



10% PEPPER EXTREAM STREAM (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SDS ID: 2015015

Issue date: 2/24/2010 Revision date: 7/24/2023 Supersedes: 9/6/2016 Version: 4.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : 10% PEPPER EXTREAM STREAM (AEROSOL)
Product code : 3045, 3046, 4025, 4045, 4046, 80223, 80328, 80332, 80347, 80349, 80353, 80403, 80405, 80406, 80421, 80422, 80450, 80451, 80452, 80528, 80557, 80585, 80586, 80725, 80726, 80727, 80728, 80729, 80740, 80744, 80745, 80746, 80748, 80749, 80750, 80760, 80761, 80765, 80766, 80768, 80769, 80785, 80787, 80822 9045, 81023, 81024, 60000, 60001, 80777, 80826, 80828, 60016, 60017, 60018
Other means of identification : OC Personal Protection Spray

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Personal Protection Spray

1.3. Supplier

MACE SECURITY INTERNATIONAL INC.
4400 Carnegie Ave,
Cleveland, OH 44103
T (877) 585-6223

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300, Outside USA: +1 703-527 3888

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Gases under pressure Compressed gas

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Contains gas under pressure; may explode if heated

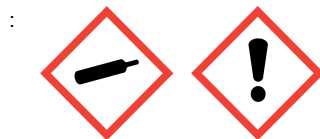
Causes skin irritation

Causes serious eye irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: Contains gas under pressure; may explode if heated

Causes skin irritation

Causes serious eye irritation

Precautionary statements (GHS US)

: Wash hands, forearms and face thoroughly after handling.

Wear eye protection, face protection, protective gloves.

If on skin: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Protect from sunlight. Store in a well-ventilated place.

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Dipropylene glycol methyl ether	CAS-No.: 34590-94-8	40 – 60
Capsicum oleoresin	CAS-No.: 8023-77-6	10

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Cough. Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If not breathing, give artificial respiration. Call a POISON CENTER or doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell. Rinse mouth thoroughly with water. If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink. If swallowed, contact a poison control center or physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Shortness of breath. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: None known.

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5.2. Specific hazards arising from the chemical

Fire hazard : Non flammable. Gases under pressure Compressed gas.
Explosion hazard : Contains gas under pressure; may explode if heated.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: may burst if heated. Do not pierce or burn, even after use.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not spray on an open flame or other ignition source. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

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Dipropylene glycol methyl ether (34590-94-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Dipropylene glycol methyl ether (DPGME)
ACGIH OEL TWA [ppm]	50 ppm
Remark (ACGIH)	TLV® Basis: Liver & CNS eff
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Dipropylene glycol methyl ether
OSHA PEL TWA [1]	600 mg/m³
OSHA PEL TWA [2]	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Capsicum oleoresin (8023-77-6)	
No additional information available	

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Thin liquid. Aerosol.
Color	: light ambery brown
Odor	: Irritating/pungent odour
Odor threshold	: No data available
pH	: 4.5 – 6
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 212 – 374 °F
Flash point	: 185 °F Closed cup

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Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 0.97 Relative density, liquid (water=1)
Solubility	: Water: Soluble in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

Heat of combustion : > 11 kJ/g

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. On combustion or on thermal decomposition (pyrolysis) releases : Carbon oxides (CO, CO₂), methane, ETHANE.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Protected from sources of heat. Protect from sunlight. Contains gas under pressure; may explode if heated.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Dipropylene glycol methyl ether (34590-94-8)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 19020 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	9510 mg/kg body weight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (dermal)	9510 mg/kg body weight

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Capsicum oleoresin (8023-77-6)	
LD50 oral rat	3000 mg/kg Source: National Library of Medicine
LD50 dermal rat	2500 mg/kg Source: National Library of Medicine
ATE US (oral)	3000 mg/kg body weight
ATE US (dermal)	2500 mg/kg body weight
ATE US (dust, mist)	10 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. pH: 4.5 – 6
Serious eye damage/irritation	: Causes serious eye irritation. pH: 4.5 – 6
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Dipropylene glycol methyl ether (34590-94-8)	
NOAEL (oral, rat, 90 days)	1000 mg/kg body weight Animal: rat, Guideline: other:

