

# SAFETY DATA SHEET



Revision date: 20-May-2024

Revision Number 3

## Section 1: Identification

### Product identifier

**Product Name** DC Duplox-F  
**Product Code(s)** 000000054108

### Other means of identification

**UN number or ID number** 3265

### Recommended use of the chemical and restrictions on use

**Recommended use** Foaming peracid disinfectant.

**Uses advised against** No information available.

**Illicit Drug Precursors/Reagents** This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling, and storing these substances.

**Chemicals of Security Concern** This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

### Details of manufacturer or importer

#### Supplier

Ixom Operations Pty Ltd  
ABN: 51 600 546 512  
Level 8, 1 Nicholson Street  
Melbourne 3000  
Australia

Telephone Number: +61 3 9906 3000

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

### GHS Classification

<b>Corrosive to metals</b>	Category 1
<b>Skin corrosion/irritation</b>	Category 1 Sub-category A
<b>Serious eye damage/eye irritation</b>	Category 1
<b>Specific target organ toxicity (single exposure)</b>	Category 3

### Label elements

Corrosion  
Exclamation mark**Signal word**  
DANGER**Hazard statements**

H290 - May be corrosive to metals  
 H314 - Causes severe skin burns and eye damage  
 H318 - Causes serious eye damage  
 H335 - May cause respiratory irritation

**Precautionary Statements - Prevention**

Keep only in original packaging.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wash hands thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves/clothing and eye/face protection.  
 Use personal protective equipment as required.  
 Avoid release to the environment.

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS).  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor/physician.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 Immediately call a POISON CENTER or doctor/physician.  
 Wash contaminated clothing before reuse.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 Call a POISON CENTER or doctor/physician if you feel unwell.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 Absorb spillage to prevent material damage.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed.  
 Store locked up.  
 Store in corrosion resistant container with a resistant inner liner.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification**

Harmful to aquatic life.

**Section 3: Composition and information on ingredients**

Chemical name	CAS No.	Weight-%
Acetic acid	64-19-7	10-<30
Hydrogen peroxide	7722-84-1	1-<10
Benzenesulfonic acid, C10-16-alkyl derivatives	68584-22-5	1-<10
Peracetic acid	79-21-0	1-<5
Acid salts	-	1-<5
Other component(s)	-	to 100

**Section 4: First aid measures****Description of first aid measures**

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.
<b>Skin contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Seek immediate medical attention/advice.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately. Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. See section 8 for more information.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning. Coughing and/ or wheezing. Difficulty in breathing.
<b>Effects of Exposure</b>	No information available.

**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically. Can cause corneal burns.
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**Section 5: Firefighting measures****Suitable Extinguishing Media**

<b>Suitable extinguishing media</b>	Dry chemical, CO2, water spray or regular foam.
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<b>Unsuitable extinguishing media</b>	No information available.
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**Specific hazards arising from the chemical**

<b>Specific hazards arising from the chemical</b>	Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Cool containers with flooding quantities of water until well after fire is out.
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**Special protective actions for fire-fighters**

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. Move containers from fire area if you can do it without risk.
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<b>Hazchem code</b>	2X
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## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Do not eat, drink or smoke when using this product. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. See section 8 for more information.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

## Section 7: Handling and storage

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Do not eat, drink or smoke when using this product. Use personal protection equipment. Keep out of reach of children.

**General hygiene considerations** Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from foodstuffs. Keep out of the reach of children. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

**Incompatible materials** Acids. Bases. Reducing agent. Metals. Metal salts. Strong alkalis. Permanganates.

## Section 8: Exposure controls and personal protection

### Control parameters

**Exposure Limits** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Chemical name	Australia	New Zealand	ACGIH TLV
Acetic acid 64-19-7	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>	TWA: 10 ppm STEL: 15 ppm
Hydrogen peroxide 7722-84-1	TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup>	TWA: 1 ppm
Peracetic acid 79-21-0	-	-	STEL: 0.4 ppm inhalable fraction and vapor

