

# Safety Data Sheets

## for ION VITAL MitoVolt Kit

### 100X JC-10 in DMSO



#### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture

Product Name: 100X JC-10 in DMSO

Catalog Numbers: 5100 | 5110

Company/Undertaking Identification

Ion Biosciences  
3055 Hunter Road, Box 3  
San Marcos, TX 78666  
+1 512.957.9123

24 hour Emergency Response

866.536.0631  
301.431.8585  
+1 301.431.8585 (Outside the U.S.)  
For Research Use Only. Not for use in diagnostic procedures.

#### SECTION 2: Hazards Identification

GHS - Classification

**Signal word:** Warning  
**Health Hazards:** None.  
**Hazard statements:** H227 - Combustible liquid.

**Skin:** Slightly hazardous, irritant and permeator  
**Inhalation:** Slightly hazardous, lung irritant  
**Ingestion:** Slightly hazardous

Precautionary Statements

**Prevention:** P210 - Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. P280 - Wear protective gloves/ eye protection/ face protection.  
**Response:** P370+P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
**Storage:** P403+P235 - Store in a well-ventilated place. Keep cool.  
**Disposal:** P501 - Dispose of contents/ container to an approved waste disposal plant.

Specific Effects

**Carcinogenic effects:** None.  
**Mutagenic effects:** None.  
**Reproductive toxicity:** None.  
**Sensitization:** None.  
**Target organ effects:** May cause damage through prolonged exposure.

Principle Routes of Exposure

HMIS

Potential Health Effects

**Eyes:** Slightly hazardous, irritant

Health	0
Flammability	4
Reactivity	0

#### SECTION 3: Composition/Information on Ingredients

Handle all chemicals with caution.

Component	CAS-No	EINECS-No	Weight%
JC-10	5563-28-0	-	Withheld
DMSO	67-68-5	200-64-3	Withheld

#### SECTION 4: First Aid Measures

**Skin contact:** Take off immediately all contaminated clothing. Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.

**Inhalation:** Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

**Most important symptoms and effects, both acute and delayed:**  
H302 - Harmful if swallowed, H316 - Causes mild skin irritation, H372 - Causes damage to organs through prolonged or repeated exposure, H412 - Harmful to aquatic life with long lasting effects.

**Ingestion:** After swallowing: make victim drink water (two glasses at most). If symptoms persist, call a physician. Do not induce vomiting without medical advice.

**Notes to physician:** Treat symptomatically.

## SECTION 5: Firefighting Measures

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### Extinguishing Media

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide (CO<sub>2</sub>) Foam.

**Unsuitable extinguishing media:** Do not use water jet.

**Specific hazards arising from the chemical:** Carbon oxides, Sulfur oxides. Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapors possible in the event of fire.

**Advice for firefighters:** Wear self-contained breathing apparatus

## SECTION 6: Accidental Release Measures

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**Personal precautions, protective equipment and emergency procedures:** Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. See Section 8 for more detail.

**Methods and material for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste.

**Reference to other sections:** See section 8 and 12 for more information.

**Environmental precautions:** Do not let product enter drains.

## SECTION 7: Handling and Storage

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**Handling:** Always wear recommended Personal Protective Equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

**Conditions for safe storage, including any incompatibilities:** Keep tightly closed in a dry, cool and well-ventilated place.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

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### Control Parameters

#### Exposure limits:

OSHA PEL	OSHA PEL	ACGIH OEL	ACGIH OEL
None	None	250ppm	None

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection:** Impervious gloves.

**Eye protection:** Wear safety glasses with side shields (or goggles).

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** Do not allow material to contaminate ground water system. Prevent product from entering drains or waterways whenever possible.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Form:** Liquid.

**Appearance:** Clear orange colored solution.

**Odor:** No data available.

**Odor threshold:** No data available.

**Boiling point/boiling range:** °C No data available; °F No data available.

**Melting point/melting range:** °C No data available; °F No data available.

**Flash point:** °C No data available; °F No data available.

**Autoignition temperature:** °C No data available; °F No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Oxidizing properties:** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Water solubility:** No data available.

**pH:** No data available.

## SECTION 10: Stability and Reactivity

**Reactivity:** Forms explosive mixtures with air on intense heating.

**Stability:** Stable under normal conditions.

**Materials to avoid:** Various plastics, metals

**Possibility of hazardous reactions:** None under normal use conditions.

**Hazardous decomposition products:** None under normal use conditions.

**Polymerization:** Hazardous polymerization does not occur.

**Conditions to avoid:** Strong heating.

**Hazardous decomposition products:** In the event of fire, see section 5.

## SECTION 11: Toxicological Information

**Acute Toxicity:**

Principle Routes of Exposure

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
DMSO	28300mg/kg	40000mg/kg	4h—5.33mg/

**Skin:** (Rabbit) Slight irritation –4h

**Inhalation:** Harmful by inhalation.

**Ingestion:** Harmful if swallowed.

**Carcinogenic effects:** None.

**Mutagenic effects:** None.

**Reproductive toxicity:** None.

**Sensitization:** None.

Potential Health Effects

**Eyes:** (Rabbit) Slight irritation –24h

## SECTION 12: Ecological Information

**Ecotoxicity:** Zebra fish (25,000mg/L-96h), Water flea (24,600mg/L-48h), algae (17000mg/L-72h)

**Chronic aquatic toxicity:** No data available.

**Mobility:** No data available.

**Biodegradation:** Not readily biodegradable.

**Bioaccumulation:** No data available.

## SECTION 13: Disposal Considerations

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**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal techniques.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

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**IATA/ADR/DOT-US/IMDG:** Not Classified as dangerous in the meaning of transport regulations.

