

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: June 15, 2018

Revision: June 15, 2018

1 Identification

- **Product identifier**
- **Trade name: 40mm Inert Muzzle Blast**
40mm Inert Muzzle Blast - 4 Inch
- **Product code:**
6043 (1011977)
6043SL (1208736)
- **Recommended use and restriction on use**
- **Recommended use:** Training device.
- **Restrictions on use:** Contact manufacturer/supplier
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Safariland, LLC
13386 International Parkway
Jacksonville, FL 32218
Customer Care (800) 347-1200
- **Information department:** Customer Care Department
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)



2 Hazard(s) identification

- **Classification of the substance or mixture**

Expl. 1.4 H204 Fire or projection hazard.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS01

- **Signal word:** Warning

- **Hazard statements:**

H204 Fire or projection hazard.

- **Precautionary statements:**

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

P250 Do not subject to grinding/shock/friction.

P370+P380 In case of fire: Evacuate area.

P372 Explosion risk in case of fire.

P373 DO NOT fight fire when fire reaches explosives.

P374 Fight fire with normal precautions from a reasonable distance.

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

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

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Health = 2
 Fire = 0
 Reactivity = 4

· **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2
 FIRE 0 Fire = 0
 REACTIVITY 4 Reactivity = 4

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

· **Other hazards**

· **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 they are dealing with a powerful force and that various devices and methods have been developed to assist them in directing this force. They should realize that this force, if misdirected, may either kill or injure both themselves and their 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, they should consult the manufacturer before use.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

1309-48-4	Magnesium oxide	40-60%
9004-70-0	Nitrocellulose, colloided, granular Expl. 1.1, H201	10-20%
55-63-0	glycerol trinitrate / nitroglycerin Unst. Expl., H200 Flam. Liq. 2, H225 Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330 STOT RE 2, H373	10-20%
8050-09-7	Rosin Skin Sens. 1, H317	1-5%
7439-89-6	Iron	1-5%
7440-50-8	Copper	0.1-1%
122-39-4	diphenylamine Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT RE 2, H373	0.1-1%

· **Additional information:** For the wording of the listed Hazard Statements, refer to section 16.

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· **Notable Trace Components (< 0.1% w/w)**

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

- ⚠ Unst. Expl., H200
- ⚠ Repr. 1A, H360; STOT RE 2, H373
- ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332

4 First-aid measures

· **Description of first aid measures**

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
 Brush off loose particles from skin.
 If skin irritation is experienced, 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:** Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:** Blast injury if mishandled.
- **Danger:** Danger of blast or crush-type injuries.
- **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.

5 Fire-fighting measures

· **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.
- **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.
- **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.
 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

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 exploding devices under containment. See 2008 Emergency response Guidebook for further information.

6 Accidental release measures

· 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.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Protect from heat.

Isolate area and prevent access.

· Environmental precautions

No special measures required.

· Methods and material for containment and cleaning up

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Send for recovery or disposal in suitable receptacles.

· 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

· Handling

· **Precautions for safe handling:** Handle with care. Avoid jolting, friction and impact.

· **Information about protection against explosions and fires:**

Protect from heat.

Emergency cooling must be available in case of nearby fire.

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

· **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.

· **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

· Control parameters

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

1309-48-4 Magnesium oxide

PEL (USA)	Long-term value: 15* mg/m ³
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TLV (USA)	fume; *total particulate Long-term value: 10* mg/m ³ *as inhalable fraction
EL (Canada)	Short-term value: 10** mg/m ³ Long-term value: 10* 3** mg/m ³ *inhalable fume;**respirable dust and fume
EV (Canada)	Long-term value: 10 mg/m ³ inhalable
LMPE (Mexico)	Long-term value: 10* mg/m ³ A4, *fracción respirable

55-63-0 glycerol trinitrate / nitroglycerin

PEL (USA)	Ceiling limit value: 2 mg/m ³ , 0.2 ppm Skin
REL (USA)	Short-term value: 0.1 mg/m ³ Skin
TLV (USA)	Long-term value: 0.46 mg/m ³ , 0.05 ppm Skin
EL (Canada)	Long-term value: 0.05 ppm Skin
EV (Canada)	Long-term value: 0.5 mg/m ³ , 0.05 ppm Skin
LMPE (Mexico)	Long-term value: 0.05 ppm PIEL

8050-09-7 Rosin

TLV (USA)	DSEN, RSEN, L
EL (Canada)	S(D), S(R)
LMPE (Mexico)	SEN, (L)

7439-89-6 Iron

EV (Canada)	Long-term value: 1* 5** mg/m ³ as iron;*salts, water-soluble;**welding fume
LMPE (Mexico)	Long-term value: 1 mg/m ³

