

## Safety Data Sheet

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





Printing date: May 27, 2015

Revision: May 27, 2015

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

- **1.1 Product identifier**
- **Trade name: 37/40 Muzzle Blast OC**
- **Article number: 6240**
- **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.
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Safariland, LLC  
13386 International Parkway  
Jacksonville, FL 32218  
Customer Care (800) 347-1200
- **Further information obtainable from:** Customer Care Department
- **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 to the EU regulations and not the US GHS regulation: H411.
  -  exploding bomb  
Expl. 1.4            H204 Fire or projection hazard.
  -  STOT SE 3            H335 May cause respiratory irritation.
  - Aquatic Chronic 3    H412 Harmful to aquatic life with long lasting effects.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  -  Xi; Irritant  
R37:            Irritating to respiratory system.
  -  N; Dangerous for the environment  
R51/53:        Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R5-44:        Heating may cause an explosion. Risk of explosion if heated under confinement.
- **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.

(Contd. on page 2)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 1)

- **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 following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS).



GHS01 GHS07

- **Signal word** Warning

- **Hazard statements**

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H411.

H204 Fire or projection hazard.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

The following Precautionary Statements are applicable only to the general GHS regulations and not the specific CLP regulation: P374.

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

P250 Do not subject to grinding/shock/friction.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P373 DO NOT fight fire when fire reaches explosives.

P374 Fight fire with normal precautions from a reasonable distance.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P372 Explosion risk in case of fire.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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

- **Additional information:**

EUH208 Contains Rosin. May produce an allergic reaction.

EUH209 Can become highly flammable in use.

- **Hazard description:**

- **WHMIS-symbols:**

D2B - Toxic material causing other toxic effects

(Contd. on page 3)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

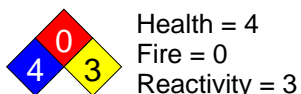
Trade name: 37/40 Muzzle Blast OC

(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.

- **HMIS Long Term Health Hazard Substances**

|            |   |
|------------|---|
| 122-39-4   | diphenylamine                           |
| 15245-44-0 | lead 2,4,6-trinitro-m-phenylene dioxide |

- **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.

## SECTION 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  
OSHA GHS






















Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 3)

· **Dangerous components:**

|   |   |          |
|---|---|----------|
| CAS: 1309-48-4<br>EINECS: 215-171-9<br>Index number: 025-199-09-0 | magnesium oxide<br>substance with a Community workplace exposure limit  | 60-80%   |
| CAS: 9004-70-0<br>EC number: 603-037-0                            | Nitrocellulose, colloided, granular<br> E R3<br> Expl. 1.1, H201  | 10-20%   |
| CAS: 55-63-0<br>EINECS: 200-240-8<br>Index number: 603-034-00-X   | glycerol trinitrate / nitroglycerin<br> T+ R26/27/28;  E R3;  N R51/53<br>R33<br> Unst. Expl., H200<br> Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330<br> STOT RE 2, H373<br> Aquatic Chronic 2, H411<br>Flam. Liq. 2, H225 | 10-20%   |
| CAS: 8023-77-6<br>EINECS: 288-920-0                               | Oleoresin Capsicum<br> Xn R21/22;  Xi R36/38<br> Skin Irrit. 2, H315; Eye Irrit. 2, H319  | 1-5%     |
| CAS: 7439-89-6<br>EINECS: 231-096-4                               | iron<br>substance with a Community workplace exposure limit   | 1-5%     |
| CAS: 7440-50-8<br>EINECS: 231-159-6                               | copper<br>substance with a Community workplace exposure limit   | 0,5-2,0% |
| CAS: 122-39-4<br>EINECS: 204-539-4<br>Index number: 612-026-00-5  | diphenylamine<br> T R23/24/25;  N R50/53<br>R33<br> Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331<br> STOT RE 2, H373<br> Aquatic Acute 1, H400; Aquatic Chronic 1, H410  | < 1,0%   |
| CAS: 85-98-3<br>EINECS: 201-645-2                                 | 1,3-diethyldiphenylurea<br> Xn R22<br> Acute Tox. 4, H302<br>Aquatic Chronic 3, H412  | 0,5-2%   |
| CAS: 7440-66-6  | zinc metal<br> N R50/53<br> Aquatic Acute 1, H400; Aquatic Chronic 1, H410  | < 1,0%   |

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

· **Notable Trace Components (≤ 0,1% w/w)**

(Contd. on page 5)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC








(Contd. of page 4)

CAS: 15245-44-0

EINECS: 239-290-0

Index number: 609-019-00-4

lead 2,4,6-trinitro-m-phenylene dioxide

 T Repr. Cat. 1, 3 R61;  Xn R62-20/22;  E R3;  N R50/53  
R33
 Unst. Expl., H200 Carc. 1B, H350; Repr. 1A, H360Df; STOT RE 2, H373 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302; Acute Tox. 4, H332

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information:

Immediately remove any clothing soiled by the product.