**Proper shipping name:** No dangerous good in sense of these transport regulations.

**Hazard class:** None.

**Subsidiary class:** None.

**Packing group:** None.

**UN-No:** None.

**Environmental hazards:** None.

## SECTION 15: Regulatory Information

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### US Federal Regulations

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contain HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** D2B—Toxic materials

## SECTION 16: Other Information

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For Research Use Only. Not for use in diagnostic procedures.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

# Safety Data Sheets

## for ION VITAL MitoVolt Kit

### Dye-Load Solution



#### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture

Product Name: Dye-Load Solution

Catalog Numbers: 5100

Company/Undertaking Identification

24 hour Emergency Response

Ion Biosciences

866.536.0631

3055 Hunter Road, Box 3

301.431.8585

San Marcos, TX 78666

+1 301.431.8585 (Outside the U.S.)

#### SECTION 2: Hazards Identification

GHS - Classification

Signal word: None.

Health Hazards: Not hazardous.

Physical Hazards: Not hazardous.

Environmental Hazards: Not hazardous.

Hazard statements: None.

Precautionary Statements

Prevention: None.

Response: None.

Storage: None.

Disposal: None.

Potential Health Effects

Eyes: No data available.

Skin: No data available.

Inhalation: No data available.

Ingestion: No data available.

Specific Effects

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

Target organ effects: No data available.

HMIS

Health	0
Flammability	0
Reactivity	0

#### SECTION 3: Composition/Information on Ingredients

Handle all chemicals with caution.

Component	CAS-No	EINECS-No	Weight%
Dye-Load Solution	-	-	Withheld

#### SECTION 4: First Aid Measures

**Skin contact:** Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

**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.

**Ingestion:** Get medical advice/attention if you feel unwell. Rinse mouth.

**Inhalation:** Get medical advice/attention if you feel unwell.

**Most important symptoms and effects, both acute and delayed:** No data available.

**Notes to physician:** Treat symptomatically.

**Indication of any immediate medical attention and special treatment needed:** No data available.

## SECTION 5: Firefighting Measures

### Extinguishing Media

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide (CO<sub>2</sub>) Foam.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** Not known.

**Advice for firefighters:** Standard procedure for chemical fires.

## SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Ensure adequate ventilation. Avoid breathing vapors, mist or gas. Always wear recommended Personal Protective Equipment. See Section 8 for more detail.

**Methods and material for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste.

**Reference to other sections:** See section 8 for more information.

**Environmental precautions:** No special environmental precautions required.

## SECTION 7: Handling and Storage

**Handling:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for safe storage, including any incompatibilities:** Keep in a dry, cool and well-ventilated place.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

### Control Parameters

**Exposure limits:**

**Engineering measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before

OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
None	None	None	None

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection:** Wear suitable chemical-resistant gloves.

**Eye protection:** Wear safety glasses with side shields (or goggles).

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** No special environmental precautions required.

breaks and at the end of workday.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Form:** Liquid.

**Appearance:** Clear solution.

**Odor:** No data available.

**Odor threshold:** No data available.

**Boiling point/boiling range:** °C No data available; °F No data available.

**Melting point/melting range:** °C No data available; °F No data available.

**Flash point:** °C No data available; °F No data available.

**Autoignition temperature:** °C No data available; °F No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Oxidizing properties:** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Water solubility:** No data available.

**pH:** 7.3

## SECTION 10: Stability and Reactivity

**Reactivity:** No data available.

**Stability:** Stable under normal conditions.

**Materials to avoid:** No data available.

**Possibility of hazardous reactions:** No data available.

**Hazardous decomposition products:** No data available.

**Polymerization:** Hazardous polymerization does not occur.

**Conditions to avoid:** No data available.

## SECTION 11: Toxicological Information

**Acute Toxicity:**

Principle Routes of Exposure

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Dye-Load Solution	No data	No data	No data

**Skin:** No data available.

**Inhalation:** No data available.

**Ingestion:** No data available.

**Carcinogenic effects:** No data available.

**Mutagenic effects:** No data available.

**Reproductive toxicity:** No data available.

**Sensitization:** No data available.

**Additional Information:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

**Eyes:** No data available.

## SECTION 12: Ecological Information

**Ecotoxicity:** Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**Chronic aquatic toxicity:** No data available.

**Mobility:** No data available.

**Biodegradation:** No data available.

**Bioaccumulation:** No data available.

## SECTION 13: Disposal Considerations

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**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal techniques.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

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**IATA/ADR/DOT-US/IMDG:** Not Classified as dangerous in the meaning of transport regulations.