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Shortness of breath. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Dipropylene glycol methyl ether (34590-94-8)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Poecilia reticulata
EC50 - Other aquatic organisms [1]	1930 mg/l Test organisms (species): other aquatic crustacea:
LOEC (chronic)	0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
NOEC (chronic)	≥ 0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

DOT NA No : UN1950
UN-No. (IMDG) : 1950
UN-No. (IATA) : 1950

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Aerosols
Proper Shipping Name (IMDG) : AEROSOLS
Proper Shipping Name (IATA) : Aerosols, non-flammable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 2.2
Hazard labels (DOT) : 2.2



IMDG

Transport hazard class(es) (IMDG) : 2.2
Hazard labels (IMDG) : 2.2



IATA

Transport hazard class(es) (IATA) : 2.2
Hazard labels (IATA) : 2.2



14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1950

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DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

IMDG

Special provision (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: None

IATA

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provision (IATA)	: A98, A145, A167, A802
ERG code (IATA)	: 2L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



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Issue date: 9/21/2021 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Guard Alaska Bear Spray #00153

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

MACE SECURITY INTERNATIONAL INC.
4400 Carnegie Ave,
Cleveland, OH 44103
T (877) 585-6223

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300, Outside USA: +1 703-527 3888

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Gases under pressure Compressed gas
Serious eye damage/eye irritation Category 2

Contains gas under pressure; may explode if heated
Causes serious eye irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: Contains gas under pressure; may explode if heated
Causes serious eye irritation

Precautionary statements (GHS US)

: Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	CAS-No.: 112-34-5	80 – 95
Oleoresin Capsicum	CAS-No.: 84603-55-4	5 – 10

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Protect from sunlight. Store in a well-ventilated place. Keep cool. Do not expose to temperatures exceeding 50 °C/ 122 °F.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Guard Alaska Bear Spray	
No additional information available	
Oleoresin Capsicum (84603-55-4)	
No additional information available	
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether (112-34-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Diethylene glycol monobutyl ether
ACGIH OEL TWA [ppm]	10 ppm (IFV - Inhalable fraction and vapor)
Remark (ACGIH)	TLV® Basis: Hematologic, liver & kidney eff
Regulatory reference	ACGIH 2021

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Color	: red
Odor	: Mixture contains one or more component(s) which have the following odour:
Odor threshold	: No data available
pH	: 6 – 7.5
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 228 – 234 °C
Flash point	: 221 – 237 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: ≈ 0.95 Relative density, liquid (water=1)
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: ≥ 210 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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Skin corrosion/irritation	: Not classified pH: 6 – 7.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 6 – 7.5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on global warming	: No known effects from this product.
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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

14.1. UN number

DOT NA No	: UN1950
UN-No. (TDG)	: UN1950
UN-No. (IMDG)	: 1950
UN-No. (IATA)	: 1950

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Aerosols
Proper Shipping Name (TDG)	: AEROSOLS
Proper Shipping Name (IMDG)	: AEROSOLS
Proper Shipping Name (IATA)	: Aerosols, non-flammable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 2.2
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Hazard labels (DOT) : 2.2



TDG

Transport hazard class(es) (TDG) : 2.2

Hazard labels (TDG) : 2.2



IMDG

Transport hazard class(es) (IMDG) : 2.2

Hazard labels (IMDG) : 2.2



IATA

Transport hazard class(es) (IATA) : 2.2

Hazard labels (IATA) : 2.2



14.4. Packing group

Packing group (DOT) : Not applicable

Packing group (TDG) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1950

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : None

DOT Packaging Bulk (49 CFR 173.xxx) : None

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other : 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

Guard Alaska Bear Spray

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

TDG

UN-No. (TDG)	: UN1950
TDG Special Provisions	: 80 - Despite section 1.17 of Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases), a person must not offer for transport or transport these dangerous goods unless they are in a means of containment that is in compliance with the requirements for transporting gases in Part 5 (Means of Containment), 107 - (1) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of UN1950, AEROSOLS, and UN2037, GAS CARTRIDGES, that contain dangerous goods included in Class 2.1 or Class 2.2 and that are transported on a road vehicle, a railway vehicle or a vessel on a domestic voyage, if the aerosols or gas cartridges have a capacity less than or equal to 50 mL. (2) Subsection (1) does not apply to self-defence spray.
Explosive Limit and Limited Quantity Index	: 1 L
Excepted quantities (TDG)	: E0
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 75 L
Emergency Response Guide (ERG) Number	: 126