Take affected persons out into the fresh air.

#### After inhalation:

Remove victim to fresh air.

Seek medical help for symptoms or if unconscious.

#### After skin contact:

Brush off loose particles from skin.

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.

#### 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

Blast injury if mishandled.

May cause respiratory irritation.

Coughing

Breathing difficulty

Irritant to eyes.

#### Hazards

Danger of blast or crush-type injuries.

Danger of impaired breathing.

### 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.

If necessary oxygen respiration treatment.

## SECTION 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.

(Contd. on page 6)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

**Trade name: 37/40 Muzzle Blast OC**

(Contd. of page 5)

- **For safety reasons unsuitable extinguishing agents:** None.
- **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**
- **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 receptacles with water spray.  
Evacuate area and fight fire from from the upwind side.  
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  
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**  
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTEL AT 1-800-255-3924. Spills of this material should be handled carefully. Do not subject materials to mechanical shock or extreme heat. A spill of this material will normally not require emergency response team capabilities.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Wear protective equipment. Keep unprotected persons away.  
Remove persons from danger area.  
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.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.  
Send for recovery or disposal in suitable receptacles.
- **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.

(Contd. on page 7)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 6)

## 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.
- **Information about fire - and explosion protection:**  
Protect from heat.  
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.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **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**

### Ingredients with limit values that require monitoring at the workplace:

#### 55-63-0 glycerol trinitrate / nitroglycerin

|             |  |
|-------------|--|
| PEL (USA)   | Ceiling limit: 2 mg/m <sup>3</sup> , 0,2 ppm<br>Skin       |
| REL (USA)   | Short-term value: 0,1 mg/m <sup>3</sup><br>Skin            |
| TLV (USA)   | Long-term value: 0,46 mg/m <sup>3</sup> , 0,05 ppm<br>Skin |
| EL (Canada) | Long-term value: 0,05 ppm<br>Skin                          |
| EV (Canada) | Long-term value: 0,5 mg/m <sup>3</sup> , 0,05 ppm<br>Skin  |

#### 1309-48-4 magnesium oxide

|             |   |
|-------------|---|
| PEL (USA)   | Long-term value: 15* mg/m <sup>3</sup><br>fume; *total particulate  |
| TLV (USA)   | Long-term value: 10* mg/m <sup>3</sup><br>*as inhalable fraction  |
| EL (Canada) | Short-term value: 10** mg/m <sup>3</sup><br>Long-term value: 10* 3** mg/m <sup>3</sup><br>*inhalable fume; **respirable dust and fume |

(Contd. on page 8)

## Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 7)

