

**Safety Data Sheet**  
acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 03/30/2015

Reviewed on 03/30/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Aluminum Oxide Resin Bonded Product
- **Article number:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Abrasives
- **Restrictions on use:** No further relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Buffalo Abrasives, Inc.  
960 Erie Avenue  
North Tonawanda, NY 14120  
Phone: 888-311-3856
- **Emergency telephone number:**  
Buffalo Abrasives, Inc.  
(888)-311-3856

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified as hazardous according to the Globally Harmonized System (GHS).
- **Additional information:**  
There are no other hazards not otherwise classified that have been identified.  
0 percent of the mixture consists of ingredient(s) of unknown toxicity.  
Not hazardous as delivered. Long term inhalation of product dusts formed during use is harmful.
- **Label elements**
- **GHS label elements** Not Regulated
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard statements** Not Regulated
- **Precautionary statements** Not Regulated
- **Hazard description:**
- **WHMIS-symbols:** Not hazardous under WHMIS.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH **1** Health = \*1  
FIRE **0** Fire = 0  
REACTIVITY **0** Reactivity = 0

\* - Indicates a long term health hazard from repeated or prolonged exposures.

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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

1344-28-1	aluminium oxide	60-95%
	Cured Resin	5-20%
	Cured Epoxy	5-20%
7789-75-5	calcium fluoride	5-20%
1309-37-1	diiron trioxide / iron (III) oxide	5-20%
12068-85-8	iron disulphide	5-20%
1314-98-3	zinc sulphide	5-15%
8002-74-2	Paraffin waxes and Hydrocarbon waxes	1-10%
14075-53-7	potassium tetrafluoroborate	1-5%
1305-62-0	calcium dihydroxide	1-4%
	 Eye Dam. 1, H318	
	 Skin Irrit. 2, H315; STOT SE 3, H335	

- **Additional information:**

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret. There is no exposure to hazardous ingredients during use.

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:**  
Unlikely route of exposure.  
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Brush off loose particles from skin.  
Wash with soap and water.  
If skin irritation is experienced, consult a doctor.
- **After eye contact:**  
Unlikely route of exposure.  
Protect unharmed eye.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Unlikely route of exposure.  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; immediately call for medical help.

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- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Danger** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
The product is not flammable.  
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** No further relevant information available.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
Avoid formation of dust.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.  
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid breathing dust.  
Any deposit of dust which cannot be avoided must be regularly removed.
- **Information about protection against explosions and fires:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in cool, dry place.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** No special requirements.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

#### Components with limit values that require monitoring at the workplace:

##### 1344-28-1 aluminium oxide

PEL (USA)	Long-term value: 15* <sup>*</sup> ; 15** <sup>**</sup> mg/m <sup>3</sup> *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** <sup>**</sup> mg/m <sup>3</sup> as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)	Long-term value: 1* mg/m <sup>3</sup> as Al; *as respirable fraction
EL (Canada)	Long-term value: 1.0 mg/m <sup>3</sup> respirable, as Al
EV (Canada)	Long-term value: 10 mg/m <sup>3</sup> total dust
LMPE (Mexico)	Long-term value: 1* mg/m <sup>3</sup> A4, *fracción respirable

##### 7789-75-5 calcium fluoride

PEL (USA)	Long-term value: 2.5 mg/m <sup>3</sup> as F
REL (USA)	Long-term value: 2.5 mg/m <sup>3</sup> as F
TLV (USA)	Long-term value: 2.5 mg/m <sup>3</sup> as F, BEI
EL (Canada)	Long-term value: 2.5 mg/m <sup>3</sup> as F
LMPE (Mexico)	Long-term value: 2.5 mg/m <sup>3</sup> A4, IBE; como F

##### 1309-37-1 diiron trioxide / iron (III) oxide

PEL (USA)	Long-term value: 10* 15** 5*** <sup>***</sup> mg/m <sup>3</sup> *Fume; Rouge: **Total dust, ***respirable
REL (USA)	Long-term value: 5 mg/m <sup>3</sup> Dust & fume, as Fe

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TLV (USA)	Long-term value: 5* mg/m <sup>3</sup> *as respirable fraction
EL (Canada)	Short-term value: 10** mg/m <sup>3</sup> Long-term value: 5* 10*** 3**** mg/m <sup>3</sup> *dust & fume**fume; Rouge: ****total dust****resp.
EV (Canada)	Long-term value: 5* 10** mg/m <sup>3</sup> *respirable, including Rouge;**total dust
LMPE (Mexico)	Long-term value: 5* mg/m <sup>3</sup> A4, *fracción respirable

