



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Imperial Dry</b>	
<b>Other means of identification</b>		
<b>Product Code</b>	1941	
<b>Recommended use</b>	Automotive Detailing	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Malco Products, Inc.	
<b>Address</b>	361 Fairview Ave Barberton, OH 44203 United States	
<b>Telephone</b>	Phone	800-253-2526
	Fax	330-753-2025
<b>Website</b>	www.malcopro.com	
<b>E-mail</b>	msdsinfo@malcopro.com	
<b>Contact person</b>	Technical Department	
<b>Emergency phone number</b>	Phone	1-800-424-9300
<b>Supplier</b>	Not available.	

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2A
<b>Environmental hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Warning	
<b>Hazard statement</b>	Causes serious eye irritation. Harmful to aquatic life with long lasting effects.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Avoid breathing vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection.	
<b>Response</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical assistance if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs, obtain medical attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.	
<b>Storage</b>	Store away from incompatible materials.	
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements. Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Other hazards</b>	None known.	
<b>Supplemental information</b>	% of the mixture consists of component(s) of unknown acute inhalation toxicity. % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.	

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ethylene Glycol Monobutyl Ether		111-76-2	2.5 - 10
Tomadol 91-6		68439-46-3	2.5 - 10
Isopropanol		67-63-0	1 - 2.5
Other components below reportable levels			90 - 100

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret. #: This substance has been assigned Community workplace exposure limit(s).

**Composition comments** The full text for all R- and H-phrases is displayed in section 16. The full text for all H-statements is displayed in section 16.

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Move to fresh air. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately. Call a POISON CENTER or doctor/physician if you feel unwell. Call a physician if symptoms develop or persist.

### Skin contact

Take off immediately all contaminated clothing. Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Wash off with soap and water. Call a physician or poison control center immediately. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Flush eyes with water as a precaution. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately. Get medical attention if irritation develops and persists. If eye irritation persists: Get medical advice/attention.

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation. Mild skin irritation.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

### General information

In case of shortness of breath, give oxygen. Immediate medical attention is required. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep victim under observation. Keep victim warm.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

### Special protective equipment and precautions for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus. Wear suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.  
**General fire hazards** No unusual fire or explosion hazards noted.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Extinguish all flames in the vicinity. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid contact with eyes. Avoid prolonged exposure. Do not get this material on clothing. When using do not eat or drink. Use only outdoors or in a well-ventilated area. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Wear personal protective equipment. Wash thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** CAUTION Keep locked up. Store locked up. Keep away from heat, sparks and open flame. Store in a closed container away from incompatible materials. Store in original tightly closed container. Keep container tightly closed. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	97 mg/m <sup>3</sup>
		20 ppm
Isopropanol (CAS 67-63-0)	STEL	984 mg/m <sup>3</sup>
		400 ppm
	TWA	492 mg/m <sup>3</sup>
		200 ppm

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	97 mg/m3
		20 ppm
Isopropanol (CAS 67-63-0)	STEL	1230 mg/m3
		500 ppm
	TWA	983 mg/m3
		400 ppm

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) 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 limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. General ventilation normally adequate. Provide eyewash station.

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

**Eye/face protection**

Face-shield. Wear safety glasses with side shields (or goggles). If contact is likely, safety glasses with side shields are recommended. Chemical respirator with organic vapor cartridge and full facepiece. Eye wash fountain is recommended.

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves. Wear protective gloves. Suitable gloves can be recommended by the glove supplier. Not normally needed.

