

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

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

- **1.1 Product identifier**
- **Trade name: MODEL 7290M GRENADE FB, MINI**
- **Article number:** Model 7290M
- **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:**
Combined Systems, Inc.
388 Kinsman Rd.
Jamestown, PA 16134
Phone: (724) 932-2177
- **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.



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



Xn; Harmful

R20/22-40-48/20/21/22: Harmful by inhalation and if swallowed. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

(Contd. on page 2)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 1)

R5: Heating may cause an explosion.

· **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.

· **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 product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS01 GHS07 GHS08

· **Signal word** Warning

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

potassium perchlorate

nickel

barium chromate

· **Hazard statements**

H204 Fire or projection hazard.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P250 Do not subject to grinding/shock/friction.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P281 Use personal protective equipment as required.

P373 DO NOT fight fire when fire reaches explosives.

P363 Wash contaminated clothing before reuse.

P372 Explosion risk in case of fire.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

· **Additional information:**

Contains nickel. May produce an allergic reaction.

· **Hazard description:**

· **WHMIS-symbols:**

D2A - Very toxic material causing other toxic effects

(Contd. on page 3)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

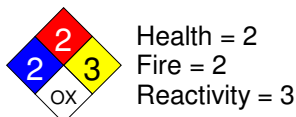
Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 2)

F - Dangerously reactive material



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



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



Warning: Contains lead salt(s). Long-term health hazard.

* - Indicates a long term health hazard from repeated or prolonged exposures.

- **HMIS Long Term Health Hazard Substances**

| | |
|-----------|-----------------------|
| 7778-74-7 | potassium perchlorate |
| 7440-02-0 | nickel |

- **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.

3 Composition/information on ingredients

- **3.2 Mixtures**

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

(Contd. on page 4)

Safety Data Sheet

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
















Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI







(Contd. of page 3)

• Dangerous components:

| | | |
|--|---|---------|
| CAS: 7778-74-7 EINECS: 231-912-9 Index number: 017-008-00-5 | potassium perchlorate  Xn R22;  O R9  Ox. Sol. 1, H271  Acute Tox. 4, H302 | 50-100% |
| CAS: 7439-95-4 EINECS: 231-104-6 Index number: 012-001-00-3 | magnesium powder (pyrophoric)  F R15-17  Pyr. Sol. 1, H250; Water-react. 1, H260 | 10-25% |
| CAS: 7429-90-5 EINECS: 231-072-3 Index number: 013-001-00-6 | aluminium powder (pyrophoric)  F R15-17  Pyr. Sol. 1, H250; Water-react. 2, H261 | 10-25% |
| CAS: 10294-40-3 EINECS: 233-660-5 Index number: 056-002-00-7 | barium chromate  Xn R20/22  Acute Tox. 4, H302; Acute Tox. 4, H332 | <10% |
| CAS: 7440-02-0 EINECS: 231-111-4 Index number: 028-002-00-7 | nickel  T R48/23;  Xn R40;  Xi R43 Carc. Cat. 3  Carc. 2, H351; STOT RE 1, H372  Skin Sens. 1, H317 | <5% |

• **Additional information:** For the wording of the listed risk phrases refer to section 16.

• Notable Trace Components (< 0.1% w/w)

| | | |
|--|---|--|
| CAS: 592-87-0 EINECS: 209-774-6 Index number: 082-001-00-6 | lead dithiocyanate  T Repr. Cat. 1, 3 R61;  Xn R62-20/22;  N R50/53 R33  Repr. 1A, H360Df; STOT RE 2, H373  Aquatic Acute 1, H400; Aquatic Chronic 1, H410  Acute Tox. 4, H302; Acute Tox. 4, H332 | |
|--|---|--|

4 First aid measures

• 4.1 Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Take affected persons out into the fresh air.

• After inhalation:

Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.