|   |   |
|---|---|
| EV (Canada)   | Long-term value: 10 mg/m <sup>3</sup><br>inhalable  |
| <b>8050-09-7 Rosin</b>                                    |   |
| TLV (USA)   | DSEN, RSEN, L   |
| EL (Canada)   | S   |
| <b>7439-89-6 iron</b>                                     |   |
| EV (Canada)   | Long-term value: 1* 5** mg/m <sup>3</sup><br>as iron;*salts, water-soluble;**welding fume |
| <b>7440-50-8 copper</b>                                   |   |
| PEL (USA)   | Long-term value: 1* 0,1** mg/m <sup>3</sup><br>as Cu *dusts and mists **fume              |
| REL (USA)   | Long-term value: 1* 0,1** mg/m <sup>3</sup><br>as Cu *dusts and mists **fume              |
| TLV (USA)   | Long-term value: 1* 0,2** mg/m <sup>3</sup><br>*dusts and mists; **fume; as Cu            |
| EL (Canada)   | Long-term value: 1* 0,2** mg/m <sup>3</sup><br>*dusts and mists; **fume, as Cu            |
| EV (Canada)   | Long-term value: 0,2* 1** mg/m <sup>3</sup><br>as copper, *fume;**dust and mists          |
| <b>122-39-4 diphenylamine</b>                             |   |
| REL (USA)   | Long-term value: 10 mg/m <sup>3</sup>   |
| TLV (USA)   | Long-term value: 10 mg/m <sup>3</sup>   |
| EL (Canada)   | Long-term value: 10 mg/m <sup>3</sup>   |
| EV (Canada)   | Long-term value: 10 mg/m <sup>3</sup>   |
| <b>15245-44-0 lead 2,4,6-trinitro-m-phenylene dioxide</b> |   |
| EV (Canada)   | Long-term value: 0,05 mg/m <sup>3</sup><br>as Pb, Skin (organic compounds)                |
| <b>10022-31-8 barium nitrate</b>                          |   |
| IOELV (EU)  | Long-term value: 0,5 mg/m <sup>3</sup><br>as Ba   |
| PEL (USA)   | Long-term value: 0,5 mg/m <sup>3</sup><br>as Ba   |
| REL (USA)   | Long-term value: 0,5 mg/m <sup>3</sup><br>as Ba   |
| TLV (USA)   | Long-term value: 0,5 mg/m <sup>3</sup><br>as Ba   |
| EL (Canada)   | Long-term value: 0,5 mg/m <sup>3</sup><br>as Ba   |

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

(Contd. on page 9)



# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 8)

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Do not inhale dust / smoke / mist.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- **Respiratory protection:**

Wear positive pressure NIOSH or European EN149 vapor respirators when deploying product in large quantities.

Use suitable respiratory protective device when high concentrations are present.

- **Protection of hands:**



Protective gloves

Wear gloves when handling deployed rounds.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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:**



Safety glasses

- **Body protection:** Protective work clothing

- **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 10)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 9)

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

**Form:** Solid metal container containing liquid and solid contents.  
Solid

**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):** Not determined.

· **Auto/Self-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Heating may cause an explosion.

#### · 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 11)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 10)

## 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**  
Toxic fumes may be released if heated above the decomposition point.  
Reacts with strong acids and alkali.  
Reacts violently with oxidising agents.  
Danger of explosion.
- **10.4 Conditions to avoid** Sources of ignition, open flame, incompatible materials.
- **10.5 Incompatible materials:** Oxidizers
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Nitrogen oxides  
Sulphur oxides (SO<sub>x</sub>)

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

### 55-63-0 glycerol trinitrate / nitroglycerin

|        |      |                                      |
|--------|------|--------------------------------------|
| Oral   | LD50 | 115 mg/kg (mouse)<br>105 mg/kg (rat) |
| Dermal | LD50 | 29 mg/kg (rat)<br>280 mg/kg (rabbit) |

### 122-39-4 diphenylamine

|      |      |                  |
|------|------|------------------|
| Oral | LD50 | 1120 mg/kg (rat) |
|------|------|------------------|

### 15245-44-0 lead 2,4,6-trinitro-m-phenylene dioxide

|      |      |                 |
|------|------|-----------------|
| Oral | LD50 | 650 mg/kg (rat) |
|------|------|-----------------|

- **Primary irritant effect:**
- **on the skin:**  
Not a skin irritant in unused form. Vapors/particles from used product are possibly irritating to skin.
- **on the eye:**  
Not an eye irritant in unused form. Vapors/particles from used product are possibly irritating to eyes.
- **Sensitisation:** No sensitising effects known.
- **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:  
Irritant  
Normal handling of the undeployed product poses little or no health hazards, One should avoid inhalation by wearing appropriate respiratory protection when exposed to the chemical ingredients of the product above listed TLV's or when exposed to the post ignition by-products. This product is a canister which

(Contd. on page 12)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

**Trade name: 37/40 Muzzle Blast OC**

(Contd. of page 11)

contains the various components completely sealed within. Therefore, under normal handling of this product, no exposure to any harmful materials will occur. When the product is used, particles may be generated which may be irritating to the eyes and the respiratory tract.

- **Acute effects (acute toxicity, irritation and corrosivity):**  
Inhalation may cause irritation to the respiratory system.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** Toxic for aquatic organisms
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** May be accumulated in organism
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **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.  
Also poisonous for fish and plankton in water bodies.  
The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary  
Toxic for aquatic organisms  
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**  
After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.  
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.

