Per OSHA HCS (29 CFR 1910.1200)

Section 1: Identification

Product identifier

- Trade name: Brown Fused Aluminum Oxide, Catalog# ATS1027, ATS1076 & ATS1028
- · Article number: No other identifiers
- · CAS Number:

Mixture

- Recommended use and restriction on use
- · Recommended use: Abrasives
- Restrictions on use: Contact manufacturer.
- Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Accurate Thermal Systems 4104 Sylon Blvd Hainesport,NJ 08036

Emergency telephone number:

609-326-3190

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Section 2: Hazard(s) Identification

- · Classification of the substance or mixture:
- GHS08 Health Hazard; Carc 2 H351 Suspected of causing cancer
- · 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
- · Label elements
- · GHS label elements
- · Hazard pictograms



GHS08

· Signal word: Not Regulated

· Hazard-determining components of labeling: Titanium dioxide

Per OSHA HCS (29 CFR 1910.1200)

- **Hazard statements** H351 Suspected of causing cancer; H373: May cause damage to organs through prolonged or repeated exposure.
- · Precautionary statements

P280 Wear protective gloves/clothing/eye protection/face protection

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P308+P313 If exposed or concerned: Get medical advice/attention

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

- · Hazard description: Hazardous under OSHA Hazard Communication
- · WHMIS-symbols: Hazardous under WHMIS



D2A - Very toxic material causing other toxic effects.

- · Classification system
- NFPA ratings (scale 0 4)



Health = *1

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *1

Fire = 0

Reactivity = 0

- * Indicates a long term health hazard from repeated or prolonged exposures
- Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable
- · **vPvB:** Not applicable

Section 3: Composition/information on Ingredients

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- · Chemical characterization: Substances
- · CAS No. Description

1344-28-1 Aluminium oxide

· Dangerous components:

13463-67-7 Titanium dioxide Carc. 2, H351 1-5%

Per OSHA HCS (29 CFR 1910.1200)

Section 4: First-aid Measures

- Description of first aid measures
- General information
- · After inhalation:

Respiration of particulates is unlikely during normal usage. Supply fresh air. After exposure, give oxygen if difficulty breathing. Consult a doctor in case of complaints.

· After skin contact:

Brush off loose particles from

skin. Clean with water and soap.

If skin irritation is experienced; consult a doctor.

· After eye contact:

Rinse eyes with water for several minutes, remove contact lenses (if present) and continue rinsing. Obtain immediate medical attention.

· After swallowing:

Rinse out mouth with water; immediately consult a doctor.

Do not induce vomiting.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed:

Coughing

Shortness of breath

- · Danger: Impaired breathing; suspected of causing cancer
- · Indication of any immediate medical attention and special treatment needed: Treat symptomatically

Section 5: Fire-fighting Measures

- Extinguishing media
- · Suitable extinguishing agents: Use fire-fighting measures suitable for environment
- · For safety reasons unsuitable extinguishing agents: No further relevant information available
- · Special hazards arising from the substance or mixture: No further relevant information available.
- Protective equipment:

Wear self-contained respiratory protective

device. Wear fully protective suit.

· Additional information: No further relevant information available.

Per OSHA HCS (29 CFR 1910.1200)

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Section 6: Accidental Release Measures

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· Personal precautions, protective equipment and emergency procedures

Limit dust formation; use respiratory protective device against the effects of fumes/dust/aerosol. For large spills, wear protective clothing.

Avoid formation of dust. Ensure adequate ventilation.

- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:

Pick up mechanically. Disposal or recovery in suitable lidded receptacles.

Dispose contaminated material as waste according to item 13.

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

· Handling

· Precautions for safe handling:

Avoid contact with skin and eyes. Prevent formation of dust.

Use only in well ventilated areas.

Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.

- Information about protection against explosions and fires: No special measures required
- Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles: No special requirements
- Information about storage in one common storage facility:

Store away from oxidizing agents. Store away from food chemicals.

· Further information about storage conditions:

Store in cool, dry conditions in well-sealed receptacles. Store receptacle in a well ventilated area.

Protect from humidity and water. This product is hygroscopic.

· Specific end use(s): No further relevant information available

Per OSHA HCS (29 CFR 1910.1200)

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Section 8: Exposure Controls/Personal Protection

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- · 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 Aluminum oxide

PEL (USA)	Long-term value: 15*; 15** mg/m³ *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)	Long-term value: 1* mg/m³ as Al; *as respirable fraction
EL (Canada)	Long-term value: 1.0 mg/m³ respirable, as Al
EV (Canada)	Long-term value: 10 mg/m³ total dust
LMPE (Mexico)	Long-term value: 1* mg/m³ A4, *fracciòn respirable

13463-67-7 Titanium dioxide

PEL (USA)	Long-term value: 15* mg/m³ *total dust
REL (USA)	See Pocket Guide App. A
TLV (USA)	Long-term value: 10 mg/m³ withdrawn from NIC
EL (Canada)	Long-term value: 10* 3** mg/m³ *total dust;**respirable fraction; IARC 2B
EV (Canada)	Long-term value: 10 mg/m ³ total dust
LMPE (Mexico)	Long-term value: 10 mg/m³ A4

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

[·] Exposure controls

Per OSHA HCS (29 CFR 1910.1200)

· Personal protective equipment:



· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed. Keep away from food, beverages and feed. Wash hands before beaks and at the end of work. Avoid contact with the eyes. Avoid contact with the skin and eyes. Do not inhale dust / smoke / mist.

· Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection is advisable.

· Protection of hands:

Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules. Gloves are advised for repeated or prolonged contact.

- Eye protection: Wear 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: Maintain employee exposure below applicable permissible exposure limits.
- · Risk management measures: No special requirements
- Other: Contaminated saturated clothing should be removed immediately and thoroughly cleaned.

Section 9: Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Granulate

Color: Light / Dark Brown

Odorless Odorless

Odor threshold:pH-value:Not determinedSlightly alkaline

· Change in condition

Melting point/Melting range: 2050 °C (3722 °F)
Boiling point/Boiling range: ndetermined.

Flash point: Not applicable

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

Auto-ignition temperature:
 Decomposition temperature:
 Not determined

Per OSHA HCS (29 CFR 1910.1200)

· Auto igniting: Not determined

Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined Not determined Not applicable

Density at 20 °C (68 °F): 3.95 g/cm³ (32.963 lbs/gal)

Relative density:
 Vapour density:
 Evaporation rate:
 Not determined
 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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Section 10: Stability and Reactivity

- Reactivity
- · Chemical stability: Stable under normal conditions
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions:

Reacts with strong acids. Reacts with oxidizing agents. Reacts with strong alkali.

- · Conditions to avoid: No further relevant information available
- · Incompatible materials: No further relevant information available
- · Hazardous decomposition products: Toxic metal oxide smoke

Section 11: Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification: None
- · Primary irritant effect

Skin: Prolonged contact may cause irritation

Eye: Slight irritant effect on eyes

Per OSHA HCS (29 CFR 1910.1200)

Inhalation: Dust may cause coughing, breathlessness and tightness of chest

Sensitization: No sensitizing effects known

- · Additional toxicological information
- Carcinogenic categories:

NTP (National Toxicology Program): Substance not listed

OSHA - CA (Occupational Safety & Health Administration): Substance not listed

Probable Routes of Exposure:

Ingestion, Inhalation. Eye contact, Skin contact

- · Acute effects (acute toxicity, irritation and corrosivity): From product as supplied: None.
- · Repeated Dose Toxicity:

Suspected of causing cancer

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

May cause damage to organs through prolonged or repeated exposure

Section 12: Ecological Information

- Toxicity
- · Aquatic toxicity: Generally not hazardous for water
- Persistence and degradability:

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

- · Behavior in environmental systems
- · Bioaccumulative potential: Does not accumulate in organisms
- · Mobility in soil: No further relevant information available.
- Other adverse effects: No further relevant information available.

Section 13: Disposal Considerations

· Waste treatment methods

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. Residual materials should be treated as hazardous.

· Recommendation:

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

· Recommendation: Disposal must be made according to official regulations.

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Per OSHA HCS (29 CFR 1910.1200)

Section 14: Transport Information

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· UN-Number

· DOT, ADR, ADN, IMDG, IATA: Not Regulated

· UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA: Not Regulated

· Transport hazard class(s)

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

 \cdot Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable

UN "Model Regulation"

Section 15: Regulatory Information

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

Section 355 (extremely hazardous substances): substance not listed Section 313 (specific toxic chemical listings): substance is listed

TSCA (Toxic Substances Control Act): substance is listed

Proposition 65 (California):

Chemicals known to cause cancer:

Present in trace quantities: 13463-67-7 Titanium dioxide

Chemicals known to cause reproductive toxicity for females: substance not listed Chemicals known to cause reproductive toxicity for males: substance not listed

Chemicals known to cause developmental toxicity: substance not listed

· Carcinogenic categories

EPA (Environmental Protection Agency): substance not listed

IARC (International Agency for Research on Cancer): 13463-67-7 Titanium dioxide

TLV (Threshold Limit Value established by ACGIH):

1344-28-1 Aluminum oxide 13463-67-7 Titanium dioxide

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

13463-67-7 Titanium dioxide

State Right to Know Listings: substance not listed

· Canadian substance listings:

Per OSHA HCS (29 CFR 1910.1200)

Canadian Domestic Substances List (DSL): substance is listed
Canadian Ingredient Disclosure list (limit 0.1%): substance is not listed
Canadian Ingredient Disclosure list (limit 1%): 1344-28-1 Aluminum oxide

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 Product Regulations.

· 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.

· Date of preparation / last revision: 6/1/2020

· 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

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