


## 1. Identification

<b>Product identifier</b>	<b>INOmax®</b>
<b>Other means of identification</b>	
<b>Synonyms</b>	INOmax® (800 ppm) * Nitric Oxide (0.08%) Blended with Nitrogen (99.92%) * INOflo®
<b>Item Code</b>	NO123
<b>SDS No.</b>	NO123
<b>Recommended use of the chemical and restrictions on use</b>	
<b>Recommended use</b>	Pharmaceutical grade nitric oxide for inhalation balanced in nitrogen. Nitric oxide is a pulmonary vasodilator and the active substance in these products. The gaseous blend of nitric oxide and nitrogen gas is supplied in aluminum cylinders as a compressed gas. INOcal is used in the calibration of medical devices.
<b>Restrictions on use</b>	Not available.
<b>Details of manufacturer or importer</b>	
<b>Supplier:</b>	
<b>Company name</b>	Ikaria Australia Pty Ltd
<b>Address</b>	Ground Floor, 17 Cotham Road Kew VIC 3101 Australia
<b>MANUFACTURER:</b>	
<b>Company name</b>	Mallinckrodt Manufacturing LLC
<b>Address</b>	675 McDonnell Blvd. Hazelwood, MO 63042
<b>Telephone</b>	Customer Fervice +1-314-654-2000 (Worldwide)
<b>e-mail</b>	Brands.SDS@mnk.com
<b>Emergency telephone number</b>	+61 280363166 (Access Code: 335277) Emergency number available in Australia: Available hours and days:

## 2. Hazard(s) identification

<b>Classification of the hazardous chemical</b>	
<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Specific target organ toxicity following single exposure      Category 1 (blood, lung)
<b>Environmental hazards</b>	Not classified.
<b>Label elements, including precautionary statements</b>	
<b>Hazard symbol(s)</b>	 Gas cylinder
<b>Signal word</b>	Warning
<b>Hazard statement(s)</b>	Contains gas under pressure; may explode if heated.
<b>Precautionary statement(s)</b>	
<b>Prevention</b>	Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Wear respiratory protection.
<b>Response</b>	IF exposed: Call a POISON CENTRE or doctor/physician.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.

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

May displace oxygen and cause rapid suffocation. Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Those with pre-existing heart, lung, or blood disorders may be more susceptible to the symptoms of asphyxia. Nitric oxide converts to nitrogen dioxide when exposed to air.

Used in the treatment of prescribed medical disorders. Administration of this gas mixture may be hazardous or contraindicated. Use only under the supervision of an experienced licensed practitioner familiar with the indications for use, dosages, methods, hazards, contraindications, and side effects.

**Supplemental information**

The hazard warnings associated with this product are based on the individual ingredients included in the finished dosage form of the pharmaceutical product. The supplied package insert (approved labeling) provides the necessary drug safety information.

All Mallinckrodt finished products are labeled in compliance with the requirements of the Food and Drug Administration (FDA) and must be used in the prescribed manner. Each package of the finished pharmaceutical product is supplied with a package insert (approved labeling) which provides necessary drug safety information.

**3. Composition/information on ingredients**

**Mixture**

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Nitrogen Nitrogen; Nitrogen NF; LIN; Cryogenic Liquid Nitrogen; Refrigerated Liquid Nitrogen	7727-37-9	>99
NITRIC OXIDE	10102-43-9	<1

**Composition comments**

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

**Description of necessary first aid measures**

**Inhalation**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory tract irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Get medical attention if symptoms persist.

**Skin contact**

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**

Not likely, due to the form of the product. Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur.

**Personal protection for first-aid responders**

If you feel unwell, seek medical advice (show the label where possible). In case of cold burns (frostbite) caused by rapidly expanding gas or vapourizing liquids, get medical attention promptly. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**Symptoms caused by exposure** Headache. Dizziness. Fatigue. Nausea, vomiting. Very high exposure can cause suffocation from lack of oxygen. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect themselves. Coughing. Discomfort in the chest. Shortness of breath. Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). May cause redness and pain. Dermatitis. Prolonged exposure may cause chronic effects.

Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped.

Continued exposure can lead to hypoxia (inadequate oxygen), cyanosis (bluish discoloration of the skin), numbness of the extremities, unconsciousness and death.

**Medical attention and special treatment** Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Frostbite: Do not remove clothes, but flush with copious amounts of lukewarm water. Call an ambulance and continue to flush during transportation to hospital. Do not rub affected area.