Chemical name	European Union	United Kingdom	Germany DFG
Acetic acid 64-19-7	-	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 20 ppm STEL: 50 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> Peak: 20 ppm Peak: 50 mg/m <sup>3</sup>
Hydrogen peroxide 7722-84-1	-	TWA: 1 ppm TWA: 1.4 mg/m <sup>3</sup> STEL: 2 ppm STEL: 2.8 mg/m <sup>3</sup>	TWA: 0.5 ppm TWA: 0.71 mg/m <sup>3</sup> Peak: 0.5 ppm Peak: 0.71 mg/m <sup>3</sup>
Peracetic acid 79-21-0	-	-	TWA: 0.1 ppm TWA: 0.32 mg/m <sup>3</sup> Peak: 0.1 ppm Peak: 0.32 mg/m <sup>3</sup>

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls

#### **Engineering controls**

Ensure that eyewash stations and safety showers are close to the workstation location.  
Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

### Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



<b>Eye/face protection</b>	Tight sealing safety goggles. If splashes are likely to occur:. Face protection shield.
<b>Skin and body protection</b>	Boots. Overalls. If there is a risk of contact:. Chemical resistant apron.
<b>Hand protection</b>	Elbow-length impervious gloves.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.
<b>Thermal hazards</b>	No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	No information available
<b>Color</b>	No information available
<b>Odor</b>	No information available
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	<7	
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	
<b>Boiling point / boiling range</b>	No data available	None known
<b>Flash point</b>	Not applicable	
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	Not applicable	
<b>Lower flammability or explosive limits</b>	Not applicable	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	ca. 1	
<b>Water solubility</b>	Miscible in water	
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	Not applicable	None known
<b>Decomposition temperature</b>	No data available	
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

### Other information

## Section 10: Stability and reactivity

**Reactivity****Reactivity** Reacts with strong alkalis. Reacts with metals.**Chemical stability****Stability** Stable under normal conditions.**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Possibility of hazardous reactions****Possibility of hazardous reactions** Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.**Conditions to avoid****Conditions to avoid** Heat. Contact with foodstuffs. Do not contaminate food or feed stuffs.**Incompatible materials****Incompatible materials** Acids. Bases. Reducing agent. Metals. Metal salts. Strong alkalis. Permanganates.**Hazardous decomposition products****Hazardous decomposition products** Carbon oxides. Oxygen.**Section 11: Toxicological information****Information on likely routes of exposure****Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:**Inhalation** Irritating to respiratory system.**Eye contact** Causes serious eye damage.**Skin contact** Causes severe burns.**Ingestion** Can burn mouth, throat, and stomach.**Symptoms** May cause redness and tearing of the eyes. Erythema (skin redness). Burning. Coughing and/ or wheezing. Difficulty in breathing. Irritation/Corrosion.**Acute toxicity****Numerical measures of toxicity - Product Information****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic acid	= 3310 mg/kg ( Rat )	= 1060 mg/kg ( Rabbit )	= 11.4 mg/L ( Rat ) 4 h

Hydrogen peroxide	= 1518 mg/kg ( Rat )	= 9200 mg/kg ( Rabbit )	= 2000 mg/m <sup>3</sup> ( Rat ) 4 h
Benzenesulfonic acid, C10-16-alkyl derivatives	= 775 mg/kg ( Rat )	= 2000 mg/kg ( Rabbit )	-
Peracetic acid	= 1540 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	= 213 mg/m <sup>3</sup> ( Rat ) 4 h = 186 mg/m <sup>3</sup> ( Rat ) 4 h

See section 16 for terms and abbreviations

### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Causes severe burns. Classification is based on mixture calculation methods based on component data.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage. Classification is based on mixture calculation methods based on component data.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen. Refer to 'Chronic effects' section below.

Chemical name	Australia	European Union	IARC
Hydrogen peroxide - 7722-84-1	-	-	Group 3

#### **IARC (International Agency for Research on Cancer)**

Group 3 - Not Classifiable as to Carcinogenicity in Humans

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation. Classification is based on mixture calculation methods based on component data.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Chronic effects:</b>	Hydrogen peroxide is an IARC Group 3 carcinogen (not classifiable as to human carcinogenicity). Chronic overexposure to acetic acid may result in pharyngitis, catarrhal bronchitis, and erosion of the teeth.