IMDG

Special provision (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG)	: P207, LP200
Packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: None

IATA

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provision (IATA)	: A98, A145, A167, A802
ERG code (IATA)	: 2L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed as Active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Oleoresin Capsicum	CAS-No. 84603-55-4	5 – 10%
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15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Guard Alaska Bear Spray

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 16: Other information

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SDS ID: 2015019

Issue date: 2/24/2010 Revision date: 7/24/2023 Supersedes: 9/6/2016 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : MUZZLE DOG REPELLENT (AEROSOL)
Product code : 80146, 80536
Synonyms : 2015019
Other means of identification : OC Personal Protection Spray

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Personal Protection Spray

1.3. Supplier

MACE SECURITY INTERNATIONAL INC.
4400 Carnegie Ave,
Cleveland, OH 44103
T (877) 585-6223

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300, Outside USA: +1 703-527 3888

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Gases under pressure Compressed gas	Contains gas under pressure; may explode if heated
Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2A	Causes serious eye irritation
Aspiration hazard Category 1	May be fatal if swallowed and enters airways

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: Contains gas under pressure; may explode if heated
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation

Precautionary statements (GHS US)

: Wash hands, forearms and face thoroughly after handling.
Wear eye protection, face protection, protective gloves.
If swallowed: Immediately call a doctor, a POISON CENTER.
If on skin: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Store locked up.

MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Protect from sunlight. Store in a well-ventilated place.
Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
White mineral oil (petroleum)	CAS-No.: 8042-47-5	85 – 90
Capsicum oleoresin	CAS-No.: 8023-77-6	10 – 15

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Cough. Give oxygen or artificial respiration if necessary. If not breathing, give artificial respiration. Call a POISON CENTER or doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth thoroughly with water. If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink. If swallowed, contact a poison control center or physician immediately. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Shortness of breath. May cause respiratory irritation. May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: Causes skin irritation. Irritation.
Symptoms/effects after eye contact	: Causes eye irritation. Eye irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Risk of lung edema.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available.

MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Non flammable. Gases under pressure Compressed gas.
Explosion hazard : Contains gas under pressure; may explode if heated.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: may burst if heated. Do not pierce or burn, even after use.
Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not spray on an open flame or other ignition source. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Protect from sunlight. Store in a well-ventilated place. Store locked up. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

MUZZLE DOG REPELLENT (AEROSOL)
No additional information available
Capsicum oleoresin (8023-77-6)
No additional information available
White mineral oil (petroleum) (8042-47-5)
No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Thick liquid. Aerosol.

Color : light ambery brown

Odor : Irritating/pungent odour

Odor threshold : No data available

pH : No data available

Melting point : Not applicable

Freezing point : No data available

Boiling point : > 446 °F

Flash point : 248 °F Open cup

Relative evaporation rate (butyl acetate=1) : No data available

Flammability : Not applicable.

Vapor pressure : No data available

Relative vapor density at 20°C : No data available

Relative density : 0.97 Relative density, liquid (water=1)

Solubility : Water: Insoluble

Partition coefficient n-octanol/water (Log Pow) : No data available

MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: < 20.5 mm²/s (estimated value)
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

On combustion or on thermal decomposition (pyrolysis) releases : Carbon oxides (CO, CO2). methane. ETHANE.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Protected from sources of heat. Protect from sunlight. Contains gas under pressure; may explode if heated.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Capsicum oleoresin (8023-77-6)	
LD50 oral rat	3000 mg/kg Source: National Library of Medicine
LD50 dermal rat	2500 mg/kg Source: National Library of Medicine
ATE US (oral)	3000 mg/kg body weight
ATE US (dermal)	2500 mg/kg body weight
ATE US (dust, mist)	10 mg/l/4h
White mineral oil (petroleum) (8042-47-5)	
LD50 oral rat	> 5000 mg/kg Source: International Uniform Chemical Information Database
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.

MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

White mineral oil (petroleum) (8042-47-5)	
NOAEL (oral, rat, 90 days)	≥ 1200 mg/kg body weight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: < 20.5 mm ² /s (estimated value)
Symptoms/effects after inhalation	: Shortness of breath. May cause respiratory irritation. May be fatal if swallowed and enters airways.
Symptoms/effects after skin contact	: Causes skin irritation. Irritation.
Symptoms/effects after eye contact	: Causes eye irritation. Eye irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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White mineral oil (petroleum) (8042-47-5)	
LC50 - Fish [1]	> 10000 mg/l Source: IUCLID

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

White mineral oil (petroleum) (8042-47-5)	
Partition coefficient n-octanol/water (Log Pow)	5.18 Source: Quantitative Structure Activity Relation

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

DOT NA No	: UN1950
UN-No. (IMDG)	: 1950
UN-No. (IATA)	: 1950

MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Aerosols
Proper Shipping Name (IMDG)	: AEROSOLS
Proper Shipping Name (IATA)	: Aerosols, non-flammable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 2.2
Hazard labels (DOT)	: 2.2



IMDG

Transport hazard class(es) (IMDG)	: 2.2
Hazard labels (IMDG)	: 2.2



IATA

Transport hazard class(es) (IATA)	: 2.2
Hazard labels (IATA)	: 2.2



14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Special precautions for user

DOT

UN-No.(DOT)	: UN1950
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DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
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DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
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DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
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DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
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DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials
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IMDG

Special provision (IMDG)	: 63, 190, 277, 327, 344, 381, 959
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Limited quantities (IMDG)	: SP277
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Excepted quantities (IMDG)	: E0
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MUZZLE DOG REPELLENT (AEROSOL)

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Packing instructions (IMDG)	: P207, LP200
Packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: None

IATA

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provision (IATA)	: A98, A145, A167, A802
ERG code (IATA)	: 2L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Revision date : 07/24/2023

ICSIDS_SDS_USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

MSDS Report

Prepared For: 申请商:	Zhaoqing New Leader Battery Industry Co., Ltd. 肇庆新利达电池实业有限公司 New Leader Industry Building, Tenth Area Chuang Ye Road, Ding Hu New Town, Zhao Qing City, Guangdong Province, China 广东省肇庆市鼎湖新城第十区创业路新利达工业大厦
Product Name: 产品名称:	EXTRA HEAVY DUTY CARBON ZINE DRY BATTERY 碳性锌锰干电池
Model 型号:	R03P (AAA)
Nominal Voltage: 标称电压:	1.5V
Typical Capacity: 典型容量:	460mAh
Weight 重量:	9.81g
Dimension 尺寸:	Φ10.24mm×44.00mm (D×H)
Prepared By : 编制单位:	NRCC (Shenzhen) Safety Technology Co., Ltd. 诺诚(深圳)安全科技有限公司 (Testing and Inspection Body affiliated to the National Registration Center for Chemicals, MEM) (应急管理部化学品登记中心旗下检测检验机构) Building A, No.2, Tengfeng 5th Road, Fuyong, Bao'an District, Shenzhen 深圳市宝安区福永街道腾丰五路2号A栋
Report No. 报告编号:	221205180156-29

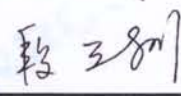
Written by 编写:



Issuing Date 签发日期:

2023.01.01

Approved by 审批:



Seal of NRCC safety

报告单位(盖章):





Material Safety Data Sheet

化学品安全技术说明书

Section 1- Chemical Product & Company Identification

第一部分 化学品及企业标识

Product Name: EXTRA HEAVY DUTY CARBON ZINE DRY BATTERY

产品名称: 碳性锌锰干电池

Manufacture: Zhaoqing New Leader Battery Industry Co., Ltd.

