

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA
GHS

Printing date: 28 March 2018

Revision: 28 March 2018

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

- **1.1 Product identifier**
- Trade name: **BROWN ALUMINUM OXIDE GRAINS (#4-240)**
- Other means of identification: No other identifiers

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- Application of the substance / the mixture: Industrial uses.
- Uses advised against: No further relevant information available.

- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
K.C. Abrasive Company
3140 Dodge Road
Kansas City, KS 66115
Phone: (913) 342-2900

- **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified as hazardous according to OSHA GHS regulations within the United States.
The product is not classified as hazardous according to the Globally Harmonized System (GHS).
The product is not classified as hazardous according to the CLP regulation.

- **Additional information:**
Product has less than 0.1% inhalable dust containing known and/or suspect carcinogens per established guidelines, and is therefore not classifiable as a carcinogen.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is not classified as hazardous according to OSHA GHS regulations within the United States.
This product does not have a classification according to the CLP regulation.
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard statements** Not Regulated.
- **Precautionary statements** Not Regulated.
- **Additional information:**
Safety data sheet available on request.

- **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components:

CAS: 1344-28-1 EINECS: 215-691-6 Reg.nr.: 01-2119529248-35-XXXX	aluminium oxide substance with a Community workplace exposure limit	>90%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide ☠ Carc. 2, H351	<5%
CAS: 7631-86-9 EINECS: 231-545-4 Reg.nr.: 01-2119379499-16-XXXX	silicon dioxide substance with a Community workplace exposure limit	<1%
CAS: 1309-37-1 EINECS: 215-168-2 Reg.nr.: 01-2119457614-35-XXXX	Red Iron Oxide substance with a Community workplace exposure limit	<1%

Additional information:

Non-classification as a carcinogen is based on non-inhalable form of product. IARC listings for titanium dioxide note that the substance must be respirable.

For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret.

For the wording of the listed Hazard Statements refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

• **After inhalation:** 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:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Slight irritant effect on eyes.

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

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- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
The product is not flammable.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid formation of dust.
For large spills, wear protective clothing.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Ensure adequate ventilation
- **6.2 Environmental precautions** No special measures required.
- **6.3 Methods and material for containment and cleaning up**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
Storage area should be dry and well-ventilated.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Protect from humidity and water.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

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1344-28-1 aluminium oxide

WEL (Great Britain)	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
PEL (USA)	Long-term value: 15*; 5** mg/m ³ *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)	Long-term value: 1* mg/m ³ as Al; *as respirable fraction

13463-67-7 titanium dioxide

WEL (Great Britain)	Long-term value: 10* 4** mg/m ³ *total inhalable **respirable
PEL (USA)	Long-term value: 15* mg/m ³ *total dust
REL (USA)	See Pocket Guide App. A
TLV (USA)	Long-term value: 10 mg/m ³ withdrawn from NIC

7631-86-9 silicon dioxide

NIOSH REL (USA)	Long-term value: 6 mg/m ³
OSHA PEL (USA)	Long-term value: 80 mg/m ³

1309-37-1 Red Iron Oxide

WEL (Great Britain)	Short-term value: 10* mg/m ³ Long-term value: 5* 10** 4*** mg/m ³ *fume (as Fe), **total respirable, ***respirable
PEL (USA)	Long-term value: 10* 15** 5*** mg/m ³ *Fume; Rouge: **Total dust, ***respirable
REL (USA)	Long-term value: 5 mg/m ³ Dust & fume, as Fe
TLV (USA)	Long-term value: 5* mg/m ³ *as respirable fraction

8.2 Exposure controls

General protective and hygienic measures:

- The usual precautionary measures are to be adhered to when handling chemicals.
- Wash hands before breaks and at the end of work.
- Keep away from foodstuffs, beverages and feed.
- Avoid close or long term contact with the skin.
- Avoid contact with the eyes.

Respiratory protection:

- Not required under normal conditions of use.
- For large spills, respiratory protection may be advisable.
- An EU approved dust respirator should be used for operations generating dust.