## **Section 12: Ecological information**

### **Ecotoxicity**

**Aquatic ecotoxicity** Keep out of waterways. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetic acid	-	LC50: =79mg/L (96h, Pimephales promelas)	-	EC50: =65mg/L (48h, Daphnia magna)



		LC50: =75mg/L (96h, Lepomis macrochirus)		
Hydrogen peroxide	-	LC50: =16.4mg/L (96h, Pimephales promelas) LC50: 18 - 56mg/L (96h, Lepomis macrochirus) LC50: 10.0 - 32.0mg/L (96h, Oncorhynchus mykiss)	-	EC50: 18 - 32mg/L (48h, Daphnia magna)
Benzenesulfonic acid, C10-16-alkyl derivatives	-	LC50: =3mg/L (96h, Oncorhynchus mykiss)	-	EC50: =2.9mg/L (48h, Daphnia magna)
Peracetic acid	-	LC50: =1.1mg/L (96h, Lepomis macrochirus)	-	-

**Terrestrial ecotoxicity** There is no data for this product.

#### Persistence and degradability

**Persistence and degradability** No information available.

#### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

#### Component Information

Chemical name	Partition coefficient
Acetic acid	-0.17
Benzenesulfonic acid, C10-16-alkyl derivatives	2
Peracetic acid	-0.46

#### Mobility

**Mobility** No information available.

#### Other adverse effects

**Other adverse effects** No information available.

### **Section 13: Disposal considerations**

#### Waste treatment methods

**Waste from residues/unused products** Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.

**Contaminated packaging** Do not reuse empty containers.

See section 8 for more information

### **Section 14: Transport information**

**ADG** Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN number or ID number** 3265  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS PERACETIC ACID)

Transport hazard class(es) 8  
Packing group II  
Hazchem code 2X

**IATA** Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 3265  
UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS PERACETIC ACID)  
Transport hazard class(es) 8  
Packing group II

**IMDG** Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 3265  
UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS PERACETIC ACID)  
Packing group II  
IMDG EMS Fire F-A  
IMDG EMS Spill S-B  
Marine pollutant Not applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
No information available

## Section 15: Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

##### Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

#### **Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** 6

#### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Acetic acid - 64-19-7	Present	-
Hydrogen peroxide - 7722-84-1	Present	-
Benzenesulfonic acid, C10-16-alkyl derivatives - 68584-22-5	Present	-
Peracetic acid - 79-21-0	Present	-

#### **Illicit Drug Precursors/Reagents**

This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling, and storing these substances.

Chemical name	Illicit Drug Precursors/Reagents
Acetic acid - 64-19-7	Category 3

#### Chemicals of Security Concern

This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

Chemical name	Chemicals of Security Concern	Additional information
Hydrogen peroxide - 7722-84-1	Present High risk	Precursors to homemade explosives

#### National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Acetic acid - 64-19-7	10 tonne/yr Threshold category 1

#### International Inventories

##### AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

##### NZIoC

All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

##### TSCA

Contact supplier for inventory compliance status.

##### DSL/NDSL

Contact supplier for inventory compliance status.

##### EINECS/ELINCS

Contact supplier for inventory compliance status.

##### ENCS

Contact supplier for inventory compliance status.

##### IECSC

Contact supplier for inventory compliance status.

##### KECL

Contact supplier for inventory compliance status.

##### PICCS

Contact supplier for inventory compliance status.

#### Legend:

**AIIC**- Australian Inventory of Industrial Chemicals

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### Section 16: Other information

**Reason(s) For Issue:** Revised Primary SDS  
Updated Formulation  
Change in Hazardous Chemical Classification  
Change to Transport Information  
Change in Personal Protective Equipment (PPE)

**Prepared By** This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision date:** 20-May-2024

**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:  
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances  
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances  
STOT: Specific Target Organ Toxicity  
ATE: Acute Toxicity Estimate  
LC50: 50% Lethal Concentration  
LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

**End of Safety Data Sheet**