制造商: 肇庆新利达电池实业有限公司

Address: New Leader Industry Building, Tenth Area Chuang Ye Road, Ding Hu New Town, Zhao Qing City, Guangdong Province, China

地址: 广东省肇庆市鼎湖新城第十区创业路新利达工业大厦

Contact Person 联系人: Jiang Dongtao

Tel 电话: 0758-7766802

Fax 传真: 0758-7761220

Emergency Tel 应急电话: 0758-7766802

E-mail 邮箱: hf@newleader.cn

Item Code 项目号: 221205180156-29

Section 2- Hazards Identification

第二部分 危险性概述

Hazard Description 危险性描述	Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful. 正常使用没有危险, 不能拆解、打开或分解电池, 里面的材料或成分是有危害的。
Primary Route(s) of Exposure 接触途径	Inhalation, Ingestion, Skin contact and Eye contact. 吸入、食入、皮肤接触、眼睛接触。



EXTRA HEAVY DUTY CARBON ZINE DRY BATTERY
碳性锌锰干电池

Material Safety Data Sheet

Potential Health
Effects
潜在健康影响

Inhalation: Vapors or mists from a ruptured battery may cause respiratory irritation.

吸入: 破裂的电池散发出来的气雾会引起呼吸道刺激。

Ingestion: The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

食入: 电池的组成成分或原料可以导致嘴，食道和胃肠道的严重化学烧伤。

Skin: Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

皮肤: 皮肤接触到电池的內部化学材料可能会导致严重的刺激或烧伤皮肤。

Eye: Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

眼睛: 眼睛接触到电池的內部化学材料可能会导致严重的刺激或烧伤眼睛。

Section 3- Composition/Information on Ingredients

第三部分 成分/组成信息

Chemical Name 化学名称	Concentration or concentration ranges (%) 浓度或浓度范围(%)	CAS Number CAS 号 (化学文摘索引登记号)
Manganese dioxide 二氧化锰	22	1313-13-9
Carbon 炭	8	1333-86-4
Zinc chloride 氯化锌	4	7646-85-7
Zinc 锌	28	7440-66-6
Iron 铁	20	7439-89-6
Water 水	15	7732-18-5
Poly 尼龙 66	3	32131-17-2

Note: CAS number is Chemical Abstract Service Registry Number.

注意: CAS 号是化学文摘服务注册号。

N/A=Not apply.

N/A =不适用。

Section 4- First Aid Measures

第四部分 急救措施



EXTRA HEAVY DUTY CARBON ZINE DRY BATTERY
碳性锌锰干电池

Material Safety Data Sheet

Inhalation 吸入	Remove source of contamination or move victim to fresh air. Obtain medical advice. 移除污染源或者将受害者移至新鲜空气处。寻求医生建议。
Ingestion 食入	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in time. 立即用清水漱口，在专业人士的指导下催吐，速就医。
Skin contact 皮肤接触	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. 脱下已污染衣服，用大量的水冲洗至少 15 分钟，速就医。
Eye contact 眼睛接触	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician. 用流动水冲洗 15 分钟，如刺激持续发生，请求助于医生。

Section 5- Fire Fighting Measures

第五部分 消防措施

Characteristics of Hazard 危险特性	Toxic fumes, gases or vapors may evolve on burning. 火灾时可释放有害浓烟、气体或者蒸汽。
Hazardous Combustion Products 燃烧产生的危险物品	Carbon monoxide, carbon dioxide and so on. 一氧化碳，二氧化碳等。
Fire-extinguishing Methods and Extinguishing Media 灭火方法及灭火剂	Please use dry powder fire extinguisher and other proper fire extinguishing media. 请使用干粉灭火器等合适的灭火介质。
Attention in Fire-extinguishing 灭火注意事项	The firemen should put on antigas masks and full fire-fighting suits. 消防人员须佩戴防毒面具、穿全身消防服。

Section 6- Accidental Release Measures

第六部分 泄露应急处理

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Personal Precautions, protective equipment, and emergency procedures 个人预防措施、防护装备和应急程序	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8. 限制区域,直到完成清理工作。请勿触摸泄漏的材料。穿戴适当的个人防护设备,如第8部分所示。
Environmental Precautions 环境保护措施	Prevent material from contaminating soil and from entering sewers or waterways. 防止物质污染土壤和进入下水道或水道。
Methods and materials for Containment 方法和材料控制	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. 出于安全,阻止泄漏,可以用干砂或沙土来遏制液体泄露,立即清理泄漏。
Methods and materials for cleaning up 清理的方法和材料	Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal. 用惰性吸收剂(干砂或沙土)吸收溢出的材料。污染物转移到可吸收废物的容器。收集所有受污染的吸收剂和根据第13部分的指令处置。用洗涤剂和水清洁污染区域,收集所有受污染的洗涤水进行适当处置。

Section 7- Handling and Storage**第七部分 操作处置与储存**

Handling 操作	Don't handling the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery. 不要以让接头短路的方式对电池进行操作。不要打开,分解,挤压或燃烧电池。
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Storage
储存

Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.