Protection of hands:

- No chemical-protective gloves required.
- Wear gloves for the protection against mechanical hazards according to NIOSH or EN 388.

Eye protection:

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Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment:**
No further relevant information available.
- **Risk management measures:** No further relevant information available.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· Appearance

- | | |
|------------------|-------------------------|
| Form: | Granulate - Non-fibrous |
| Colour: | Brown |
| Odour: | Odourless |
| Odour threshold: | Not determined. |

- | | |
|--|----------------------|
| pH-value: | Not applicable. |
| Melting point/freezing point: | 2038 °C (3.700,4 °F) |
| Initial boiling point and boiling range: | Not determined. |

- | | |
|--------------|-----------------|
| Flash point: | Not applicable. |
|--------------|-----------------|

- | | |
|----------------------------|-----------------|
| Flammability (solid, gas): | Not determined. |
|----------------------------|-----------------|

- | | |
|---------------------------------|-----------------|
| Auto/Self-ignition temperature: | Not determined. |
|---------------------------------|-----------------|

- | | |
|----------------------------|-----------------|
| Decomposition temperature: | Not determined. |
|----------------------------|-----------------|

- | | |
|-----------------------|---|
| Explosive properties: | Product does not present an explosion hazard. |
|-----------------------|---|

· Explosion limits

- | | |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

- | | |
|----------------------|----------------|
| Oxidising properties | Non-oxidising. |
|----------------------|----------------|

- | | |
|------------------|-----------------|
| Vapour pressure: | Not applicable. |
|------------------|-----------------|

· Density:

- | | |
|-------------------|-----------------|
| Relative density: | 3,97 |
| 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. |

- | | |
|-----------------------|--|
| 9.2 Other information | No further relevant information available. |
|-----------------------|--|

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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Prevent formation of dust.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products** Toxic metal oxide smoke

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:** None.
- **Primary irritant effect**
- **Skin corrosion/irritation:** Slight irritant effect on skin and mucous membranes.
- **Serious eye damage/irritation:** Slight irritant effect on eyes.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer):**

13463-67-7 titanium dioxide	2B
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- **NTP (National Toxicology Program):**

None of the ingredients are listed.

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

None of the ingredients are listed.

- **Probable routes of exposure:**

Ingestion.
Eye contact.
Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:**
Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is nonclassifiable as a carcinogen.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**

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- **Aquatic toxicity:** Generally not hazardous for water
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Negative ecological effects are, according to the current state of knowledge, not expected.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Contact waste processors for recycling information.
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 packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|--|-----------------|
| · 14.1 UN-Number | |
| · DOT, ADR, IMDG, IATA | Not Regulated |
| · 14.2 UN proper shipping name | |
| · DOT, ADR, IMDG, IATA | Not Regulated |
| · 14.3 Transport hazard class(es) | |
| · DOT, ADR, IMDG, IATA | |
| · Class | Not Regulated |
| · 14.4 Packing group | |
| · DOT, ADR, IMDG, IATA | Not Regulated |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

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SECTION 15: Regulatory information

15.1 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 are listed.

Section 313 (Specific toxic chemical listings):

Aluminum oxide listing is only relevant to fibrous forms and is not applicable to the product as supplied.

1344-28-1 | aluminium oxide

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

Reference to titanium dioxide is based on unbound respirable particles and is not generally applicable to product as supplied.

13463-67-7 | titanium dioxide

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 are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

EPA (Environmental Protection Agency)

None of the ingredients are listed.

IARC (International Agency for Research on Cancer)

13463-67-7 | titanium dioxide

2B

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

13463-67-7 | titanium dioxide

Canadian Domestic Substances List (DSL)

All ingredients are listed.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

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

SECTION 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.

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▫ **Relevant phrases**

H351 Suspected of causing cancer. Route of exposure: Inhalation.

▫ **Abbreviations and acronyms:**

ADR: 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Carc. 2: Carcinogenicity – Category 2

▫ **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor-internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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