



Safety Data Sheet

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

Revision Date: 06.01.2015

Section 1 – Identification

1.1 Product Identifier:

Trade Name: Rblast Brown Fused Aluminum Oxide

1.2 Relevant Identified Uses of The Substance or Mixture and Uses Advised Against

Identified Use(s) Consult the Supplier

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer/Supplier

GMA Industries, Inc

38127 Ecorse Rd

Romulus, MI 48174

Phone: (734) 595-7300

1.4 Emergency Telephone Number:

ChemTel INC (800) 255-3924

Section 2 – Hazards Identification

2.1 Classification on the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H351



Health Hazard

Carc. 2 H351 Suspected of causing cancer

Classification according to Directive 67/548/EEC or Directive 199/45/EC Not applicable

Information concerning particular hazards for human and environment:

The product doesn't have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification System:

The classification is according to the latest editions of the EU-list, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances list, and is supplemented by information from technical literature and by information provided by the company

2.2 Label Elements

Labeling According to Regulation (EC) No 1272/2008 (CLP)

The substance is classified and labeled according to the Globally Harmonized System within the United States (GHS)

This product doesn't have a classification according to the CLP regulation

This product is classified and labeled according to the CLP regulation



Hazard

Not applicable within the EU;

Pictograms(S)

applicable only for North America

Signal **WARNING**

Not applicable within the EU;

Word(s)

applicable only for North America

Hazard-determining components of labeling:

Titanium Dioxide

Hazard Statements

The following Hazard Statements are applicable only according to OSHA regulations within the United States. These statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H351. H351 Suspected of causing cancer.

Precautionary Statements

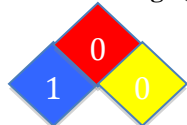
Applicable only within the United States (USA)

- P281 Use personal protective equipment as required
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

WHMIS-symbols: Not Hazardous under WHMIS

NFPA Rating: (scale 0-4)



Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings: (scale 0-4)

HEALTH	1
FIRE	0
REACTIVITY	0

Health = 1
Fire = 0
Reactivity = 0

HMIS Long Term Health Hazard Substances 13463-67-7 Titanium Dioxide

2.3 Other Hazards

Results of PBT and vPvB Assessment

PBT: Not Applicable
vPvB: Not Applicable

Section 3 – Composition/Information on Ingredients

3.2 Mixtures

Descriptions: Mixture of substances listed below with nonhazardous additions

Hazardous Ingredient(s)	% W/W	CAS No.	EC No.	REACH Registration No	Hazard Pictogram(s) and Hazard Statement(s)
Aluminum Oxide	>90	1344-38-1	215-691-6	NA	NONE Substance with a Community workplace exposure limit
Silicon Fused	<5	7631-86-9	231-545-4	NA	NONE Substance with a Community workplace exposure limit
Titanium Dioxide	<5	13463-67-7	236-675-5	NA	NONE Substance with a Community workplace exposure limit
Iron Oxide	<5	1309-37-1	215-168-2	NA	NONE Substance with a Community workplace exposure limit

Dangerous Components (Alternative Classifications):

Hazardous Ingredient(s)	% W/W	CAS No.	EC No.	REACH Registration No	Hazard Pictogram(s) and Hazard Statement(s)
Titanium Dioxide	<5	13463-67-7	236-675-5	NA	 3.6/2 H351

3.3 Additional Information: For the wording of the listed risk phrases refer to section 16

Section 4 – First Aid Measures

4.1 Description of first aid measures

General Information: No Special measures required

After Inhalation:

Supply fresh air; consult doctor in case of complaints
Provide oxygen treatment if affected person has difficulty breathing

After skin contact:

Immediately remove 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 plenty of 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

Hazards Danger of impaired breathing

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: Use fire extinguishing methods suitable for 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: Wear self-contained respiratory protective device; Wear fully protective suit

Additional Information: No Further relevant information available.

Section 6 – Accident Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use respiratory protective device against the effects of fumes/dust/aerosol

For large spills, wear protective clothing

Avoid formation of dust

Ensure adequate ventilation

6.2 Environment 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

Dispose contaminated material as waste according to item 13

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

Any unavoidable deposit of dust must be regularly removed.

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

Use only in well ventilated areas

Avoid breathing dust

Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility:

Store away from foodstuffs. Store away from oxidizing agents

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

This product is hygroscopic.

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

Section 8 – Exposure Controls/Personal Protections

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace:

Additional Information: The lists valid during the making were used as basis.