不要将电池随意丢在盒子或抽屉里，以免电池之间或电池与其他金属物质发生短路。

Keep out of reach of children.

储存在小孩接触不到的地方。

Do not expose the battery to heat or fire. Avoid storage in direct sunlight.

不要将电池暴露在火源和热源附近，避免在阳光直射下存储。

Do not store together with oxidizing and acidic materials.

不要与氧化和酸性物质存储在一起。

Section 8 - Exposure Controls/Personal Protection

第八部分 接触控制和个体防护

Engineering
Controls
工程控制

No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses.

操作未破损的电池，没有工程控制要求。对于破损的电池，个人防护用品应包括化学品防护手套和安全眼镜。

Personal
Protective
Equipment
个人防护设备

Respiratory Protection: In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use. Not necessary under conditions of normal use.

呼吸保护：当电池排气阀打开时，应尽量使通风设备开至最大，避免将打开排气阀的电芯局限在某一狭窄空间内。正常操作条件下，呼吸保护是不必要的。正常使用条件下不必考虑。

Protective Gloves: Not necessary under conditions of normal use.

防护手套：正常使用条件下不必考虑。

Other Protective Clothing or Equipment: Not necessary under conditions of normal use.

其他防护服装或设备：正常使用条件下不必考虑。

Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

当电池排气阀打开时，应做好个人防护：呼吸防护，防护手套，防护服装和有护边的安全玻璃罩都是要准备的。



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Section 9- Physical and Chemical Properties

第九部分 理化特性

Physical State 物理状态	Form: Solid 形态: 固体
	Color: Gold and green 颜色: 金色和绿色
	Odour: Odorless 气味: 无气味
Change in condition 变化的条件	
pH 酸碱度	Not applicable. 不适用
Flash Point 闪点	Not applicable. 不适用
Flammability 易燃度	Not applicable. 不适用
Relative density 相对密度	Not applicable. 不适用
Solubility (Water) 溶解性 (水溶性)	Not applicable. 不适用
Solubility (Other) 溶解性 (其他)	Not applicable. 不适用

Section 10 – Stability and Reactivity

第十部分 稳定性和反应性

Stability 稳定性	Stable under normal temperatures and pressures. 常温常压下稳定。
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Conditions to Avoid 应避免的条件	Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions. 加热 70°C 以上或焚烧、变形、毁坏、粉碎、拆卸、过充电、短路，长时间暴露在潮湿的条件下。
Hazardous Decomposition Products 危害分解物	Toxic Fumes, and may form peroxides. 有毒烟雾，并可能形成过氧化物。
Possibility of Hazardous Reaction 危险反应的可能性	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons. 如果发生泄露，避免与强氧化剂，无机酸，强碱，卤代烃接触。

Section 11 – Toxicological Information

第十一部分 毒理学信息

Irritation 刺激	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin. 内部物质暴露的情况下，蒸汽烟雾可能对眼睛和皮肤产生刺激性。
Sensitization 致敏	Not applicable. 不适用
Reproductive Toxicity 再生毒性	Not applicable. 不适用
Toxicologically Synergistic Materials 协同材料毒理学	Not applicable. 不适用

Section 12-Ecological Information

第十二部分 生态学信息

General note 通用信息	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. 不允许未稀释或大量的产品到达地下水、水道或污水系统。
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Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity 化学产品在环境/可能的环境预期的行为的一种生态毒性	Not applicable. 不适用
Mobility in soil 土壤中移动性	Not applicable. 不适用
Persistence and Degradability 持久性和降解性	Not applicable. 不适用

