

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

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

- **1.1 Product identifier**
- **Trade name:** Screamer Siren Cartridge, 15mm
- **Article number:** No other identifiers
- **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** Explosive product.
- **Uses advised against** Contact manufacturer.
- **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
- **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**
Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).



exploding bomb

Expl. 1.4 H204 Fire or projection hazard.

- **Additional information:**
Risk of explosion if heated under confinement.
0 % of the mixture consists of component(s) of unknown toxicity.
Adverse health effects are not reasonably expected from normal use of product.
There are no other hazards not otherwise classified that have been identified.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS).
The product is classified and labelled according to the CLP regulation.



GHS01

- **Signal word** Warning

(Cont'd. on page 2)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 1)

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

potassium perchlorate

- **Hazard statements**

H204 Fire or projection hazard.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P250 Do not subject to grinding/shock/friction.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P373 DO NOT fight fire when fire reaches explosives.

P370+P380 In case of fire: Evacuate area.

P372 Explosion risk in case of fire.

P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

EUH044 Risk of explosion if heated under confinement.

- **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

- **Explosive Product Notice**

PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES - The prevention of accidents in the use of explosives is a result of careful planning and observance of the best known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing this force. He should realize that this force, if misdirected, may either kill or injure both him and his fellow workers.

WARNING - All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, or ordinances. If you have any questions or doubts as to how to use any explosive product, DO NOT USE IT before consulting with your supervisor, or the manufacturer, if you do not have a supervisor. If your supervisor has any questions or doubts, he should consult the manufacturer before use.

(Cont'd. on page 3)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 2)

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 7778-74-7 EINECS: 231-912-9 Index number: 017-008-00-5	potassium perchlorate ----- ☠ Ox. Sol. 1, H271 ⚠ Acute Tox. 4, H302	50-100%
CAS: 7757-79-1 EINECS: 231-818-8	potassium nitrate ----- ☠ Ox. Sol. 2, H272	2,5-10%
CAS: 7704-34-9 EINECS: 231-722-6 Index number: 016-094-00-1	sulfur ----- ⚠ Skin Irrit. 2, H315	≤ 2,5%
CAS: 69012-64-2 EINECS: 273-761-1	Silica-Amorphous Silica fume substance with a Community workplace exposure limit	≤ 2,5%

Additional information:

For the listed ingredient(s), the identity and exact percentages are being withheld as a trade secret.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

This is a sealed unit that will not result in exposure to the contents under normal and reasonable conditions of use. In the unlikely event of exposure to contents, appropriate first aid should be administered.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Brush off loose particles from skin.

Immediately immerse in or flush with cool water to dissipate heat.

Clean with water and soap.

Seek immediate medical help for blistering or open wounds.

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:

Unlikely route of exposure.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed Blast injury if mishandled.

Hazards Danger of blast or crush-type injuries.

4.3 Indication of any immediate medical attention and special treatment needed

Product may produce physical injury if mishandled. Treatment of these injuries should be based on the blast and compression effects.

(Cont'd. on page 4)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 3)

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
DO NOT fight fire when fire reaches explosives.
Flood area with water. If no water is available, carbon dioxide, dry chemical or earth may be used. If the fire reaches the cargo, withdraw and let fire burn.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
Fire or projection hazard.
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**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Eliminate all ignition sources if safe to do so.
Cool endangered product with water spray.
Flammability Classification: (defined by 29 CFR 1910.1200) Explosive. Can explode under fire conditions. Individual devices will randomly explode. Will not mass explode if multiple devices are involved. Burning material may produce toxic and irritating vapors. In unusual cases, shrapnel may be thrown from exploding devices under containment. See 2008 Emergency response Guidebook for further information.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment as required.
Ensure adequate ventilation
Isolate area and prevent access.
- **6.2 Environmental 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 unusable 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**
Handle with care. Avoid jolting, friction and impact.
Use only in well ventilated areas.

(Cont'd. on page 5)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 4)

Keep from heat and sources of ignition.

· **Information about fire - and explosion protection:**

Prevent impact and friction.

Protect against electrostatic charges.

Substance/product can reduce the ignition temperature of flammable substances.

Fire or projection hazard.

Emergency cooling must be available in case of nearby fire.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Avoid storage near extreme heat, ignition sources or open flame.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from flammable substances.

· **Further information about storage conditions:** Store in dry conditions.

