

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

Printing date: 25.05.2016

Revision: 25.05.2016

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

- **1.1 Product identifier**
- **Trade name:** BTUS; BTTX; BTUS-ST; BTTX-ST; BTUS-RC; BTTX-RC; BTUS-HT; BTTX-HT; BTUSCAL; BTTX-CAL **Brown Fused Aluminum Oxide**
- **Registration number** 01-2119529248-35-0141
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture:** Industrial uses.
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**

U.S. Electrofused Minerals, Inc. 600 Steel Street Aliquippa, PA 15001 (800) 927-8823 info@usminerals.com	U.S. Electrofused Minerals, Inc Rosenberg 29810 Southwest Freeway Rosenburg, TX 77471 Phone: (281) 239-2799
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- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585

**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 CLP regulation.
- **Additional information:**  
As supplied, the product has less than 0.1% inhalable dust containing known and/or suspected carcinogens per established guidelines and is therefore not classified as a carcinogen.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
This product does not have a classification according to the CLP regulation.  
The product is not classified as hazardous according to OSHA GHS regulations within the United States.
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated
- **Hazard-determining components of labelling:** Not applicable.
- **Hazard statements** Not Regulated
- **Precautionary statements** Not Regulated.
- **NFPA ratings (scale 0 - 4)**



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· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity= 0

- **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.

### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Components:**

CAS: 1344-28-1	aluminium oxide	50-100%
EINECS: 215-691-6	substance with a Communityworkplace exposure limit	
CAS: 13463-67-7	titanium dioxide	2,5-10%
EINECS: 236-675-5	⚠ Carc. 2, H351	

· **Additional information:**

For the wording of the listed Hazard Statements refer to section 16.  
For the listed ingredient(s), the identityand/or exact percentages are being withheld as a trade secret.  
Non-classification as a carcinogen is based on non-inhalable form of product. IARC listings for titanium dioxide note that substance must be respirable.

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **After inhalation:**

Supplyfresh air; consult doctor in case of complaints.  
Provide oxygen treatment if affected person has difficultybreathing.

· **After skin contact:**

Brush off loose particles from skin.  
Clean with water and soap.  
If skin irritation continues, consult a doctor.

· **After eye contact:**

Immediatelyremove contact lenses if possible.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plentyof water.  
Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

Coughing  
Breathing difficulty  
Gastric or intestinal disorders.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **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 respiratoryprotective device.  
Wear fullyprotective suit.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Use respiratoryprotective device against the effects of fumes/dust/aerosol.  
For large spills, wear protective clothing.  
Avoid formation of dust.  
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 recoveryor 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.  
Anyunavoidable deposit of dust must be regularlyremoved.  
Do not dryclean dust covered objects and floors. Wash thoroughlywith plentyof water.  
Use onlyin well ventilated areas.  
Avoid breathing dust.
- **Information about fire - and explosion protection:** No special measures required.

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· **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**
- **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. Store away from oxidising agents.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
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:**

**1344-28-1 aluminium oxide**

PEL (USA)	Long-term value: 15*; 15** mg/m <sup>3</sup> *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** 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

**13463-67-7 titanium dioxide**

PEL (USA)	Long-term value: 15* mg/m <sup>3</sup> *total dust
REL (USA)	See Pocket Guide App. A
TLV (USA)	Long-term value: 10 mg/m <sup>3</sup> withdrawn from NIC
EL (Canada)	Long-term value: 10* 3** mg/m <sup>3</sup> *total dust; **respirable fraction; IARC 2B
EV (Canada)	Long-term value: 10 mg/m <sup>3</sup> total dust

- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.

· **8.2 Exposure controls**

- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.

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Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work. Avoid contact with the eyes.  
Avoid close or long term contact with the skin. Do not inhale dust / smoke / mist.

• **Respiratory protection:**

NIOSH or EU approved dust respirator should be used for operations generating dust. For spills, respiratory protection may be advisable.  
Particulate mask should filter at least 99% of airborne particles.

• **Protection of hands:**

Wear gloves for the protection against mechanical hazards according to NIOSH or EN 388. Gloves are advised for repeated or prolonged contact.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

• **Eye protection:**



Safetyglasses

Follow relevant national guidelines concerning the use of protective eyewear.

• **Body protection:**

Not required under normal conditions of use. Protection may be required for spills.

• **Limitation and supervision of exposure into the environment:** No special requirements.

• **Risk management measures:** No special requirements.

**SECTION 9: Physical and chemical properties**

• **9.1 Information on basic physical and chemical properties**

• **Appearance**

Form: Granulate

Colour: Brown

• **Odour:** Odourless

• **Odour threshold:** Not determined.

• **pH-value:** Slightly alkaline

• **Melting point/Melting range:** 2040 °C (3704 °F)

• **Boiling point/Boiling range:** Not determined.

• **Flash point:** Not applicable.

• **Flammability (solid, gaseous):** Product is not flammable.

• **Auto/Self-ignition temperature:** Not determined.

• **Decomposition temperature:** Not determined.

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

• **Explosion limits**

Lower: Not determined.

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<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density at 20 °C (68 °F):</b>	3,87 g/cm <sup>3</sup> (32,295 lbs/gal)
· <b>Relative density:</b>	Not determined.
· <b>Vapour density:</b>	Not applicable.
· <b>Evaporation rate:</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>9.2 Other information</b>	No further relevant information available.

### 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**  
Reacts with strong acids.  
Reacts with oxidising agents.  
Reacts with strong alkali.
- **10.4 Conditions to avoid** Prevent formation of dust.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products** No dangerous decomposition products known.

### 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:** Based on available data, the classification criteria are not met.
- **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.

· **Repeated dose toxicity:**

Repeated or long-term inhalation of product dusts may cause pulmonary disease.

· **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 non-classifiable 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**

· **Aquatic toxicity:** Generally not hazardous for water

· **12.2 Persistence and degradability**

Inorganic product, is not eliminable from water by means of biological cleaning processes.

· **12.3 Bioaccumulative potential** Does not accumulate in organisms.

· **12.4 Mobility in soil** No further relevant information available.

· **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**

Smaller quantities can be disposed of with household waste. Can be reused after reprocessing.

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.

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### SECTION 14: Transport information

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

### SECTION 15: Regulatory information

<b>· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>· United States (USA)</b>	
<b>· SARA</b>	
<b>· Section 355 (extremely hazardous substances):</b>	
None of the ingredients are listed.	
<b>· Section 313 (Specific toxic chemical listings):</b>	
None of the ingredients are listed.	
<b>· TSCA (Toxic Substances Control Act):</b>	
All ingredients are listed.	
<b>· Proposition 65 (California):</b>	
<b>· Chemicals known to cause cancer:</b>	
Reference to Titanium Dioxide is based on unbound respirable particles and is not generally applicable to product as supplied.	
13463-67-7   titanium dioxide	
<b>· Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients are listed.	
<b>· Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients are listed.	

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

None of the ingredients are listed.

· **Carcinogenic Categories**

· **EPA(Environmental Protection Agency)**

None of the ingredients are listed.

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

References to chemical components listed below are based on unbound respirable particles and are not generally applicable to product as supplied.

13463-67-7 titanium dioxide	2B
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7 titanium dioxide	
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· **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.

· **Relevant phrases**

H351 Suspected of causing cancer.

· **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

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

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: ISBN: 978-0-470-07488-6

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

SafetyData Sheets, Individual Manufacturers

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