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

- 1.1 Product identifier
- Trade name: Bird Banger Scare Cartridge
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.
- Application of the substance / the preparation Explosive product.
- 1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier: Reed-Joseph International Company
  PO Box 894
  Greenville, MS 38702 USA
  (662) 335-5822
- Further information obtainable from: Product Safety Department
- 1.4 Emergency telephone number:
  ChemTel Inc.
  (800)255-3924, +1 (813)248-0585

2 Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  
  GHS01 exploding bomb
  Expl. 1.4 H204 Fire or projection hazard.

  GHS07
  Acute Tox. 4 H302 Harmful if swallowed.
  Eye Irrit. 2 H319 Causes serious eye irritation.
  Flam. Sol. 2 H228 Flammable solid.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

  E; Explosive
  R2: Risk of explosion by shock, friction, fire or other sources of ignition.

- Information concerning particular hazards for human and environment:
  The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
  Fast burning substance. Keep away from heat. Do not subject to mechanical or electrical shock. Particles from ignition may be harmful if inhaled. Do not take internally.

- 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.

(Contd. on page 2)
2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
- Hazard pictograms
  ![GHS01 GHS07]

- Signal word Warning
- Hazard-determining components of labelling:
  potassium perchlorate
- Hazard statements
  H204 Fire or projection hazard.
  H228 Flammable solid.
  H302 Harmful if swallowed.
  H319 Causes serious eye irritation.
- Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  P250 Do not subject to grinding/shock/friction.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P240 Ground/bond container and receiving equipment.
  P264 Wash thoroughly after handling.
  P270 Do no eat, drink or smoke when using this product.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P373 DO NOT fight fire when fire reaches explosives.
  P370+P380 In case of fire: Evacuate area.
  P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
  P372 Explosion risk in case of fire.
  P337+P313 If eye irritation persists: Get medical advice/attention.
  P330 Rinse mouth.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P401 Store in accordance with local/ regional/ national/ international regulations.
  P501 Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

- Hazard description:
- WHMIS-symbols:
  F - Dangerously reactive material

(Contd. on page 3)
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Trade name: Bird Banger Scare Cartridge

- NFPA ratings (scale 0 - 4)
  Health = 1
  Fire = 1
  Reactivity = 3

- HMIS-ratings (scale 0 - 4)
  Health = 1
  Fire = 1
  Reactivity = 3

HMIS Long Term Health Hazard Substances
None of the ingredients is listed.

- 2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>CAS:</th>
<th>EINECS:</th>
<th>Ingredient</th>
<th>HMIS</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7757-79-1</td>
<td>231-818-8</td>
<td>potassium nitrate</td>
<td>O R8, Ox: Sol. 2, H272</td>
<td>50-100%</td>
</tr>
<tr>
<td>7440-44-0</td>
<td>231-153-3</td>
<td>carbon</td>
<td>Xi R36/37, Eye Irrit. 2, H319, STOT SE 3, H335</td>
<td>10-25%</td>
</tr>
<tr>
<td>7704-34-9</td>
<td>231-722-6</td>
<td>sulfur</td>
<td>Xi R38, Skin Irrit. 2, H315</td>
<td>2,5-10%</td>
</tr>
<tr>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>aluminium powder (pyrophoric)</td>
<td>F R15-17, Pyr. Sol. 1, H250; Water-react. 2, H261</td>
<td>2,5-10%</td>
</tr>
<tr>
<td>7440-32-6</td>
<td>231-142-3</td>
<td>titanium</td>
<td>F R15-17, Pyr. Sol. 1, H250; Self-heat. 1, H251; Water-react. 1, H260</td>
<td>≤ 2,5%</td>
</tr>
<tr>
<td>7778-74-7</td>
<td>231-912-9</td>
<td>potassium perchlorate</td>
<td>Xn R22, O R9, Ox: Sol. 1, H271, Acute Tox. 4, H302</td>
<td>≤ 2,5%</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 16.
Trade name: Bird Banger Scare Cartridge

**4 First aid measures**

- **4.1 Description of first aid measures**
  - **General information:**
    - Do not leave affected persons unattended.
    - Take affected persons out of danger area and lay down.
    - Position and transport stably in side position.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:**
    - Immediately wash with water and soap and rinse thoroughly.
    - Generally the product does not irritate the skin.
  - **After eye contact:**
    - Remove contact lenses if worn.
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.

**5 Firefighting measures**

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents:**
    - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
  - During heating or in case of fire poisonous gases are produced.
  - Product may explode if burned in confined space. Individual cartridges may explode. Mass explosion of many cartridges at once is unlikely.
- **5.3 Advice for firefighters in case of fire**
  - Evacuate area. Fight fire remotely due to the risk of explosion.
- **Protective equipment:**
  - Wear self-contained respiratory protective device.
  - Wear fully protective suit.
- **Additional information**
  - Cool endangered receptacles with water spray.

**6 Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Keep away from ignition sources.
  - Remove persons from danger area.
- **6.2 Environmental precautions:**
  - Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
  - Pick up mechanically.
  - Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
  - See Section 7 for information on safe handling.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 03.01.2013
Revision: 03.01.2013

Trade name: Bird Banger Scare Cartridge

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. of page 4)

7 Handling and storage

- 7.1 Precautions for safe handling
  Open and handle receptacle with care.
  Prevent formation of dust.
- Information about fire - and explosion protection:
  Keep ignition sources away - Do not smoke.
  Prevent impact and friction.
  Keep respiratory protective device available.
- 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 oxidizing agents.
  - Further information about storage conditions:
    Protect from heat and direct sunlight.
    Store under lock and key and out of the reach of children.
- 7.3 Specific end use(s) No further relevant information available.