## 5. Fire-fighting measures

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### Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Use fire-extinguishing media appropriate for surrounding materials. Use any media suitable for the surrounding fires.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### Specific hazards arising from the chemical

Contents under pressure. Fire or excessive heat may result in rupture of container due to release of significant amounts of gases. Ruptured cylinders may rocket. During fire, gases hazardous to health may be formed such as: Nitrogen oxides. Carbon oxides.

### Special protective equipment and precautions for fire fighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

### Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

### Hazchem code

None.

### General fire hazards

Pressurised container may explode when exposed to heat or flame.

### Specific methods

Cool containers exposed to flames with water until well after the fire is out.

## 6. Accidental release measures

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### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). In the event of a leak evacuate all personnel until ventilation can restore oxygen concentrations to safe levels. Keep away from sources of ignition - No smoking. Keep out of low areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Emergency personnel need self-contained breathing equipment. Local authorities should be advised if significant spillages cannot be contained.

#### For emergency responders

Keep unnecessary personnel away.

### Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

### Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Eliminate sources of ignition. Isolate area until gas has dispersed. Use water spray to reduce vapours or divert vapour cloud drift. Collect spillage. Transfer to a container for disposal. Following product recovery, flush area with water.

## 7. Handling and storage

### Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Oxygen concentration should not fall below 19.5 % at sea level (pO<sub>2</sub> = 135 mmHg). Mechanical ventilation or local exhaust ventilation may be required. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Always wear NIOSH approved, positive pressure air supplied respirator when handling this material. Wear appropriate personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Store in original tightly closed container. Protect against physical damage and/or friction. For storage condition, see finished product label. Store in a well-ventilated place. Protect from sunlight.

## 8. Exposure controls and personal protection

### Control parameters

Follow standard monitoring procedures.

### Occupational exposure limits

#### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
NITRIC OXIDE (CAS 10102-43-9)	TWA	31 mg/m <sup>3</sup> 25 ppm

#### Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value
NITRIC OXIDE (CAS 10102-43-9)	TWA	31 mg/m <sup>3</sup> 25 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
NITRIC OXIDE (CAS 10102-43-9)	TWA	25 ppm

#### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
NITRIC OXIDE (CAS 10102-43-9)	TWA	0.63 mg/m <sup>3</sup> 0.5 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure control banding. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, for example personal protective equipment (PPE)

#### Eye/face protection

Wear safety glasses with side shields (or goggles). Chemical goggles are recommended.

<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves. Thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	If airborne concentrations are above the applicable exposure limits, use an approved respiratory protection. Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Gas.
<b>Form</b>	Compressed gas.
<b>Colour</b>	Colorless - Nitric oxide can produce brownish nitrogen dioxide after reaction with oxygen.
<b>Odour</b>	Odorless in product concentration, may form NO <sub>2</sub> with pungent odor in presence of air.
<b>Odour threshold</b>	0.5 - 5 ppm for NO <sub>2</sub>
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-163.89 °C (-263 °F) @ 1 atm
<b>Initial boiling point and boiling range</b>	-151.67 °C (-241 °F) @ 1 atm
<b>Flash point</b>	Not flammable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not flammable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not flammable.
<b>Flammability limit - upper (%)</b>	Not flammable.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	1.3 kg/l @ NTP (20 °C, 1atm)
<b>Relative density</b>	Relative gas density = 1.04 @ NTP (20 °C, 1atm)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	7.4 ml/100 ml (NO in water at 0 °C)
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not flammable.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Contains gas under pressure; may explode if heated. Nitric oxide converts to nitrogen dioxide when exposed to air.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.

<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid high temperatures. Contact with incompatible materials. Protect against direct sunlight. Low temperatures.
<b>Incompatible materials</b>	Strong oxidising agents. Strong acids. Strong bases. Metals. Metal oxides.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on possible routes of exposure

<b>Inhalation</b>	Suffocation (asphyxiant) hazard - if allowed to accumulate to concentrations that reduce oxygen below safe breathing levels. Prolonged inhalation may be harmful.
<b>Skin contact</b>	May cause frostbite or freezing of skin.
<b>Eye contact</b>	Causes serious eye irritation. Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). Permanent eye damage including blindness could result.
<b>Ingestion</b>	Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms related to exposure** Headache. Dizziness. Fatigue. Nausea, vomiting. Very high exposure can cause suffocation from lack of oxygen. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect themselves. Coughing. Discomfort in the chest. Shortness of breath. Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). May cause redness and pain. Dermatitis.

Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped.

Continued exposure can lead to hypoxia (inadequate oxygen), cyanosis (bluish discoloration of the skin), numbness of the extremities, unconsciousness and death.