**8002-74-2 Paraffin waxes and Hydrocarbon waxes**

REL (USA)	Long-term value: 2 mg/m <sup>3</sup>
TLV (USA)	Long-term value: 2 mg/m <sup>3</sup>
EL (Canada)	Long-term value: 2 mg/m <sup>3</sup>
EV (Canada)	Long-term value: 2 mg/m <sup>3</sup> fume
LMPE (Mexico)	Long-term value: 2 mg/m <sup>3</sup>

**1305-62-0 calcium dihydroxide**

PEL (USA)	Long-term value: 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL (USA)	Long-term value: 5 mg/m <sup>3</sup>
TLV (USA)	Long-term value: 5 mg/m <sup>3</sup>
EL (Canada)	Long-term value: 5 mg/m <sup>3</sup>
EV (Canada)	Long-term value: 5 mg/m <sup>3</sup>
LMPE (Mexico)	Long-term value: 5 mg/m <sup>3</sup>

**14075-53-7 potassium tetrafluoroborate**

PEL (USA)	Long-term value: 2.5 mg/m <sup>3</sup> as F
REL (USA)	Long-term value: 2.5 mg/m <sup>3</sup> as F
TLV (USA)	Long-term value: 2.5 mg/m <sup>3</sup> as F, BEI
EL (Canada)	Long-term value: 2.5 mg/m <sup>3</sup> as F
LMPE (Mexico)	Long-term value: 2.5 mg/m <sup>3</sup> A4, IBE; como F

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· **Ingredients with biological limit values:**

**7789-75-5 calcium fluoride**

BEI (USA)	2 mg/L Medium: urine Time: prior to shift Parameter: Fluoride (background, nonspecific)
	3 mg/L Medium: urine Time: end of shift Parameter: Fluoride (background, nonspecific)

**14075-53-7 potassium tetrafluoroborate**

BEI (USA)	2 mg/L Medium: urine Time: prior to shift Parameter: Fluoride (background, nonspecific)
	3 mg/L Medium: urine Time: end of shift Parameter: Fluoride (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

· **Engineering controls:** No further relevant information available.

· **Breathing equipment:** Not required under normal conditions of use.

· **Protection of hands:**



Protective gloves

Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.

· **Eye protection:**



Safety glasses

· **Body protection:** Not required under normal conditions of use.

· **Limitation and supervision of exposure into the environment**

No further relevant information available.

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## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Solid material

- **Color:** Light grey

- **Odor:** Odorless

- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:** Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not determined.

- **Auto-ignition temperature:** Not determined.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

- **Lower:** Not determined.

- **Upper:** Not determined.

- **Vapor pressure:** Not applicable.

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**

- **Water:** Insoluble.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

- **Dynamic:** Not applicable.

- **Kinematic:** Not applicable.

- **Other information** No further relevant information available.

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## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with strong acids.  
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Avoid acids.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
Under fire conditions only:  
Carbon monoxide and carbon dioxide  
Aluminium oxide smoke  
Toxic metal oxide smoke

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** No further relevant information available.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Probable Routes of Exposure** Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** None.
- **Repeated Dose Toxicity:**  
Long-term inhalation of silica dusts may cause obstructive pulmonary disease including silicosis.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.

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- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Smaller quantities can be disposed of with household waste.  
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Not Regulated
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Not Regulated
- **Packing group**
- **DOT, ADR, IMDG, IATA** Not Regulated
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

1344-28-1 aluminium oxide

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1314-98-3 zinc sulphide

**· TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**· Proposition 65 (California)**
**· Chemicals known to cause cancer:**

None of the ingredients are listed.

**· Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**· Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**· Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**· Carcinogenic categories**
**· EPA (Environmental Protection Agency)**

1314-98-3 zinc sulphide

D, I, II

14075-53-7 potassium tetrafluoroborate

I (oral)

**· IARC (International Agency for Research on Cancer)**

7789-75-5 calcium fluoride

3

1309-37-1 diiron trioxide / iron (III) oxide

3

14075-53-7 potassium tetrafluoroborate

3

**· TLV (Threshold Limit Value established by ACGIH)**

1344-28-1 aluminium oxide

A4

7789-75-5 calcium fluoride

A4

1309-37-1 diiron trioxide / iron (III) oxide

A4

14075-53-7 potassium tetrafluoroborate

A4

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**· State Right to Know Listings**

None of the ingredients is listed.

**· Canadian substance listings:**
**· Canadian Domestic Substances List (DSL)**

All ingredients are listed.

**· Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

**· Canadian Ingredient Disclosure list (limit 1%)**

1344-28-1 aluminium oxide

1309-37-1 diiron trioxide / iron (III) oxide

1305-62-0 calcium dihydroxide

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**Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 03/30/2015 / -

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

**Sources**

SDS Prepared by:

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