· **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 section 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

69012-64-2 Silica-Amorphous Silica fume

TLV (USA)	TLV withdrawn
EL (Canada)	Long-term value: 4* 1,5** mg/m ³ fume *total; **respirable
EV (Canada)	Long-term value: 2 mg/m ³ respirable

· **DNELs** No further relevant information available.

· **PNECs** No further relevant information available.

· **8.2 Exposure controls**

· **Engineering measures**

Do not subject to grinding/shock/friction.

Take any precaution to avoid mixing with combustibles.

Use only outdoors or in a well-ventilated area.

· **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.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

(Cont'd. on page 6)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 5)

- **Respiratory protection:**
Not required under normal conditions of use.
Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**
Wear gloves for the protection against mechanical hazards according to NIOSH or EN 388.
- **Eye protection:**



Safety glasses

- **Body protection:** Protection may be required for spills.
- **Limitation and supervision of exposure into the environment**
No further relevant information available.
- **Risk management measures**
Organizational measures should be in place for all activities involving this product.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - **Form:** Hard wound paper containing explosive components
 - **Colour:** According to product specification
 - **Odour:** Odourless
 - **Odour threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
 - **Melting point/Melting range:** Not Determined.
 - **Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Fire or projection hazard.
- **Auto/Self-ignition temperature:** Not determined.
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not self-igniting.
- **Danger of explosion:** Fire or projection hazard.
Risk of explosion if heated under confinement.
- **Explosion limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Oxidising properties** Contains oxidizing agent.
- **Vapour pressure:** Not determined.
- **Density:** Not determined.

(Cont'd. on page 7)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 6)

- **Relative density** Not determined.
- **Vapour density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with water:** Soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Risk of explosion if heated under confinement.
- **10.3 Possibility of hazardous reactions**
Fire or projection hazard.
Toxic fumes may be released if heated above the decomposition point.
Reacts with strong acids and alkali.
Substance/product can reduce the ignition temperature of flammable substances.
May intensify fire; oxidiser.
- **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
Sulphur oxides (SO_x)

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
- **LD/LC50 values relevant for classification:** None.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Acute effects (acute toxicity, irritation and corrosivity):** Danger of blast or crush-type injuries.
- **Repeated dose toxicity:** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

(Cont'd. on page 8)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 7)

- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** The product contains materials that are harmful to the environment.
- **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.
- **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**
Must not be disposed together with household garbage. Do not allow product to reach sewage system. 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.
- **Waste disposal key:** EPA RCRA Code (USA): D001, D003.
- **European waste catalogue:** 20 03 99
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT, ADR, IMDG, IATA** UN0431
- **14.2 UN proper shipping name**
- **DOT, IMDG, IATA** Articles, Pyrotechnic
- **ADR** 0431 Articles, Pyrotechnic

(Cont'd. on page 9)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 8)

· 14.3 Transport hazard class(es)

· DOT, ADR, IMDG, IATA



· Class	1.4
· Label	1.4G
· 14.4 Packing group	
· DOT, ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	
· Special marking (IATA):	



Cargo Aircraft Only.

· 14.6 Special precautions for user	Not applicable.
· EMS Number:	F-B,S-X
· Segregation groups	Perchlorates
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	EX2003110151
· UN "Model Regulation":	UN 0431 ARTICLES, PYROTECHNIC, 1.4G, II

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):

7757-79-1 | potassium nitrate

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients are 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.

(Cont'd. on page 10)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 9)

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

7778-74-7 | potassium perchlorate

NL

- **IARC (International Agency for Research on Cancer)**

69012-64-2 | Silica-Amorphous Silica fume

3

- **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%)**

None of the ingredients are listed.

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I**

7757-79-1 | potassium nitrate

- **Other regulations, limitations and prohibitive 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.

- **Relevant phrases**

H271 May cause fire or explosion; strong oxidiser.

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H315 Causes skin irritation.

- **Abbreviations and acronyms:**

Expl. 1.4: Explosives, Division 1.4

Ox. Sol. 1: Oxidising Solids, Hazard Category 1

Ox. Sol. 2: Oxidising Solids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

(Cont'd. on page 11)

Safety Data Sheet

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

Printing date 06.10.2015

Revision: 06.10.2015

Trade name: Screamer Siren Cartridge, 15mm

(Cont'd. from page 10)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

SourcesWebsite, European Chemicals Agency (<http://http://echa.europa.eu/>)Website, US EPA Substance Registry Services (http://http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do)Website, Chemical Abstracts Registry, American Chemical Society (<https://www.cas.org>)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com