



Talon Composites

MSDS

ALUMINUM - BORON CARBIDE METAL MATRIX COMPOSITE (NON-HAZARDOUS)

MATERIAL SAFETY DATA SHEET

Trade name and chemical: TALBOR ALUMINUM - Boron Carbide, B4C

Formula: AL+ 29.2 W%B4C Non-Hazardous

| Ingredient | CAS # | Percent |
|-------------------|--------------|----------------|
| Aluminum | 7429-90-5 | 90-70 |
| Boron Carbide | 12069-32-8 | 10-30 |

Physical Data

| | |
|---|-----------------------------------|
| Boiling Point: | ca. 2450 C |
| Vapor Pressure: | N/D |
| Vapor Density: | N/D |
| Evaporation Rate: | N/D |
| Solubility in Water: | nil |
| Specific Gravity: | ca. 2.65 g/cc |
| Percent Volatile: | N/D |
| Volatile Organics: | N/D |
| VOC less H2O and exempt solvent: | N/D |
| pH: | N/D |
| Viscosity: | N/D |
| Melting Point: | ca. 660 C |
| Appearance and Odor: | Solid, odorless, silver/gray wire |

Fire and Explosion Hazard Data

| | |
|----------------------------------|-----|
| Flash Point: | N/D |
| Flammable Limits - LEL: | N/D |
| Flammable Limits - UEL: | N/D |
| Autoignition Temperature: | N/D |

Extinguishing Media: Non-combustible. Choose material suitable for surrounding fire.

Special Fire-Fighting Procedures: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

Unusual Fire and No unusual fire or explosion hazards are anticipated.

Explosion Hazards:**NFPA-Hazard-Codes:**

Health 0 Fire 0 Reactivity 0
Unusual Reaction Hazard 0

Reactivity Data**Stability:**

Stable

Incompatibility-**Materials to Avoid:**

Strong acids, strong bases, strong oxidizing agents

Hazardous**Polymerization:**

Will not occur

Hazardous**Decomposition Products:**

None known.

Environmental Information**Spill Response:**

Not Applicable

Recommended Disposal:

Reclaim if feasible. Product may be recycled. Disposal alternative: dispose of waste product in a sanitary landfill.

Environmental Data:

Not determined.

Regulatory Information:

Since regulations vary, consult applicable regulations or authorities before disposal. US EPA Hazardous Waste Number = None (not US EPA Hazardous)

EPCRA Hazard Class:

Fire Hazard: No Pressure: No Reactivity: No Acute: No Chronic: No

Suggested First Aid**Eye Contact:**

Not applicable

Skin Contact:

No need for first aid is anticipated in the event of skin contact.

Inhalation:

No need for first aid is anticipated.

If swallowed:

No need for first aid is anticipated.

Precautionary Information**Eye Protection:**

Wear vented goggles

Skin Protection:

Avoid skin contact with hot material

Ventilation Protection:

Not applicable.

Respiratory Protection:

Avoid breathing of dust created by cutting, sanding or grinding.

Prevention of Accidental Ingestion:

Wash hands after handling and before eating.

Recommended Storage:

Store away from acids.

Fire and Explosion**Avoidance:**

Not applicable.

Other Precautionary Information:

Caution: Composites are brittle and may snap abruptly if bent releasing smaller fragments. Wear eye protection when

handling. Watch for sharp edges.

Exposure Limit

| Ingredient | Value | Type | Auth |
|----------------------|------------------------------|-------------|-------------|
| Aluminum | 10 mg/m ³ | TWA | ACGIH |
| Aluminum | 15 mg/m ³ as Al | TWA | OSHA |
| Boron Carbide | 10 mg/m ³ as dust | TWA | OSHA |
| Boron Carbide | 10 mg/m ³ as B | TWA | ACGIH |

Source of Exposure Limit Data:

- ACGIH: American Conference of Governmental Industrial Hygienists
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level
- OSHA: Occupational Safety and Health Administration

Exposure Limit

Eye Contact: Eye contact is not expected to occur during normal use of the product

Skin contact: No adverse health effects are expected from skin contact.

Inhalation: No adverse health effects are expected from inhalation exposure.

If Swallowed: Ingestion is not a likely route of exposure to this product.

N/D - Not Determined N/A-Not Applicable