



Tornado Personal Defense System Inc.
10% Stream 0.38 OZ Pepper Spray (Aerosol)
Safety Data Sheet

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

Date of Issue: Oct 1, 2015

SDS ID: 20151001_038UC

SECTION 1: IDENTIFICATION

Product Identifier: Tornado Ultra, Tornado Stealth, Tornado Lipstick, Tornado Armor Case, Tornado Key Chain, Tornado Protective Case, Tornado Soft Case

10% OC, 1.33% active ingredient

Common Name: Pepper Spray, OC Spray

Substance Name: Oleoresin Capsicum(Red Pepper)

Intended Use of the Product: Self defense spray

Name Address and Telephone #:

Tornado Personal Defense System Inc.

1465 Slater Road

Ferndale, WA 98248

1-877-460-0939

Emergency Telephone #: 1-800-535-5053 For chemical emergency call Infotrac 24 hours a day, 7 days a week. Customer ID: Tornado Personal Defense

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

GHS-US classification

Signal Word (GHS-US)

Danger

Hazard Statements (GHS-US)

Eye Irritant 2A	H319
Compressed Gas	H280
Skin Irritant	H315
Asp. Tox. 1	H304

Precautionary Statements (GHS-US)

P210	Keep away from heat, hot surfaces, open flames, sparks. No smoking
P251	Pressurized container: Do not pierce or burn, even after use
P261	Avoid breathing mist, spray, vapors
P264	Wash hands, forearms and face thoroughly after handling
P271	Use only outdoors or in a well ventilated area
P280	Wear eye protection, protective clothing, protective gloves
P302+P352	If on skin: Wash with plenty of water
P304+P340	If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	If eye irritation persists: get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P403+P233	Store in a well ventilated place. Keep container tightly closed
P405	Store locked up
P410+P403	Protect from sunlight. Store in a well ventilated place
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Signal word (GHS-US): Danger

Label Elements(GHS-US):

Other Hazards: N/A

Unknown Acute Toxicity: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance: N/A

Mixture:

INGREDIENT	CAS #	%
Water	N/A	45 – 65
Propylene Glycol	57-55-6	5-45
Isopropyl Alcohol	67-63-0	5-25
Oleoresin Capsicum	8023-77-6	5-10

SECTION 4: FIRST-AID MEASURES

Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, and ingestion):

FIRST AID MEASURES AFTER:

<i>Inhalation</i>	Remove to fresh air. Give artificial respiration or oxygen if needed. If symptoms persist contact a physician.
<i>Eye contact</i>	Remove contact lenses and flush with plenty of water for at least 15 minutes. If symptoms persist contact a physician.
<i>Skin contact</i>	Remove contaminated clothing. Flush with water for 15 minutes. Wash with soap and water. Do not cover effected area or use creams or ointments for 6 hours.
<i>Ingestion</i>	Do not induce vomiting, Take immediately to a hospital or physician

Description of most important symptoms and effects, acute and delayed:

<i>After inhalation</i>	Shortness of breath, may cause dizziness or drowsiness
<i>After eye contact</i>	Causes serious eye irritation
<i>After skin contact</i>	Can causes skin irritation and redness
<i>After ingestion</i>	Risk of lung oedema

Indication of any immediate medical attention and special treatment needed: N/A

SECTION 5: FIRE FIGHTING MEASURES

PRODUCT IS NON-FLAMMABLE: Use extinguishing media appropriate for surrounding area. Attempts should be made to keep product cool to avoid explosion of canister and release of chemical.

Specific Hazards: Product canister may explode when heated releasing chemicals contained within. Release of chemicals from canister can cause skin irritation, shortness of breath, eye irritation and skin irritation.

Protective equipment for firefighters: Firefighters should wear protective equipment when fighting a fire where product is stored including protective clothing and respirators.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Use of personal precautions: Evacuate area until mist dissipates. If entering area prior to mist dissipating, wear protective gloves and clothing and a respirator. Avoid direct skin contact during clean up, a respirator may be necessary during clean up.

Emergency procedures: Evacuate unnecessary personnel while evidence of chemical in the air. Ventilate area. Do not enter area when chemical in the air unless wearing a respirator. When entering area wear non-porous protective clothing and gloves that will not allow chemical to come into contact with skin or eyes. Avoid breathing in chemical. Prevent product from entering public or natural water systems.

