Safety Data Sheet

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

Printing date: January 20, 2017 Revision: January 20, 2017

1 Identification

· Product identifier

· Trade name: OC 40mm Munitions Warning/Signaling - 300 Meters

Product code: 60310C

· Recommended use and restriction on use

· Recommended use: Crowd Control 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, +1 (813)248-0585



2 Hazard(s) identification

· Classification of the substance or mixture

Expl. 1.4 H204 Fire or projection hazard.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements

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

Hazard pictograms:





GHS01 GHS07

· Signal word: Warning

· Hazard statements:

H204 Fire or projection hazard. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements:

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

P250 Do not subject to grinding/shock/friction.

P261 Avoid breathing dust.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

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P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P373 DO NOT fight fire when fire reaches explosives.

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P372 Explosion risk in case of fire.

P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P312 Call a POISON CENTER/doctor if you feel unwell. P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P380 In case of fire: Evacuate area.

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

P405 Store locked up.

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.

NFPA ratings (scale 0 - 4)



Health = 1Fire = 0Reactivity = 3

· HMIS-ratings (scale 0 - 4)

1 Health = 1 ○ Fire = 0 REACTIVITY 3 Reactivity = 3

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 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.

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Chemical	characterization: Mixtures			
· Components:				
1309-48-4	magnesium oxide	20-40%		
7778-74-7	potassium perchlorate	10-209		
	① Ox. Sol. 1, H271 ① Acute Tox. 4, H302			
7757-79-1	potassium nitrate	10-209		
	🕸 Ox. Sol. 2, H272			
7439-95-4	magnesium powder (pyrophoric)	2.5-59		
	OPyr. Sol. 1, H250; Water-react. 1, H260			
7704-34-9		2.5-59		
	Skin Irrit. 2, H315			
7429-90-5	aluminium powder (pyrophoric)	2.5-59		
	Orange Pyr. Sol. 1, H250; Water-react. 2, H261			
7631-86-9	silicon dioxide	2.5-59		
8023-77-6	Oleoresin Capsicum	1-2.5		
	♦ Eye Dam. 1, H318	-]		
	Acute Tox. 4, H302; Skin Irrit. 2, H315			
9004-70-0	Nitrocellulose, colloided, granular	1-2.59		
Additional	information: For the wording of the listed Hazard Statements refer to section 16.			
	race Components (< 0.1% w/w)			
122-39-4	4 diphenylamine			
	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT RE 2, H373			
12403-82-6	dihydroxy[styphnato(2-)]dilead / lead styphnate			
	Unst. Expl., H200			
	Acute Tox. 2, H300; Acute Tox. 2, H330			
	& Carc. 1B, H350; Repr. 2, H361; STOT RE 2, H373			

4 First-aid measures

- Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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If skin irritation continues, consult a doctor.

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.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Asthma attacks

Irritating to eyes, respiratory system and skin.

Breathing difficulty

Coughing

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Allergic reactions

· Danger:

Danger of blast or crush-type injuries.

Danger of impaired breathing.

Indication of any immediate medical attention and special treatment needed:

If necessary oxygen respiration treatment.

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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: None.
- 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.

During heating or in case of fire poisonous gases are produced.

- 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.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

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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

· 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.

Ensure adequate ventilation.

Protect from heat.

· 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.

· 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.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

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:

Keep away from heat and direct sunlight.

Handle with care. Avoid jolting, friction and impact.

Information about protection against explosions and fires:

Protect from heat.

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

Emergency cooling must be available in case of nearby fire.

- · 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.

Protect from humidity and water.

Information about storage in one common storage facility:

Store away from foodstuffs.

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Store away from oxidizing agents.

Store away from flammable substances.

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

<u> </u>	<u>'</u>
1309-48-4 magnes	sium oxide
PEL (USA)	Long-term value: 15* mg/m³ fume; *total particulate
TLV (USA)	Long-term value: 10* mg/m³ *as inhalable fraction
EL (Canada)	Short-term value: 10** mg/m³ Long-term value: 10* 3** mg/m³ *inhalable fume;**respirable dust and fume
EV (Canada)	Long-term value: 10 mg/m³ inhalable
LMPE (Mexico)	Long-term value: 10* mg/m³ A4, *fracción respirable
7429-90-5 alumini	um powder (pyrophoric)
PEL (USA)	Long-term value: 15*; 5** mg/m³ *Total dust; ** Respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)	Long-term value: 1* mg/m³ as Al; *as respirable fraction
EL (Canada)	Long-term value: 1.0 mg/m³ respirable, as Al
EV (Canada)	Long-term value: 5 mg/m³ aluminium-containing (as aluminium)
LMPE (Mexico)	Long-term value: 1* mg/m³ A4, *fracciòn respirable
7631-86-9 silicon (dioxide
NIOSH REL (USA)	Long-term value: 6 mg/m³
OSHA PEL (USA)	Long-term value: 80 mg/m³
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- Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

- · Engineering controls: Provide adequate ventilation.
- Breathing equipment:

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

· Protection of hands:

Gloves not required under normal conditions of use.

