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

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

· 1.1 Product identifier
· Trade name: Electrobor Boron Carbide Grain
· 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:
   Electro Abrasives LLC
   701 Willet Road
   Buffalo, NY 14218
   Phone: (716) 822-2500
· 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 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: H360.
   health hazard
   Repr. 1B  H360  May damage fertility or the unborn child.
· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
   Information concerning particular hazards for human and environment:
   The product does not have to be labelled 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-lists, and extended by company and literature data.
   The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.
· 2.2 Label elements
· Labelling according to Regulation (EC) No 1272/2008
   The substance is classified and labelled according to the Globally Harmonized System within the United States (GHS).
   This product does not have a classification according to the CLP regulation.
   The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Trade name: Electrobor Boron Carbide Grain

- **Hazard pictograms**
  Not applicable within the EU; applicable only for North America.

- **Signal word**
  DANGER
  Not applicable within the EU; applicable only for North America.
  Danger

- **Hazard-determining components of labelling:**
  diboron trioxide

- **Hazard statements**
  Not applicable within the EU; applicable only for North America.
  H360 May damage fertility or the unborn child.

- **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.

- **Additional information:**
  Restricted to professional users.

- **Hazard description:**
  - **WHMIS-symbols:** D2A - Very toxic material causing other toxic effects
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - HEALTH Health = *0
  - FIRE Fire = 0
  - REACTIVITY Reactivity = 0

<table>
<thead>
<tr>
<th>HMIS Long Term Health Hazard Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1303-86-2 diboron trioxide</td>
</tr>
</tbody>
</table>

- **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
OSHA GHS

Trade name: Electrobor Boron Carbide Grain

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
  Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 1303-86-2</td>
<td>diboron trioxide</td>
</tr>
<tr>
<td>EINECS: 215-125-8</td>
<td>T Repr. Cat. 2 R60-61</td>
</tr>
<tr>
<td>Index number: 005-008-00-8</td>
<td>Repr. &quot;1B, H360FD&quot;</td>
</tr>
<tr>
<td>CAS: 7439-89-6</td>
<td>iron substance with a Community workplace exposure limit</td>
</tr>
<tr>
<td>EINECS: 231-096-4</td>
<td></td>
</tr>
</tbody>
</table>

- SVHC
  1303-86-2 diboron trioxide

- 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:
    Brush off loose particles from skin.
    Clean with water and soap.
    If skin irritation is experienced, consult a doctor.
  - After eye 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
  Gastric or intestinal disorders.
  - Hazards: Danger of impaired breathing.

- 4.3 Indication of any immediate medical attention and special treatment needed
  Contains boron compounds.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents: 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.

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

Printing date 15.10.2014  Revision: 06.10.2014  

Trade name: Electrobor Boron Carbide Grain  

· 5.3 Advice for firefighters  
  · Protective equipment:  
    Wear self-contained respiratory protective device.  
    Wear fully protective suit.  
  · Additional information No further relevant information available.  

SECTION 6: Accidental release measures  

· 6.1 Personal precautions, protective equipment and emergency procedures  
  Use respiratory protective device against the effects of fumes/dust/aerosol.  
  Avoid formation of dust.  
  Ensure adequate ventilation  
  For large spills, wear protective clothing.  
· 6.2 Environmental precautions: Prevent seepage into sewage system, workpits and cellars.  
· 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.  
  Do not flush with water or aqueous cleansing agents  
· 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.  
  Use only in well ventilated areas.  
  Avoid breathing dust.  
  Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.  
· 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 oxidising agents.  
    Store away from foodstuffs.  
    Do not store together with acids.  
· 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.  

(Contd. of page 3)  
(Contd. on page 5)
Trade name: Electrobor Boron Carbide Grain

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

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1303-86-2 diboron trioxide</td>
</tr>
<tr>
<td>PEL (USA)</td>
</tr>
<tr>
<td>REL (USA)</td>
</tr>
<tr>
<td>TLV (USA)</td>
</tr>
<tr>
<td>EL (Canada)</td>
</tr>
<tr>
<td>EV (Canada)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7439-89-6 iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV (Canada)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

· DNELs No further relevant information available.
· PNECs No further relevant information available.
· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:
  Avoid close or long term contact with the skin.
  The usual precautionary measures are to be adhered to when handling chemicals.
  Keep away from foodstuffs, beverages and feed.
  Pregnant women should strictly avoid inhalation or skin contact.
  Avoid contact with the eyes.
  Do not inhale dust / smoke / mist.
  Wash hands before breaks and at the end of work.
· Respiratory protection:
  Suitable respiratory protective device recommended.
  Use suitable respiratory protective device in case of insufficient ventilation.
  For spills, respiratory protection may be advisable.
· 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.
· Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Safety Data Sheet
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Trade name: Electrobor Boron Carbide Grain

- 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
- General Information
- Appearance:
  Form: Granulate
  Colour: Black
- Odour: Odourless
- Odour threshold: Not determined.
- pH-value: Neutral
- Change in condition
  Melting point/Melting range: 4262 °F / 2350 °C
  Boiling point/Boiling range: Undetermined.
- Flash point: Not applicable.
- Flammability (solid, gaseous): Product is not flammable.
- Auto/Self-ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Self-igniting: Not determined.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  Lower: Not determined.
  Upper: Not determined.
- Vapour pressure: Not applicable.
- Density at 20 °C: 2.52 g/cm³
- Relative density Not determined.
- Vapour density Not applicable.
- Evaporation rate Not applicable.
- Solubility in / Miscibility with water: Insoluble.

(Contd. of page 5)
(Contd. on page 7)
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 oxidising 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: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  Acute toxicity:
  Primary irritant effect:
  on the skin: No irritant effect.
  on the eye: No irritating effect.
  Sensitisation: No sensitising effects known.
  Additional toxicological information:
  Product is suspected to cause damage to fertility.
  Product is suspected to cause birth defects.
  The substance is not subject to classification according to the latest version of the EU lists.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
  Classification for the United States only.
  Repr. 1B

SECTION 12: Ecological information

- 12.1 Toxicity
  Aquatic toxicity: No further relevant information available.
- 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.

(Contd. on page 8)
Trade name: Electrobor Boron Carbide Grain

- Additional ecological information:
- General notes:
  Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
  Danger to drinking water if even small quantities leak into the ground.
  Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term
damage of the environment can not be excluded.
  **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: Transport 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
  - 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 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 listings):**
        - None of the ingredients are listed.
      - **TSCA (Toxic Substances Control Act):**
        - All ingredients are listed.
      - **Proposition 65 (California):**
        - **Chemicals known to cause cancer:**
          - None of the ingredients is listed.
        - **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.
      - **Carcinogenic Categories**
      - **EPA (Environmental Protection Agency)**
        - 1303-86-2 | diboron trioxide | I (oral)  
      - **IARC (International Agency for Research on Cancer)**
        - None of the ingredients are listed.
      - **TLV (Threshold Limit Value established by ACGIH)**
        - None of the ingredients are listed.
      - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
        - None of the ingredients are listed.
  - **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%)**
      - 1303-86-2 | diboron trioxide
  - **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.

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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
H360FD May damage fertility. May damage the unborn child.
R60 May impair fertility.
R61 May cause harm to the unborn child.

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 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)
Repr. 1B: Reproductive toxicity, Hazard Category 1B
Repr. 1A: Reproductive toxicity, Hazard Category 1A

Sources
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