manner.

Always VISUALLY INSPECT all wheels before mounting.

Always CHECK MACHINE SPEED against the established maximum safe operating speed MARKED ON THE WHEEL.

Always CHECK MOUNTING FLANGES for equal and correct diameter.

Always USE MOUNTING BLOTTERS.

Always be sure WORK REST is properly adjusted.  
Always USE A SAFETY GUARD covering at least one-half of the grinding wheel.  
Always allow NEWLY MOUNTED WHEELS to run at operating speed, with guard in place, for at least one minute before grinding.  
Always TURN OFF COOLANT before stopping wheel to avoid creating an out-of-balance wheel.

## 8. Exposure Controls/Personal Protection

**Appropriate engineering controls:** Use local exhaust or general ventilation as required to minimize exposure to dust and maintain the concentration of contaminants below the TLVs.

**Individual protection measures, such as personal protective equipment:**

**Respiratory protection:** Use NIOSH approved respirator if exposure limits are exceeded or where dust exposures are excessive. Consider the potential for exposure to components of the coatings or base material being ground in selecting proper respiratory protection. Refer to OSHA's specific standards for lead, cadmium, etc. where appropriate. Selection of respiratory protection depends on the contaminant type, form and concentration. Select and use respirators in accordance with OSHA 1910.134 and good industrial hygiene practice.

**Skin protection:** Cloth or leather gloves recommended.

**Eye protection:** Safety goggles or safety glasses with side shields are recommended where splashing is possible.

**Other:** Protective clothing as needed to prevent contamination of personal clothing.  
Hearing protection may be required.

## 9. Physical and Chemical Properties

<b>Boiling point:</b> Not applicable	<b>Vapor Pressure:</b> (mm Hg) Not applicable
<b>Solubility in Water:</b> Insoluble	<b>Vapor Density:</b> (air=1) Not applicable
<b>Specific Gravity:</b> Not applicable	<b>Evaporation Rate:</b> Not applicable
<b>Melting Point:</b> Not applicable	<b>Flash Point:</b> Non-combustible
<b>Appearance and Odor:</b> Gray: metal, no odor.	

## 10. Chemical stability and Reactivity Information

Avoid acids of all types with a pH < 4.0.

### DECOMPOSITION

In use, dusts and decomposing odors may be generated. In most cases, the material removed from the work piece will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.

For products containing phenol and formaldehyde resin, thermal decomposition may produce trace amounts of phenol and formaldehyde.

For products containing inorganic fluorides, thermal decomposition may produce trace amounts of fluorides.

## **11. Toxicological Information**

### **CARCINOGENICITY**

Silica, Amorphous, Fused - IARC-3, NIOSH-X

LD50/LC50

Values are not appropriate or available.

### **Likely routes of exposure:**

**Inhalation:** May cause respiratory tract irritation with coughing, mucous production and shortness of breath. High concentration is irritating to the respiratory tract and may cause dizziness, headache and anesthetic effects.

**Ingestion:** None expected under normal use conditions. Swallowing large pieces may cause obstruction of the gastrointestinal tract.

**Skin contact:** None expected under normal use conditions. Rubbing product across the skin may cause mechanical irritation or abrasions.

**Eye contact:** Dust particles may cause abrasive injury to the eyes.

**Chronic effects from short- and long-term exposure:** Long-term overexposure to respirable dust may cause lung damage (fibrosis) with symptoms of coughing, shortness of breath and diminished breathing capacity. Risk of cancer depends on the level and duration of exposure. Chronic effects may be aggravated by smoking. Prolonged exposure to elevated noise levels during operations may affect hearing. A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being ground. Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be evaluated.

## **12. Ecological information**

Products have no ecological effects when properly used and stored. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. No data available.

## **13. Disposal Considerations**

Dispose in accordance with all applicable local, state/provincial and federal regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

#### 14. Transport Information

No specific regulations for transportation are required. Make sure to protect products from damage during transportation

#### 15. Regulatory Information

EXPOSURE LIMITS/REGULATORY INFORMATION				
SUBSTANCE DESCRIPTION	UNITS	OSHA	ACGIH	MOL
Aluminum Oxide, Non-fibrous	MG/M3	15.0000	10.0000	10.0000
Amorphous Silica, Fused	MG/M3	0.1000	0.1000	0.

#### 16. Additional Information

##### KEY TO ABBREVIATIONS:

EQ = Equal	LT = Less Than	GT = Greater Than
AP = Approximately	TR = Trace	ND = No Data Available

##### DISCLAIMER

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof: however, the Company makes no warranty with respect to the accuracy of the information or the suitability of the recommendations and assumes no liability to any user thereof.