Wear protective gloves to handle contents of damaged or leaking units.

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

Information on basic physical and chemical properties

· Appearance:

Form: Solid metal container containing liquid and solid contents.

Color: According to product specification

· Odor: Odorless

· Odor threshold: Not determined.

· **pH-value:** Not applicable.

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	(Cont'd. of page
· Melting point/Melting range: · Boiling point/Boiling range:	Not determined. Not determined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Danger of explosion:	Heating may cause an explosion. Risk of explosion by shock, friction, fire or other sources ignition.
Explosion limits Lower: Upper:	Not determined. Not determined.
Vapor pressure:	Not applicable.
Density: Relative density: Vapor density: Evaporation rate:	Not determined. Not determined. Not applicable. Not applicable.
Solubility in / Miscibility with Water:	Insoluble.
Partition coefficient (n-octanol/wat	er): Not determined.
Viscosity Dynamic: Kinematic: Other information	Not applicable. Not applicable. 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

Toxic fumes may be released if heated above the decomposition point.

Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.

Reacts with flammable substances.

· Conditions to avoid

Store away from oxidizing agents.

Keep ignition sources away - Do not smoke.

Cartridge may detonate if case is punctured or severely damaged.

Incompatible materials No relevant information available.

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Hazardous decomposition products

Carbon monoxide and carbon dioxide Toxic metal oxide smoke Chlorine compounds Nitrogen oxides

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

8023-77-6 Oleoresin Capsicum

 Oral
 LD50
 3000 mg/kg (rat)

 Dermal
 LD50
 >2500 mg/kg (mouse)

- Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- · On the eye: Irritating effect.
- · Sensitization:

Sensitizing effect through inhalation is possible with prolonged exposure. Sensitizing effect by skin contact is possible with prolonged exposure.

· IARC (International Agency for Research on Cancer):

7631-86-9 silicon dioxide

3

· NTP (National Toxicology Program):

None of the ingredients are listed.

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

None of the ingredients are listed.

· Acute effects (acute toxicity, irritation and corrosivity):

May be harmful if inhaled.

Irritating to eyes, respiratory system and skin.

Repeated dose toxicity: Repeated exposures may result in skin and/or respiratory sensitivity.

12 Ecological information

- · Toxicity
- Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · **Mobility in soil:** No relevant information available.
- **Ecotoxical effects:**
- · Remark: Harmful to fish
- · Additional ecological information
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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Harmful to aquatic organisms

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. 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.

4 Transport information	
· UN-Number · DOT, ADR, IMDG · IATA	UN0301 FORBIDDEN
· UN proper shipping name · DOT	Ammunition Tear-producing with burster, expelling charge or propelling charge
ADR	0301, Ammunition Tear-producing with burster, expelling charge or propelling charge, 1.4G, II
· IMDG	Ammunition Tear-producing with burster, expelling charge or propelling charge, 1.4G, II FORBIDDEN
· Transport hazard class(es)	
· DOT	
1.4 (50) (50) (50) (50) (50) (50) (50) (50)	
· Class	1.4
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Label	1.4G+6.1+8	
ADR, IMDG		
1.4 G		
Class	1.4	
Label	1.4G+6.1+8	
IATA		
Class	FORBIDDEN	
Label	FORBIDDEN	
Packing group		
DOT, ADR, IMDG	II	
IATA	FORBIDDEN	
Environmental hazards		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
EMS Number:	F-A,S-Q	
Segregation groups	Chlorates	
Transport in bulk according to Annex	II of	
MARPOL73/78 and the IBC Code	Not applicable.	
Transport/Additional information:		
IATA	FORBIDDEN.	

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):

7757-79-1 potassium nitrate

7429-90-5 aluminium powder (pyrophoric)

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

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· 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.

· Chemicals known to cause developmental toxicity:

Present in trace quantities.

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):

7631-86-9 silicon dioxide

3

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

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed.

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.

· Date of preparation / last revision 01/20/2017 / -

· 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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

LDL o: Lowest Lothel Door Observed

LDLo: Lowest Lethal Dose Observed Expl. 1.1: Explosives – Division 1.1

Expl. 1.4: Explosives – Division 1.4

Pyr. Sol. 1: Pyrophoric solids – Category 1

Water-react. 1: Substances and mixtures which in contact with water emit flammable gases – Category 1 Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2

Ox. Sol. 1: Oxidizing solids - Category 1

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Ox. Sol. 2: Oxidizing solids - Category 2

Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

·Sources

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