(Contd. on page 5)

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>7429-90-5 aluminium powder (pyrophoric)</th>
</tr>
</thead>
<tbody>
<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>

* as respirable fraction
*total dust **respirable fraction
metal and insoluble compounds, respirable
aluminium-containing (as aluminium)

- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.

(Contd. on page 6)
Trade name: Bird Banger Scare Cartridge

- **Respiratory protection:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
  ![Protective gloves]
  Protective gloves
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.
- **Eye protection:** Not required.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>9.1 Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td>Form: Powder</td>
</tr>
<tr>
<td>Colour: Black</td>
</tr>
<tr>
<td>Odour: Characteristic</td>
</tr>
<tr>
<td>Odour threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not applicable.</td>
</tr>
<tr>
<td>Change in condition</td>
</tr>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>Flash point: Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous): Not determined.</td>
</tr>
<tr>
<td>Ignition temperature: 260 °C</td>
</tr>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Self-igniting: Product is not self-igniting.</td>
</tr>
</tbody>
</table>

(Contd. on page 7)
Trade name: Bird Banger Scare Cartridge

(Contd. of page 6)

- Danger of explosion: Risk of explosion by shock, friction, fire or other sources of ignition.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure: Not applicable.
- Density: Not determined.
- Relative density: Not determined.
- Vapour density: Not applicable.
- Evaporation rate: Not applicable.
- Solubility in / Miscibility with water: Insoluble.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- 9.2 Other information: No further relevant information available.

10 Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
  - No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions: Flammable.
- 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
  - Nitrogen oxides (NOx)
  - Sulphur oxides (SOx)

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.

(Contd. on page 8)
Trade name: Bird Banger Scare Cartridge

- Sensitization: No sensitizing effects known.

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.
  - Additional ecological information:
    - General notes:
      Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
      Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    - 12.5 Results of PBT and vPvB assessment
      - PBT: Not applicable.
      - vPvB: Not applicable.
  - 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
  - Uncleaned packaging:
    - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- 14.1 UN-Number
  - DOT NA0431
  - ADR, IMDG, IATA UN0431

- 14.2 UN proper shipping name
  - DOT, IMDG, IATA Articles, Pyrotechnic
  - ADR 0431 Articles, Pyrotechnic

- 14.3 Transport hazard class(es)
  - DOT, ADR, IMDG

  - Class 1,4

(Contd. of page 7)
(Contd. on page 9)
### Trade name: Bird Banger Scare Cartridge

<table>
<thead>
<tr>
<th>Label</th>
<th>1.4G</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA</td>
<td>1.4G</td>
</tr>
<tr>
<td>Class</td>
<td>1.4G</td>
</tr>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
<td>II</td>
</tr>
<tr>
<td>14.5 Environmental hazards:</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td></td>
</tr>
<tr>
<td>ADR</td>
<td></td>
</tr>
<tr>
<td>Tunnel restriction code</td>
<td>E</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>UN0431, Articles, Pyrotechnic, 1.4G, II</td>
</tr>
</tbody>
</table>

### 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 is listed.
  - Section 313 (Specific toxic chemical listings):
    7429-90-5 aluminium powder (pyrophoric)
  - 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 is listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
# Safety Data Sheet

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

**Printing date 03.01.2013**

**Revision: 03.01.2013**

---

## Trade name: Bird Banger Scare Cartridge

---

### 5. Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

### 6. Carcinogenic Categories

<table>
<thead>
<tr>
<th>Agency</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>7778-74-7</td>
<td>Potassium perchlorate</td>
</tr>
<tr>
<td>IARC (International Agency for Research on Cancer)</td>
<td></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>TLV (Threshold Limit Value established by ACGIH)</td>
<td>7429-90-5</td>
<td>aluminium powder (pyrophoric)</td>
</tr>
<tr>
<td>NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
<td></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>OSHA-Ca (Occupational Safety &amp; Health Administration)</td>
<td></td>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

### Canada

<table>
<thead>
<tr>
<th>List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Domestic Substances List (DSL)</td>
<td>All ingredients are listed.</td>
</tr>
<tr>
<td>Canadian Ingredient Disclosure list (limit 0.1%)</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Canadian Ingredient Disclosure list (limit 1%)</td>
<td>7429-90-5</td>
</tr>
</tbody>
</table>

### 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

---

## 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

- **H250** Catches fire spontaneously if exposed to air.
- **H251** Self-heating: may catch fire.
- **H260** In contact with water releases flammable gases which may ignite spontaneously.
- **H261** In contact with water releases flammable gases.
- **H271** May cause fire or explosion; strong oxidiser.
- **H272** May intensify fire; oxidiser.
- **H302** Harmful if swallowed.
- **H315** Causes skin irritation.
- **H319** Causes serious eye irritation.
- **H335** May cause respiratory irritation.
- **R15** Contact with water liberates extremely flammable gases.
- **R17** Spontaneously flammable in air.
- **R22** Harmful if swallowed.
- **R36/37** Irritating to eyes and respiratory system.
- **R38** Irritating to skin.

(Contd. on page 11)
Trade name: Bird Banger Scare Cartridge

R8  Contact with combustible material may cause fire.
R9  Explosive when mixed with combustible material.

**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 Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- WHMIS: Workplace Hazardous Materials Information System (Canada)

**Sources**
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