**Proper shipping name:** None.

**Hazard class:** None.

**Subsidiary class:** None.

**Packing group:** None.

**UN-No:** None.

**Environmental hazards:** None.

## SECTION 15: Regulatory Information

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### US Federal Regulations

**SARA 313:** This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contain HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** Non-controlled.

## SECTION 16: Other Information

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For Research Use Only. Not for use in diagnostic procedures.

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THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"



# Safety Data Sheets

## for ION VITAL MitoVolt Kit

### Masking Solution



#### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture

Product Name: Masking Solution

Catalog Numbers: 5100

Company/Undertaking Identification

24 hour Emergency Response

Ion Biosciences

866.536.0631

3055 Hunter Road, Box 3

301.431.8585

San Marcos, TX 78666

+1 301.431.8585 (Outside the U.S.)

#### SECTION 2: Hazards Identification

GHS - Classification

Signal word: None.

Health Hazards: Not hazardous.

Physical Hazards: Not hazardous.

Environmental Hazards: Not hazardous.

Hazard statements: None.

Precautionary Statements

Prevention: None.

Response: None.

Storage: None.

Disposal: None.

Potential Health Effects

Eyes: No data available.

Skin: No data available.

Inhalation: No data available.

Ingestion: No data available.

Specific Effects

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

Target organ effects: No data available.

HMIS

Health	0
Flammability	0
Reactivity	0

#### SECTION 3: Composition/Information on Ingredients

Handle all chemicals with caution.

Component	CAS-No	EINECS-No	Weight%
Masking Solution	-	-	Withheld

#### SECTION 4: First Aid Measures

**Skin contact:** Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

**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.

**Ingestion:** Get medical advice/attention if you feel unwell. Rinse mouth.

**Inhalation:** Get medical advice/attention if you feel unwell.

**Most important symptoms and effects, both acute and delayed:** No data available.

**Notes to physician:** Treat symptomatically.

**Indication of any immediate medical attention and special treatment needed:** No data available.

## SECTION 5: Firefighting Measures

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### Extinguishing Media

**Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide (CO<sub>2</sub>) Foam.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** Not known.

**Advice for firefighters:** Standard procedure for chemical fires.

## SECTION 6: Accidental Release Measures

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**Personal precautions, protective equipment and emergency procedures:** Ensure adequate ventilation. Avoid breathing vapors, mist or gas. Always wear recommended Personal Protective Equipment. See Section 8 for more detail.

**Methods and material for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste.

**Reference to other sections:** See section 8 for more information.

**Environmental precautions:** No special environmental precautions required.

## SECTION 7: Handling and Storage

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**Handling:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Conditions for safe storage, including any incompatibilities:** Keep in a dry, cool and well-ventilated place.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

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### Control Parameters

**Exposure limits:**

**Engineering measures:** Handle in accordance with good

OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
None	None	None	None

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection:** Wear suitable chemical-resistant gloves.

**Eye protection:** Wear safety glasses with side shields (or goggles).

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** No special environmental precautions required.

industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Form:** Liquid.

**Appearance:** Clear, red colored solution.

**Odor:** No data available.

**Odor threshold:** No data available.

**Boiling point/boiling range:** °C No data available; °F No data available.

**Melting point/melting range:** °C No data available; °F No data available.

**Flash point:** °C No data available; °F No data available.

**Autoignition temperature:** °C No data available; °F No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Oxidizing properties:** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Water solubility:** No data available.

**pH:** 7.3

## SECTION 10: Stability and Reactivity

**Reactivity:** No data available.

**Stability:** Stable under normal conditions.

**Materials to avoid:** No data available.

**Possibility of hazardous reactions:** No data available.

**Hazardous decomposition products:** No data available.

**Polymerization:** Hazardous polymerization does not occur.

**Conditions to avoid:** No data available.

## SECTION 11: Toxicological Information

**Acute Toxicity:**

Principle Routes of Exposure

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Masking Solution	No data	No data	No data

**Skin:** No data available.

**Inhalation:** No data available.

**Ingestion:** No data available.

**Carcinogenic effects:** No data available.

**Mutagenic effects:** No data available.

**Reproductive toxicity:** No data available.

**Sensitization:** No data available.

**Additional Information:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

**Eyes:** No data available.

## SECTION 12: Ecological Information

**Ecotoxicity:** Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**Chronic aquatic toxicity:** No data available.

**Mobility:** No data available.

**Biodegradation:** No data available.

**Bioaccumulation:** No data available.

## SECTION 13: Disposal Considerations

---

**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal techniques.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

---

**IATA/ADR/DOT-US/IMDG:** Not Classified as dangerous in the meaning of transport regulations.

**Proper shipping name:** None.

**Hazard class:** None.

**Subsidiary class:** None.

**Packing group:** None.

**UN-No:** None.

**Environmental hazards:** None.

## SECTION 15: Regulatory Information

---

### US Federal Regulations

**SARA 313:** This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contain HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** Non-controlled.

## SECTION 16: Other Information

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