• After skin contact:

Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

• After eye contact:

Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

(Contd. on page 5)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 4)

- **After swallowing:**
Unlikely route of exposure.
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**
Blast injury if mishandled.
Allergic reactions
Cramp
Thirst
Nausea
Disorientation
- **Hazards**
Danger of blast or crush-type injuries.
Danger of impaired breathing.
Danger of circulatory collapse.
- **4.3 Indication of any immediate medical attention and special treatment needed**
Contains nickel.
In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.
Medical supervision for at least 48 hours.
If necessary oxygen respiration treatment.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Product may produce physical injury if mishandled. Treatment of these injuries should be based on the blast and compression effects.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
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**
Product may explode if burned in confined space. Individual cartridges may explode. Mass explosion of many cartridges at once is unlikely.
Hazardous combustions products: Metal Compounds, Carbon Monoxide, Carbon Dioxide, Nitrous Oxides, Various complex oxides of metals, Nitrogen.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Cool endangered receptacles with water spray.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Eliminate all ignition sources if safe to do so.

(Contd. on page 6)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 5)

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.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Protect from heat.

Isolate area and prevent access.

· 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.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated 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.

7 Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Handle with care. Avoid jolting, friction and impact.

· Information about fire - and explosion protection:

Protect against electrostatic charges.

Prevent impact and friction.

Keep respiratory protective device available.

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:

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 oxidizing agents.

Do not store together with acids.

Store away from flammable substances.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

(Contd. on page 7)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 6)

Store in dry conditions.

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

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:**

7429-90-5 aluminium powder (pyrophoric)

| | |
|-------------|---|
| PEL (USA) | 15* 5** mg/m ³ *total dust **respirable fraction |
| REL (USA) | 10* 5** mg/m ³ Metal, insol.compds.:*total dust**resp. fraction |
| TLV (USA) | 1* mg/m ³ *as respirable fraction |
| EL (Canada) | 1,0 mg/m ³ metal and insoluble compounds, respirable |
| EV (Canada) | 5 mg/m ³ aluminium-containing (as aluminium) |

10294-40-3 barium chromate

| | |
|-------------|---|
| PEL (USA) | Short-term value: C 0,1* mg/m ³ *as CrO ₃ |
| REL (USA) | 0,001 mg/m ³ as Cr(VI), 10-hr TWA |
| TLV (USA) | 0,05 mg/m ³ as Cr |
| EL (Canada) | Short-term value: C0,1 mg/m ³ Long-term value: 0,025 mg/m ³ as Cr; ACIGH A1, IARC 1 |

7440-02-0 nickel

| | |
|-------------|--|
| PEL (USA) | 1 mg/m ³ |
| REL (USA) | 0,015 mg/m ³ as Ni; See Pocket Guide App. A |
| TLV (USA) | 1,5* 0,2** 0,1*** mg/m ³ inhal.fraction;*elemental;**insol.,***sol.compds. |
| EL (Canada) | 0,05 mg/m ³ as Ni; ACIGH A1, IARC 1 |
| EV (Canada) | 1* 0,2** 0,1*** mg/m ³ inh. ;*metal;**insol. compds.;***soluble compds. |

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.

(Contd. on page 8)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013


Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 7)

- **Ingredients with biological limit values:**

- **10294-40-3 barium chromate**

| | |
|-----------|---|
| BEI (USA) | 25 µg/L Medium: urine Time: end of shift at end of workweek Parameter: Total chromium (fume) |
| | 10 µg/L Medium: urine Time: increase during shift Parameter: Total chromium (fume) |

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Store protective clothing separately.
 - Do not inhale gases / fumes / aerosols.
 - Avoid contact with the eyes and skin.
- **Respiratory protection:**
 - Not required under normal conditions of use.
 - Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
 - None required for handling unused product; where possible, use protective gloves for handling spent rounds.
- **Eye protection:**
 -  Safety glasses
- **Body protection:** Not required under normal conditions of use.
- **Limitation and supervision of exposure into the environment**
 - No further relevant information available.
- **Risk management measures**
 - See Section 7 for additional information.
 - Organizational measures should be in place for all activities involving this product.
 - No further relevant information available.

(Contd. on page 9)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 8)

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

| | |
|--------------------|-----------------|
| Form: | Solid material |
| Colour: | Dark grey |
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |

· pH-value: Not applicable.

· Change in condition

| | |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not determined.

· Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not self-igniting.

· Danger of explosion: Extreme 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.

(Contd. on page 10)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 9)

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**
Danger of explosion.
Reacts with strong acids and oxidizing agents.
- **10.4 Conditions to avoid**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
Keep away from heat and direct sunlight.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Nitrogen oxides
Carbon monoxide and carbon dioxide
Toxic metal oxide smoke

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.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
Danger through skin adsorption.
- **Sensitisation:** Sensitization possible by skin contact.
- **Repeated dose toxicity:**
May cause damage to organs through prolonged or repeated exposure .
Repeated exposures may result in skin and/or respiratory sensitivity.