Aluminum Oxide	1344-28-1	PEL (USA)	Long-term value: 15*, 15** mg/m ³ *Total dust, ** Respirable fraction
		REL (USA)	Long-term value: 10* 5*mg/m ³ As Al* Total Dust **Respirable/pro powd/welding
		TLV (USA)	Long-term value: 1* mg/m ³ As AL; *as respirable fraction
		EL (CANADA)	Long-term value: 10 mg/m ³ respirable, as Al
		EV (CANADA)	Long-term value: 10 mg/m ³ Total dust
Silicon Fused	60678-86-0	PEL (USA)	See Quartz listing
		TLV (USA)	TLV withdrawn
		EV (CANADA)	Long-term value: 10 mg/m ³ respirable
Titanium Dioxide	13463-67-7	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
		EL (CANADA)	Long-term value: 10* 3** mg/m ³ *total dust; **respirable fraction; IARC 2B
		EV (CANADA)	Long-term value: 10 mg/m ³ Total dust
Iron Oxide	1309-37-1	PEL (USA)	Long-term value: 10* 15** 5*** mg/m ³ * Fume; Rouge: ** Total Dust, ***respirable
		REL (USA)	Long-term value: 5mg/m ³ Dust & fume, as Fe
		TLV (USA)	Long-term value: 5* mg/m ³ *as respirable fraction
		EL (CANADA)	Short-term value: 10** mg/m ³ Long-term value: 5* 10*** 3**** mg/m ³ *dust & fume **fume; Rouge: ***total dust ****resp.
		EV (CANADA)	Long-term value: 5* 10** mg/m ³ *respirable, including Rouge; **total dust

8.2 Exposure Controls

Personal Protective Equipment

General Protective and Hygienic Measures:

The usual precautionary measures are to be adhered to when handling chemicals.

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:

Suitable respiratory protective device recommended.

Use suitable respiratory protective device in case of insufficient ventilation.

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.

Material of Gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Eye Protection:



Safety Glasses

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:	Solid Granular Product	Color:	Brown
Odor:	Odorless	Odor Threshold:	Not Determined
Melting Point (°C)/		Boiling Point/	
Freezing Point (°C):	Not Available	Boiling Range (°C):	Not Available
Flash Point (°C):	No Data	Explosive Limit Ranges:	Not Available
Auto Ignition Temp (°C):	Not Available	Decomposition Temp (°C):	Not Determine
Explosive Properties:	None	Oxidizing Properties:	Not Available
Flammability (Solid, Gas):	Not Available	Ph(value):	Not Available
Evaporation Rate:	N/A	Vapor Pressure (mm Hg):	Not Available
Vapor Density (Air=1):	N/A	Density (g/ml):	Not Available
Solubility (Water):	Insoluble	Solubility (Other):	Not Available
Partition Coefficient (N-Octanol/water):	Not available	Viscosity (mPa.s)	Not Available

9.2 Other Information: No further relevant information available.

Section 10 – Stability and Reactivity

10.1 Reactivity

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 oxidizing agents.
Reacts with strong alkali.

10.4 Conditions to avoid: No further relevant information available.

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:

Primary irritant Effect:

On the Skin: No irritant effect.

On the Eye: Slight irritant effect on eyes.

Sensitisation: No sensitising effects known.

Repeated Dose Toxicity: May cause damage to organs through prolonged or repeated exposure.

CMR Effects (carcinogenicity, mutagenicity and toxicity for reproduction): Based on IARC classifications and not the CLP classification. Carc. 2

Section 12 – Ecological Information

12.1 Toxicity

Aquatic Toxicity: General 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. Residual materials should be treated as hazardous.

Uncleaned Packaging:

Recommendation: Disposal must be made according to official regulations

Section 14 – Transportation Information

14.1 UN-Number

DOT,ADR,ADN,IMDG,IATA

Not Regulated

14.2 UN Proper Shipping Name

DOT,ADR,ADN,IMDG,IATA

Not Regulated

14.3 Transport hazard class(es)

DOT,ADR,ADN,IMDG,IATA

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 Bilk According to Annex II of MARPOL73/78 and the IBC Code:

Not Applicable

UN “Model Regulation”

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 listing): None of the ingredients are listed,

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer: 13463-67-7 Titanium Dioxide

Chemicals known to cause reproduction toxicity for females: None of the ingredients are listed

Chemicals known to cause reproduction toxicity for males: None of the ingredients are listed

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): 13463-67-7 Titanium Dioxide

2B

TLV (Threshold Limit Value established by ACGIH): 1344-28-1 Aluminum Oxide 13463-67-7 Titanium Dioxide

A4

NIOSH-CA (National Institute of Occupational Safety and Health): 13463-67-7 Titanium Dioxide

Canada

Canadian Domestic Substances List (DSL): All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%):

1344-28-1 Aluminum Oxide

7631-86-9 Silicon dioxide, chemically prepared

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.

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.

Additional Information:

- The accumulation of airborne dust particles may lead to health and safety risks in some cases. The uses of good industrial practices with mitigate this risk.
- The health risks from inhalation of dust particles vary; this is due to particle concentration, exposure length, number of exposures and type of particles inhaled. Please read Section 2,4,6,7 and 8 of the SDS to understand these potential risks. Wear personal protective equipment and follow storage and handling procedures to maintain a safe workplace.
- In rare instances, combustible dusts may represent a potential explosion hazard when airborne. This hazard is often associated with organic dust such as foodstuffs and coal, but may also occur with mineral products.

Relevant Phrases

H351 Suspected of causing cancer.

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

GHS: Globally Harmonized System of Classification and Labeling 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 Abstract Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Material Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Sources:

ChemTel Inc,

1305 North Florida Avenue