Section 13 – Disposal Considerations

第十三部分 废弃处置

Waste Treatment 废弃处置方法	Recycle or dispose of in accordance with government, state & local regulations. 建议遵照国家和地方法规处置或再利用。
Attention for Waste Treatment 废弃注意事项	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling. 废电池不能被当做普通垃圾。不能扔进火中或置于高温下。不能解体、刺穿、破碎或类似的处理。最好的办法是回收利用。

Section 14 – Transport Information

第十四部分 运输信息

According to Special Provision A123 of the 2023 *IATA Dangerous Goods Regulations* 64th Edition, Examples of such batteries are:

Alkali -manganese, zinc-carbon and nickel-cadmium batteries. Any electrical battery or battery powered device, equipment or vehicle having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent:



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根据 2023 年 IATA 《危险物品规则》第 64 版特别规定 A123, 这类电池比如:

碱性电池、碳性电池和镍镉电池。任何此类电池或电池供电的装置、设备或车辆在运输中都必须采取措施来防止以下潜在的危险:

(a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals); and

(a) 短路 (例如: 如果是电池的话, 需要将暴露的端子做有效的绝缘; 如果是设备的话, 需要断开电池和端子的连接) 和

(b) accidental activation.

The words "Not Restricted" and the Special Provision number must be included in the description of the substance on the Air Waybill as required by "Not Dangerous Goods", when an Air Waybill is issued.

(b)意外启动

根据非危险物质托运单的要求, 需要在托运单上标注清楚“不受限制”一词和特殊规定条款号。

UN number of Batteries, dry: N/A

干电池的 UN 编号: 不适用

UN Proper shipping name/Description(technical name): Batteries, dry

联合国正确运输名称/描述(技术名称): 干电池

UN Classification(Transport hazard class): N/A

UN 危险品分类 (运输危险类别): 不适用

Packing group: N/A

包装等级: 不适用

The battery is not restricted according to IMO IMDG Code (inc Amdt 40-20).

根据 IMO IMDG Code (inc Amdt 40-20) 可按普通货物条件办理。

The battery is not restricted according to JT/T 617.2-2018 "Regulations concerning road transportation of dangerous goods - Part 2: Classification".

根据 JT/T 617.2-2018 《危险货物道路运输规则 第 2 部分: 分类》可按普通货物条件办理。

The battery is not restricted according to "List of Railway Dangerous Goods(2009)".

根据《铁路危险货物品名表》(2009 年版) 可按普通货物条件办理。

Section 15 – Regulatory Information



第十五部分 法规信息

With regard to transport, the following regulations are cited and considered:

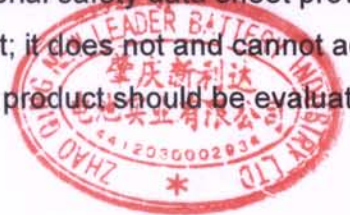
关于运输, 引用以下规章和考量:

- *The International Civil Aviation Organization (ICAO) Technical Instructions*
- 国际民用航空组织(ICAO)技术说明
- *The International Air transport Association (IATA) Dangerous Goods Regulations*
- 国际航空运输协会(IATA)危险货物规则
- *The International Maritime Dangerous Goods (IMDG) Code*
- 国际海上危险货物运输(IMDG)代码
- *The Office of Hazardous Materials Safety within the US Department of Transportation (DOT)*
- 美国能源部运输办公室
- *Research and Special Programs Administration (RSPA)*
- 危险品安全研究和特殊的计划管理局(RSPA)
- *Regulations concerning road transportation of dangerous goods*
- 危险货物道路运输规则
- *List of Railway Dangerous Goods*
- 铁路危险货物品名表

Section 16 – Additional Information

第十六部分 其他信息

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.



The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.



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信息，我们不对商品的性能做任何明示的或者暗示的保证，我们也不对使用这些信息造成的
后果担负任何责任。用户应当自己调查研究后决定这些信息是否适用于他们的特定用途。尽
管在该文档里提出了合理的预警，但是这仅仅只是给您做参考，考量和调查。这份安全技术
说明书提供了安全处理和使用该产品的指南，但是它没有，也不能对所有可能发生的情景提
出建议，所以您需要根据您对该产品的特定使用情况来决定是否需要其他的预防措施。

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*****End of MSDS Report*****

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