(Contd. on page 13)

# Safety Data Sheet

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

Printing date: May 27, 2015




Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 12)

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT, ADR, IMDG, IATA**
- **14.2 UN proper shipping name**
- **DOT, IATA**
- **ADR**
- **IMDG**
- **14.3 Transport hazard class(es)**
- **DOT**
- 
- **Class**
- **Label**
- **ADR, IMDG**
- 
- **Class**
- **Label**
- **IATA**
- 
- **Class**
- **Label**
- **14.4 Packing group**
- **DOT, ADR, IMDG, IATA**
- **14.5 Environmental hazards:**
- **Marine pollutant:**
- **Special marking (ADR):**

UN0301

Ammunition Tear-producing with burster, expelling charge or propelling charge  
0301 Ammunition Tear-producing with burster, expelling charge or propelling charge, ENVIRONMENTALLY HAZARDOUS

Ammunition Tear-producing with burster, expelling charge or propelling charge, MARINE POLLUTANT

1.4  
1.4G+6.1+8

1.4  
1.4G+6.1+8

1.4  
1.4G+6.1+8

II

Yes  
Symbol (fish and tree)  
Symbol (fish and tree)

(Contd. on page 14)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 13)

- **Special marking (IATA):**



Cargo Aircraft Only.

- **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.
- **UN "Model Regulation":** UN0301, Ammunition Tear-producing with burster, expelling charge or propelling charge, ENVIRONMENTALLY HAZARDOUS, 1.4G (6.1+8), 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):**

55-63-0 | glycerol trinitrate / nitroglycerin

7440-50-8 | copper

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California):**
- **Chemicals known to cause cancer:**  
Present in trace quantities.

15245-44-0 | lead 2,4,6-trinitro-m-phenylene dioxide

- **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:**  
Present in trace quantities.

15245-44-0 | lead 2,4,6-trinitro-m-phenylene dioxide

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

7440-50-8 | copper

D

7440-66-6 | zinc metal

D, I, II

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

None of the ingredients are listed.

(Contd. on page 15)

# Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

Trade name: 37/40 Muzzle Blast OC

(Contd. of page 14)

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

|           |                 |    |
|-----------|-----------------|----|
| 1309-48-4 | magnesium oxide | A4 |
| 122-39-4  | diphenylamine   | A4 |

- **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%)**

122-39-4 | diphenylamine

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

1309-48-4 | magnesium oxide

7440-50-8 | copper

- **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.

- **Substances of very high concern (SVHC) according to REACH, Article 57**

15245-44-0 | lead 2,4,6-trinitro-m-phenylene dioxide

- **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**

|      |  |
|------|--|
| H200 | Unstable explosives.   |
| H201 | Explosive; mass explosion hazard.                                  |
| H225 | Highly flammable liquid and vapour.                                |
| H300 | Fatal if swallowed.  |
| H301 | Toxic if swallowed.  |
| H302 | Harmful if swallowed.  |
| H310 | Fatal in contact with skin.  |
| H311 | Toxic in contact with skin.  |
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.                                     |
| H330 | Fatal if inhaled.  |
| H331 | Toxic if inhaled.  |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life.  |
| H410 | Very toxic to aquatic life with long lasting effects.              |
| H411 | Toxic to aquatic life with long lasting effects.                   |
| H412 | Harmful to aquatic life with long lasting effects.                 |

(Contd. on page 16)

## Safety Data Sheet

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

Printing date: May 27, 2015

Revision: May 27, 2015

|  |
|--|
| <b>Trade name: 37/40 Muzzle Blast OC</b> |
|--|

(Contd. of page 15)

- R21/22 Harmful in contact with skin and if swallowed.  
 R22 Harmful if swallowed.  
 R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
 R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.  
 R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.  
 R33 Danger of cumulative effects.  
 R36/38 Irritating to eyes and skin.  
 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **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)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 Expl. 1.1: Explosives, Division 1.1  
 Expl. 1.4: Explosives, Division 1.4  
 Unst. Expl.: Explosives, Unstable explosives  
 Flam. Liq. 2: Flammable liquids, Hazard Category 2  
 Acute Tox. 2: Acute toxicity, Hazard Category 2  
 Acute Tox. 3: Acute toxicity, Hazard Category 3  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Acute Tox. 1: Acute toxicity, Hazard Category 1  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
 Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1  
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2  
 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

• **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](http://www.chemtelinc.com)