**Acute toxicity** May displace oxygen and cause rapid suffocation.

Components	Species	Test Results
NITRIC OXIDE (CAS 10102-43-9)		
<b>Acute</b>		
<b>Inhalation</b>		
<i>Gas</i>		
LC50	Rat	130 ppm, 4 hours
LC50	Rat	115 ppm, 1 Hours

**Skin corrosion/irritation** May cause frostbite or freezing of skin.

**Serious eye damage/irritation** Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn").

### Respiratory or skin sensitisation

**Respiratory sensitisation** Due to lack of data the classification is not possible.

**Skin sensitisation** Due to lack of data the classification is not possible.

**Germ cell mutagenicity** Nitric oxide has demonstrated genotoxicity in Salmonella (Ames Test), human lymphocytes, and after in vivo exposure in rats.

**Carcinogenicity** Due to lack of data the classification is not possible.

Not carcinogenic at inhalation exposures up to 20 ppm in rats for 20 hr/day for up to 2 years. Higher exposures have not been investigated.

**Reproductive toxicity** Due to lack of data the classification is not possible.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** None known.

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	This product has no known eco-toxicological effects. The nitric oxide component of this gas mixture will react with air to form nitrogen dioxide, which in contact with water or moist air will form nitrous and nitric acid.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	
<b>Partition coefficient     n-octanol / water (log Kow)</b>	
Nitrogen	0.67
<b>Mobility in soil</b>	Not available.
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 13. Disposal considerations

<b>Disposal methods</b>	Waste containing this product is classified as Industrial Waste. Do not puncture, incinerate or crush. Waste materials should not be released into the environment. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Residual waste</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Empty gas cylinders should be returned to the vendor for recycling or refilling. Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### ADG

<b>UN number</b>	1956
<b>UN proper shipping name</b>	COMPRESSED GAS, N.O.S. (Nitrogen, Nitric Oxide)
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	No
<b>Hazchem code</b>	2TE
<b>Special precautions for user</b>	Not available.

### RID

<b>UN number</b>	1956
<b>UN proper shipping name</b>	COMPRESSED GAS, N.O.S. (Nitric Oxide, Nitrogen)
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.2 (+13)
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	No
<b>Special precautions for user</b>	Not available.

### IATA

<b>UN number</b>	1956
<b>UN proper shipping name</b>	Compressed gas, n.o.s. (Nitrogen, Nitric Oxide)
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	No
<b>ERG Code</b>	2L
<b>Special precautions for user</b>	Not available.
<b>Other information</b>	
<b>Passenger and cargo     aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

### IMDG

<b>UN number</b>	1956
<b>UN proper shipping name</b>	COMPRESSED GAS, N.O.S. (Nitrogen, Nitric Oxide)

<b>Transport hazard class(es)</b>	
Class	2.2
Subsidiary risk	-
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	
Marine pollutant	No
<b>EmS</b>	F-C, S-V
<b>Special precautions for user</b>	Not available.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

ADG



IATA; IMDG; RID



## 15. Regulatory information

### Safety, health and environmental regulations

#### National regulations

This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

Australia. SUSMP, Sch. 4, Prescription Only Medicine (Standard for Uniform Scheduling of Medicines & Poisons No. 12, Poisons Standard June 2016, June 2016) CAS RN: 10102-43-9  
Name: NITRIC OXIDE Minimum concentration: 10 Operator for minimum concentration: >  
Concentration unit: mg per L or kg.

#### Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.



**Australia Medicines & Poisons Appendix J**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix K**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 10**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 2**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 3**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 4**

NITRIC OXIDE (CAS 10102-43-9)

**Australia Medicines & Poisons Schedule 5**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 6**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 7**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 8**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 9**

Poisons schedule number not allocated.

**High Volume Industrial Chemicals (HVIC)**

Not listed.

**Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)**

Not listed.

**National Pollutant Inventory (NPI) substance reporting list**

NITRIC OXIDE (CAS 10102-43-9)

2000 TONNES/YR Threshold Category: 2B

400 TONNES/YR Threshold Category: 2A

**Prohibited Carcinogenic Substances**

Not regulated.

**Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)**

Not listed.

**Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)**

Not listed.

**Restricted Carcinogenic Substances**

Not regulated.

**International regulations****Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

<b>Issue date</b>	11-November-2016
<b>Revision date</b>	31-October-2019
<b>References</b>	EPA: ACQUIRE database NLM: Hazardous Substances Data Base HSDB® - Hazardous Substances Data Bank National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices US. IARC Monographs on Occupational Exposures to Chemical Agents IARC Monographs. Overall Evaluation of Carcinogenicity
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<b>Revision information</b>	This document has undergone significant changes and should be reviewed in its entirety.