Methods and material for containment and cleanup: Soak up spills with appropriate absorbent, such as clay or diatomaceous earth as soon as possible. Collect and dispose of material.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

- Handle with care
- Keep out of reach of children
- Avoid storing in areas where temperatures exceed 50 degrees Celsius(122 degrees Fahrenheit)
- Wash hands after use
- Wash and or/avoid contact with spray area after use

Recommendations for safe storage:

- Avoid storing in areas where temperatures exceed 50 degrees Celsius(122 degrees Fahrenheit)
- Do not store in direct sunlight
- Avoid storing or exposing the item(s) to objects that can pierce or otherwise destroy or compromise the container

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Oleoresin Capsicum(8023-77-6)	
ACGIH	N/A
OSHA	N/A

Isopropyl Alcohol(67-63-0)	
ACGIH TWA(ppm)	200 ppm
ACGIH STEL(ppm)	400 ppm

OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
OSHA PEL (TWA) (ppm)	440 ppm

Propylene Glycol (57–55–6)	
ACGIH TWA(ppm)	N/A
OSHA PEL (TWA) (mg/m ³)	N/A
OSHA PEL (TWA) (ppm)	N/A

Engineering Controls:

- Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Provide adequate ventilation.

Protective measures and protective equipment:

- protective goggles(chemical or safety goggles, gloves(protective oil and chemical gloves),
- Suitable protective clothing
- Use NIOSH/MSHA approved chemical/mechanical type filter system to remove a combination of particles, gas and vapors. Use air line, if necessary

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

IDENTIFIER	PROPERTIES
Appearance	Amber to light red liquid
Flammability	Non-flammable
Explosive limits	Not applicable
Odor	Bitter, pungent, highly irritating odor
Vapor pressure @ 70F	71 PSIA
Vapor density	3.04 AIR=1
PH	4 – 6
Relative density	0.9 H ₂ O=1
Melting point	No data available
Freezing point	No data available
Solubility(ies)	100%
Initial boiling point	190F
Boiling Range	190-352F

Flash point	No data available
Evaporation rate	Ev. Rate< 1 ETHER=1
Flammability	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

- Will react to strong acids, alkalis, organic acid anhydrides, oxidizing materials, sodium, potassium and magnesium.

Chemical Stability:

- Stable at ambient temperatures
- Hazardous polymerization will not occur
- No Hazardous decomposition product(non-thermal)

Other:

This substance can form explosive peroxides on contact with Strong oxidizers, finely divided alkaline metals, strong acids and strong alkalis.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity: Strong skin and eye irritant. Oral LD 50 (RAT) <5 GM/KG not toxic per 16 CFR, Section 1500.3 (5)

Primary routes of entry: Inhalation, skin, ingestion.

Signs and symptoms of exposure: Respiratory and skin irritation. High inhaled amounts can cause dizziness, skin contact can cause local irritation, or general allergic reaction in sensitive individuals.

Existing conditions aggravated by exposure: Certain allergies in sensitive individuals.

Exposure limits (for ingredients):

Isopropyl alcohol: OSHA (TWA) 400 ppm, (STEL) 500 ppm

Target organs (for ingredients):

Isopropyl alcohol	Ocular, gas
Oleoresin capsicum:	Irritant, allergen, ocular
Propylene glycol	Gas

SECTION 12: ECOLOGICAL INFORMATION

No specific ecological data is available for this product. Please refer to Section 6 for information regarding accidental releases

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in a safe manner in accordance with local, state and federal regulations. Container under pressure, never drill, puncture or burn after use. Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT:

Transport document description(ADR):	:	ID8000Consumer commodity 9
UN-No.(DOT)	:	ID8000
Proper ship name(DOT)	:	Consumer commodity
Hazard classes(DOT)	:	9 – Class 9 – Misc. hazardous materials CFR 173.140
Hazard labels (DOT)	:	9 – Class 9 – Misc. dangerous materials



DOT packaging exceptions (49 CFR 173.xxx)	:	167
DOT packaging non bulk (49 CFR 173.xxx)	:	167
DOT packaging bulk (49 CFR 173.xxx)	:	none
DOT Quantity limitations		
passenger/aircraft/rail bulk (49 CFR 173.27)	:	30kg
DOT Quantity limitations cargo aircraft only (49 CFR 173.75)	:	30 kg gross

Transport by sea	:	No additional information available
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Air Transport

UN-No.(IATA)	:	8000
Proper shipping name(IATA)	:	Consumer commodity
Class(IATA)	:	9 – Miscellaneous dangerous goods

SECTION 15: REGULATORY INFORMATION

TOXIC SUBSTANCE CONTROL ACT (TSCA): All ingredients are on the TSCA Inventory or are not required to be listed on the TSCA Inventory.

SECTION 16: OTHER INFORMATION

Creation date	:	October 1, 2015
Other information	:	None