7440-50-8 Copper

PEL (USA)	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL (USA)	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV (USA)	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu
EL (Canada)	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume, as Cu
EV (Canada)	Long-term value: 0.2* 1** mg/m ³ as copper, *fume;**dust and mists
LMPE (Mexico)	Long-term value: 0.2* 1** mg/m ³

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*humo (como Cu);**polvo y niebla (como Cu)

122-39-4 diphenylamine

REL (USA)	Long-term value: 10 mg/m ³
TLV (USA)	Long-term value: 10 mg/m ³
EL (Canada)	Long-term value: 10 mg/m ³
EV (Canada)	Long-term value: 10 mg/m ³
LMPE (Mexico)	Long-term value: 10 mg/m ³
	A4

· Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Engineering controls:

Use only outdoors or in a well-ventilated area.

Provide adequate ventilation.

· Breathing equipment: Not required under normal conditions of use.

· Protection of hands:

Wear gloves for the protection against mechanical hazards according to OSHA and NIOSH rules.

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 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 relevant information available.

9 Physical and chemical properties

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· Information on basic physical and chemical properties	
· Appearance:	
Form:	Fluid Solid metal container containing liquid and solid contents.
Color:	According to product specification
· Odor:	Odorless
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	Not determined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Heating may cause an explosion.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density:	Not determined.
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Danger of explosion.
Toxic fumes may be released if heated above the decomposition point.

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- Reacts with strong oxidizing agents.
- Reacts with strong acids and alkali.
- **Conditions to avoid** Sources of ignition, open flame, incompatible materials.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products**
 Carbon monoxide and carbon dioxide
 Nitrogen oxides
 Sulfur oxides (SOx)

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

55-63-0 glycerol trinitrate / nitroglycerin

Oral	LD50	115 mg/kg (mouse) 105 mg/kg (rat)
Dermal	LD50	29 mg/kg (rat) 280 mg/kg (rabbit)

122-39-4 diphenylamine

Oral	LD50	1120 mg/kg (rat)
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· Primary irritant effect:

· On the skin:

Not a skin irritant in unused form. Vapours/particles from used product are possibly irritating to skin. Based on available data, the classification criteria are not met.

· On the eye:

Not an eye irritant in unused form. Vapours/particles from used product are possibly irritating to eyes. Based on available data, the classification criteria are not met.

· Sensitization: No sensitizing effects known.

· IARC (International Agency for Research on Cancer):

15245-44-0	lead 2,4,6-trinitro-m-phenylene dioxide/ lead styphnate	2B
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· NTP (National Toxicology Program):

None of the ingredients are listed.

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

None of the ingredients are listed.

· Probable route(s) of exposure:

- Ingestion.
- Inhalation.
- Eye contact.
- Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity): Danger of blast or crush-type injuries.

· Repeated dose toxicity: No relevant information available.

· Germ cell mutagenicity: Based on available data, the classification criteria are not met.

· Carcinogenicity: Based on available data, the classification criteria are not met.

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- **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.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** May be accumulated in organisms.
- **Mobility in soil:** No relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information**
- **General notes:**
 Harmful to aquatic organisms
 The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary.
 Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

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

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN0012

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<ul style="list-style-type: none"> · UN proper shipping name · DOT, IMDG, IATA · ADR 	CARTRIDGES FOR WEAPONS, INERT PROJECTILE 0012, CARTRIDGES FOR WEAPONS, INERT PROJECTILE
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT 	
	
<ul style="list-style-type: none"> · Class · Label 	1.4 1.4s
<ul style="list-style-type: none"> · ADR, IMDG, IATA 	
	
<ul style="list-style-type: none"> · Class · Label 	1.4 1.4S
<ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA 	II
<ul style="list-style-type: none"> · Environmental hazards · Marine pollutant: 	No
<ul style="list-style-type: none"> · Special precautions for user · EMS Number: 	Not applicable. F-A,S-Q
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

55-63-0 glycerol trinitrate / nitroglycerin

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· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

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

· **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

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

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

· **EPA (Environmental Protection Agency):**

7440-50-8 | Copper

D

7440-66-6 | zinc powder - zinc dust (stabilised)

D, I, II

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

None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL) (Substances not listed.):**

All ingredients listed on DSL or NDSL.

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.

· **Abbreviations and acronyms:**

ADR: 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Expl. 1.1: Explosives – Division 1.1

Expl. 1.4: Explosives – Division 1.4

Unst. Expl.: Explosives – Unstable explosive

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 1: Acute toxicity – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· **Sources**

SDS Prepared by:

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