



# Material Safety Data Sheet

Bruce Power L.P. Catalogue No:

|              |
|--------------|
| 0000529950 4 |
| 0000533438 4 |
| 0000534158 4 |

| WHMIS (Pictogram) | WHMIS (Classification)  | Protective Equipment |
|-------------------|---|----------------------|
|                   | <b>D-2A:</b> Material causing Other toxic effects (Very Toxic). |                      |

## SECTION I: Product and Company Identification

|  |  |
|--|--|
| <b>Common Name:</b> Antimonial Lead, Machine Lead  | <b>In Case Of Emergency</b>                                      |
| <b>Trade Name:</b> Hard Lead   | Canutec (CAN): (613) 996-6666                                    |
| <b>Chemical Family:</b> Non Ferrous Metals   | Infotrac (USA): (800) 535-5053                                   |
| <b>Material Use:</b> Industrial Applications   | International: (352) 323-3500                                    |
| <b>Supplier Name:</b> Alchemy Extrusions<br>23 Chapple Street<br>Hamilton, ON<br>Canada, L8L 8K7 | <b>Date Prepared:</b> February 2001<br><b>Reviewed:</b> May 2012 |

## SECTION II: Composition and Information on Ingredients

| Name          | CAS #     | % by Weight | Exposure Limit         | LD50 oral, rat   |
|---------------|-----------|-------------|------------------------|------------------|
| Lead (Pb)     | 7439-92-1 | 93 - 97     | 0.05 mg/m <sup>3</sup> | 790 mg/kg        |
| Antimony (Sb) | 7440-36-0 | 3.00 – 7.00 | 0.50 mg/m <sup>3</sup> | 15 mg/kg (man)   |
| Arsenic (As)  | 7440-38-2 | 0.10 – 1.00 | 0.01 mg/m <sup>3</sup> | 763 mg/kg        |
| Tin (Sn)      | 7440-31-5 | 0.00 – 0.50 | 2.00 mg/m <sup>3</sup> | 72 mg/kg (mouse) |

## SECTION III: Physical Information

|                                |                 |                                   |               |
|--------------------------------|-----------------|-----------------------------------|---------------|
| <b>Boiling Point (°C)</b>      | Pb1740, Sb 1320 | <b>Specific Gravity</b>           | 10.3 –11.3    |
| <b>Vapour Pressure (mm Hg)</b> | 1mm @975 °C     | <b>% Volatile (By Volume)</b>     | Not Pertinent |
| <b>Vapour Density (Air=1)</b>  | Not Pertinent   | <b>Evaporation Rate (Ether=1)</b> | Not Pertinent |
| <b>Solubility In Water</b>     | Nil             | <b>pH</b>                         | Not Pertinent |
| <b>Appearance</b>              | Metallic Grey   | <b>Melting Point (°C)</b>         | 252 - 327     |
| <b>Odour</b>                   | None            | <b>Form</b>                       | Bar, Ingot    |

## SECTION IV: Transport Information

|                      |               |                       |               |
|----------------------|---------------|-----------------------|---------------|
| <b>Shipping Name</b> | Not Regulated | <b>Class/Division</b> | Not Pertinent |
| <b>UN Number</b>     | Not Pertinent | <b>Packing Group</b>  | Not Pertinent |

| <b>SECTION V: Fire and Explosion Hazards</b> |  |
|--|--|
| <b>Flash Point (°C) and Method</b>           | Not Pertinent  |
| <b>Flammable Limits in Air (Vol %)</b>       | <b>Upper:</b> Not Pertinent<br><b>Lower:</b> Not Pertinent |
| <b>Means of Extinction</b>                   | Class D – Dry Chemical or Sand                             |

