

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : MetriCide™ OPA Plus

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : High Level Disinfectant
Restrictions on use : None known

1.4. Supplier's details

Manufacturer

METREX® RESEARCH
28210 Wick Road
Romulus, MI., 48174-U.S.A.
T 1-800-841-1428 (Customer Service)

1.5. Emergency phone number

Emergency number : (Chemical Spills, Leaks, Fire, Exposure or Accident only): CHEMTREC 1-800-424-9300 (in the US), 1-703-527-3887 (Outside the US)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Skin sensitization, Category 1A	H317	May cause an allergic skin reaction.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
Precautionary statements (GHS US) : P261 - Avoid breathing mist, vapors, spray.
P264 - Wash hands thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear eye protection, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

P337+P313 - If eye irritation persists: Get medical advice or attention.
P302+P352 - If on skin: Wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Water and non-hazardous ingredients	CAS-No.: 7732-18-5	90-100
Ortho-Phthalaldehyde	CAS-No.: 643-79-8	0.1-<1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice. If experiencing respiratory symptoms: Get immediate medical advice/attention.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash 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 : If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical advice.

4.2. Most important symptoms/effects, acute and delayed

Inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Ortho-Phthalaldehyde belongs to a family of aldehydes that have a potential to cause respiratory sensitization. Symptoms include wheezing, shortness of breath, tightness of the chest and throat, dry mouth and tingling of the mouth and lips.

Skin : May cause moderate irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction.

Eyes : Direct contact with the eyes is likely to be irritating.

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According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

Ingestion	: Ingestion may cause nausea, vomiting and diarrhea. May discolor the tissues of the mouth, throat and stomach.
Chronic symptoms	: None known.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically. Obtain medical attention if breathing difficulty persists.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None.

5.2. Specific hazards arising from the chemical

Fire hazard	: This product is not classified as flammable or combustible.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Cool down the containers exposed to heat with a water spray. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Do not touch or walk on the spilled product. Keep unnecessary and unprotected personnel away from the spillage.
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For non-emergency personnel

Emergency procedures	: Avoid contact with eyes, skin and clothing. Wear suitable protective clothing. Avoid breathing vapors. Ventilate spillage area.
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For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment.
Environmental precautions	: Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment	: Stop leak if safe to do so.
Other information	: Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with eyes, skin and clothing. Wear personal protective equipment. Avoid breathing vapors. Do not form mists, sprays, or aerosols of this product. Ensure adequate ventilation.
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Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store at room temperature. Keep container tightly closed.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Ortho-Phthalaldehyde (643-79-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	o-Phthalaldehyde
ACGIH® TLV® TWA	25 µg/100cm ² (SL - Surface limit)
ACGIH® TLV® C	0.6 µg/m ³ (V - Vapor fraction)
	0.0001 ppm (V - Vapor fraction)
Remark (ACGIH)	TLV® Basis: Eye, skin & resp tract irr; resp sens; anaphylaxis. Notations: Skin; DSEN; RSEN
Regulatory reference	ACGIH 2025

8.2. Appropriate engineering controls

Appropriate engineering controls : Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
Wear impervious gloves. Contact your glove supplier for selection assistance.
Eye protection:
Wear safety goggles or other eye protection to prevent eye contact.
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Appearance : Clear bluish green. Liquid.
Color : Clear bluish green
Odor : Slight
Odor threshold : No data available
pH : 7 – 7.8

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According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

Melting point	: Not applicable
Freezing point	: 0 °C (32 °F)
Boiling point	: 100 °C (212 °F)
Flash point	: Not flammable
Relative evaporation rate (butyl acetate=1)	: Same as water
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: Same as water
Relative vapor density at 20°C	: Same as water
Relative density	: > 1
Solubility	: 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
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

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

Avoid high temperatures. Protect from sunlight.

10.5. Incompatible materials

Keep away from oxidizers, strong acids and strong bases.

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

MetriCide™ OPA Plus	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	5000 mg/kg body weight

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According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

Water and non-hazardous ingredients (7732-18-5)

LD50 oral rat	90000 mg/kg
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Ortho-Phthalaldehyde (643-79-8)

LD50 oral rat	178.46 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
pH: 7 – 7.8

Water and non-hazardous ingredients (7732-18-5)

pH	7
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Serious eye damage/irritation : Causes serious eye irritation.
pH: 7 – 7.8

Water and non-hazardous ingredients (7732-18-5)

pH	7
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Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

Ortho-Phthalaldehyde (643-79-8)

STOT-single exposure	Causes damage to organs.
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Additional information	lungs
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STOT-repeated exposure : Not classified

Ortho-Phthalaldehyde (643-79-8)

Additional information	lungs
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STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard : Not classified

Inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Ortho-Phthalaldehyde belongs to a family of aldehydes that have a potential to cause respiratory sensitization. Symptoms include wheezing, shortness of breath, tightness of the chest and throat, dry mouth and tingling of the mouth and lips.

Skin : May cause moderate irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction.

Eyes : Direct contact with the eyes is likely to be irritating.

Ingestion : Ingestion may cause nausea, vomiting and diarrhea. May discolor the tissues of the mouth, throat and stomach.

Chronic symptoms : None known.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

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According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Ortho-Phthalaldehyde (643-79-8)	
LC50 - Fish [1]	4.43 mg/l Quantitative structure-activity relationship (QSAR)
EC50 - Crustacea [1]	0.11 mg/l Daphnia magna (Water flea)
EC50 96h - Algae [1]	0.184 mg/l Pseudokirchneriella subcapitata

12.2. Persistence and degradability

MetriCide™ OPA Plus	
Persistence and degradability	Rapidly degradable
Water and non-hazardous ingredients (7732-18-5)	
Persistence and degradability	Not applicable.
Ortho-Phthalaldehyde (643-79-8)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Water and non-hazardous ingredients (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Waste treatment methods : Dispose of in accordance with applicable federal, state, and local regulations.
Sewage disposal recommendations : Do not dispose of waste into sewer. Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. If recycling is not available, discard in accordance with hospital policy.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated

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DOT	TDG	IMDG	IATA
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

MetriCide™ OPA Plus

SARA Section 311/312 Hazard Classes

Refer to Section 2 for OSHA Hazard Classification.

All components of this product are listed, or excluded from listing, 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

CANADA

Water and non-hazardous ingredients (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Ortho-Phthalaldehyde (643-79-8)

Listed on the Canadian DSL (Domestic Substances List)

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According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

EU-Regulations

No additional information available

National regulations

Water and non-hazardous ingredients (7732-18-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. 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

SECTION 16 Other information

According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

Revision date : 11/03/2025

Full text of hazard classes and H-statements

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Indication of changes:

New format.

Safety Data Sheet (SDS), USA

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