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 11)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI


(Contd. of page 10)

- **Ecotoxicological effects:**
- **Remark:** The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.
- **Additional ecological information:**
- **General notes:**
This statement was deduced from the properties of the single components.
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.
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.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · DOT, ADR, IMDG, IATA | UN0452 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · DOT, IMDG, IATA · ADR | GRENADES PRACTICE HAND OR RIFLE 0452 GRENADES PRACTICE HAND OR RIFLE |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · DOT, ADR, IMDG, IATA | <div style="text-align: center;">  <p>1.4</p> </div> |
| <ul style="list-style-type: none"> · Class · Label | 1.4 1.4G |
| <ul style="list-style-type: none"> · 14.4 Packing group · DOT, ADR, IMDG, IATA | II |

(Contd. on page 12)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 11)

- | | |
|---|------------------------|
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · EMS Number: | F-A,S-Q |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | DOT: EX2011120556 |
| · UN "Model Regulation": | UN0452, 0452, 1.4G, II |

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) |
| 7440-02-0 | nickel |
| 7440-50-8 | copper |
| 7440-66-6 | zinc powder -zinc dust (pyrophoric) |
| 592-87-0 | lead dithiocyanate |

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):
· Chemicals known to cause cancer:

| | |
|------------|-----------------|
| 10294-40-3 | barium chromate |
| 7440-02-0 | nickel |

· Chemicals known to cause reproductive toxicity for females:

| | |
|------------|-----------------|
| 10294-40-3 | barium chromate |
|------------|-----------------|

· Chemicals known to cause reproductive toxicity for males:

| | |
|------------|-----------------|
| 10294-40-3 | barium chromate |
|------------|-----------------|

· Chemicals known to cause developmental toxicity:

| | |
|------------|-----------------|
| 10294-40-3 | barium chromate |
|------------|-----------------|

· Carcinogenic Categories
· EPA (Environmental Protection Agency)

| | |
|-----------|-----------------------|
| 7778-74-7 | potassium perchlorate |
|-----------|-----------------------|

NL

(Contd. on page 13)

Safety Data Sheet

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 12)

| | | |
|------------|-------------------------------------|-----|
| 7440-50-8 | copper | D |
| 7440-66-6 | zinc powder -zinc dust (pyrophoric) | II |
| 10022-31-8 | barium nitrate | CBD |

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

| | | |
|------------|-----------------|---|
| 10294-40-3 | barium chromate | 1 |
| 7440-02-0 | nickel | 1 |

· **TLV (Threshold Limit Value established by ACGIH)**

| | | |
|------------|-------------------------------|----|
| 7429-90-5 | aluminium powder (pyrophoric) | A4 |
| 10294-40-3 | barium chromate | A1 |
| 7440-02-0 | nickel | A5 |
| 7440-67-7 | zirconium powder (pyrophoric) | A4 |
| 1309-48-4 | magnesium oxide | A4 |
| 10022-31-8 | barium nitrate | A4 |

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

| | | |
|------------|-----------------|--|
| 10294-40-3 | barium chromate | |
| 7440-02-0 | nickel | |

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

| | | |
|------------|-----------------|--|
| 10294-40-3 | barium chromate | |
| 7440-02-0 | nickel | |

· **Canadian Ingredient Disclosure list (limit 1%)**

| | | |
|-----------|-------------------------------|--|
| 7429-90-5 | aluminium powder (pyrophoric) | |
|-----------|-------------------------------|--|

· **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.
- 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.
- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H332 Harmful if inhaled.
- H351 Suspected of causing cancer.

(Contd. on page 14)

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

Printing date 31.05.2013

Revision: 31.05.2013

Trade name: MODEL 7290M GRENADE FB, MINI

(Contd. of page 13)

- H372 Causes damage to organs through prolonged or repeated exposure.
- R15 Contact with water liberates extremely flammable gases.
- R17 Spontaneously flammable in air.
- R20/22 Harmful by inhalation and if swallowed.
- R22 Harmful if swallowed.
- R40 Limited evidence of a carcinogenic effect.
- R43 May cause sensitisation by skin contact.
- R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
- 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)

HMS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Sources

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