| <b>SECTION VI: Health Hazard and First Aid Data</b> |  |
|---|--|
|---|--|

|                                    |  |  |     |                             |     |
|------------------------------------|--|--|-----|-----------------------------|-----|
| <b>Ingestion</b>                   | <b>Effects:</b>  | May cause headache, nausea, abdominal pains, fatigue, muscle/joint pain, kidney disjunction, wrist-drop. |     |                             |     |
|                                    | <b>First Aid:</b>  | Give water or milk. If conscious, induce vomiting. Seek medical assistance for possible blood poisoning. |     |                             |     |
| <b>Eye Contact</b>                 | <b>Effects:</b>  | Molten metal may splash.   |     |                             |     |
|                                    | <b>First Aid:</b>  | Flush with large amounts of water.   |     |                             |     |
| <b>Skin Contact</b>                | <b>Effects:</b>  | May cause local irritation.  |     |                             |     |
|                                    | <b>First Aid:</b>  | Wash skin with soap and water. Remove clothing and launder.  |     |                             |     |
| <b>Skin Absorption</b>             | Not Pertinent  |  |     |                             |     |
| <b>Inhalation</b>                  | See "Ingestion", CNS damage (results in fatigue, tremours, hallucinations, convulsions, delirium), weight loss, sleep disturbance. |  |     |                             |     |
| <b>Effects of Acute Exposure</b>   | See "Ingestion Effect" and "Inhalation Effects".   |  |     |                             |     |
| <b>Effects of Chronic Exposure</b> | Possible anemia, central nervous systems and kidney damage.  |  |     |                             |     |
| <b>Carcinogenicity</b>             | IARC (Yes)   |  |     |                             |     |
| <b>Mutagenicity</b>                | No   | <b>Teratogenicity</b>  | Yes | <b>Reproductive Effects</b> | Yes |

| <b>SECTION VII: Reactivity Data</b> |  |  |  |  |
|-------------------------------------|--|--|--|--|
|-------------------------------------|--|--|--|--|

|   |  |                            |                       |               |                  |     |
|---|--|----------------------------|-----------------------|---------------|------------------|-----|
| <b>Stability</b>                        | Stable - Yes   | <b>Conditions to Avoid</b> |                       | Not Pertinent |                  |     |
| <b>Incompatible Materials</b>           | <b>Water</b>   | No                         | <b>Acid</b>           | No            | <b>Oxidizers</b> | Yes |
|   | <b>Corrosive</b>   | No                         | <b>Alkali</b>         | No            | <b>Reducers</b>  | No  |
|   | <b>Other</b>   | No                         |                       |               |                  |     |
| <b>Hazardous Decomposition Products</b> | Toxic lead fumes will form at high temperatures. Contact with sodium azide generates lead azide – a detonating compound. |                            |                       |               |                  |     |
| <b>Hazardous Polymerization</b>         | <b>May Occur</b>   | No                         | <b>Will Not Occur</b> | X             |                  |     |
|   | <b>Conditions to Avoid</b>   | Not Pertinent              |                       |               |                  |     |

| <b>SECTION VIII: Preventative Measures</b>  |  |
|---|--|
| <b>Steps to be taken in case Material is Released or Spilled:</b> If spill of dust, use cleanup methods which avoid dust generation. Use water and wet sweep or vacuum. |  |
| <b>Waste Disposal Method:</b> Dispose of in accordance with appropriate federal and local regulations.  |  |
| <b>Respiratory Protection:</b> When engineering controls are not feasible to control overexposure, use appropriate <b>NIOSH</b> approved respirators.                   |  |
| <b>Engineering Controls</b>   | <b>Local Exhaust</b> Essential to keep worker exposure within allowable limits during welding or grinding. |
|   | <b>Mechanical (General)</b> Not Applicable   |
|   | <b>Special</b> Not Applicable   <b>Other</b> Not Applicable  |
|   | Not Applicable   |
| <b>Protective Gloves:</b> As needed to protect against physical hazards.  | <b>Eye Protection:</b> Safety glasses, goggles or face shield if molten.                                   |
| <b>Other Protective Equipment:</b> Heat resistant leggings and gloves if pouring molten metal.  |  |

| <b>SECTION IX: Special Precautions</b>  |  |
|---|--|
| <b>Precautions to be taken in Handling and Storing:</b> The scrap metal itself presents no health hazard unless it is welded, burned, ground or cut. Possible fumes may be generated. Should have complete evaluation done. Wash hands and arms after handling. |  |
| <b>Special Precautions and Waste Disposal Methods:</b> Return to manufacturer, scrap dealer, or dispose of in accordance to local & federal regulations.  |  |

| <b>SECTION X: Notice to Reader</b>  |  |
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| The information contained in this MSDS was obtained from sources which are believed to be reliable. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The manufacturer does not assume responsibility and expressly disclaims liability for any loss, damage, or expense arising out of or in any way connected with, the handling, storage, use or disposal of the product identified in this MSDS. |  |

Prepared by: Health, Safety and Environment Department of Alchemy Extrusions.