**Other**

Wear chemical protective equipment that is specifically recommended by the manufacturer. Wear suitable protective clothing. It may provide little or no thermal protection.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. Wear positive pressure self-contained breathing apparatus (SCBA). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or smoke. Keep away from food and drink. 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**

<b>Appearance</b>	Clear.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Yellow
<b>Odor</b>	Butyl Grape
<b>Odor threshold</b>	Not available.
<b>pH</b>	6.5 - 8
<b>Melting point/freezing point</b>	-113.6 °F (-80.89 °C) estimated
<b>Initial boiling point and boiling range</b>	266.4 °F (130.22 °C) estimated
<b>Flash point</b>	> 200.0 °F (> 93.3 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2.5 % estimated
<b>Flammability limit - upper (%)</b>	12 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	1.99 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	100 cP
<b>Viscosity temperature</b>	68 °F (20 °C)
<b>Other information</b>	
<b>Density</b>	8.20 lbs/gal
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIA estimated
<b>Kinematic viscosity</b>	101.665 cSt
<b>Kinematic viscosity temperature</b>	68 °F (20 °C)
<b>Oxidizing properties</b>	Not oxidizing.
<b>VOC</b>	0.02 % w/w By Weight

**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>	Risk of ignition. Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents. Do not mix with other chemicals.  
**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Harmful if inhaled. No adverse effects due to inhalation are expected. Prolonged inhalation may be harmful.

**Skin contact** Causes mild skin irritation. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

**Eye contact** Causes serious eye irritation. Direct contact with eyes may cause temporary irritation.

**Ingestion** May cause discomfort if swallowed. Expected to be a low ingestion hazard. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation. Mild skin irritation.

### Information on toxicological effects

**Acute toxicity** Harmful if inhaled.

Components	Species	Test Results
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Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

**Acute**

**Dermal**

LD50	Rabbit	400 mg/kg
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**Oral**

LD50	Rat	560 mg/kg
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Isopropanol (CAS 67-63-0)

**Acute**

**Oral**

LD50	Rat	4.7 g/kg
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\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation. Causes mild skin irritation. Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Causes serious eye irritation. None known.

### Respiratory or skin sensitization

#### Canada - Alberta OELs: Irritant

Ethylene Glycol Monobutyl Ether (CAS 111-76-2) Irritant

**Respiratory sensitization** Not a respiratory sensitizer. Due to partial or complete lack of data the classification is not possible.

**Skin sensitization** Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. None known. This product is not expected to cause skin sensitization. Due to partial or complete lack of data the classification is not possible.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Due to partial or complete lack of data the classification is not possible.

**Carcinogenicity** Hazardous by WHMIS criteria. Cancer hazard. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not classifiable as to carcinogenicity to humans. Due to partial or complete lack of data the classification is not possible.

#### ACGIH Carcinogens

Ethylene Glycol Monobutyl Ether (CAS 111-76-2) A3 Confirmed animal carcinogen with unknown relevance to humans.

Isopropanol (CAS 67-63-0) A4 Not classifiable as a human carcinogen.

**Canada - Manitoba OELs: carcinogenicity**

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)  
 Isopropanol (CAS 67-63-0)

Confirmed animal carcinogen with unknown relevance to humans.  
 Not classifiable as a human carcinogen.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

**Reproductive toxicity**

Not classified. This product is not expected to cause reproductive or developmental effects. Due to partial or complete lack of data the classification is not possible.

**Specific target organ toxicity - single exposure**

Due to partial or complete lack of data the classification is not possible. Not classified.

**Specific target organ toxicity - repeated exposure**

Not classified. Due to partial or complete lack of data the classification is not possible.

**Aspiration hazard**

Not an aspiration hazard. Due to partial or complete lack of data the classification is not possible.

**Chronic effects**

Hazardous by OSHA criteria. Hazardous by WHMIS criteria. May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.

**Further information**

Symptoms may be delayed.

**12. Ecological information****Ecotoxicity**

Harmful to aquatic life with long lasting effects. Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the environment. Contains a substance which causes risk of hazardous effects to the environment. The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
<b>Aquatic</b>		
Fish	LC50	Inland silverside ( <i>Menidia beryllina</i> ) 1250 mg/l, 96 hours
Isopropanol (CAS 67-63-0)		
<b>Aquatic</b>		
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> ) > 1400 mg/l, 96 hours
Tomadol 91-6 (CAS 68439-46-3)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> ) 2.9 - 8.5 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 6 - 12 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential****Partition coefficient n-octanol / water (log Kow)**

Ethylene Glycol Monobutyl Ether 0.83  
 Isopropanol 0.05

**Mobility in soil**

No data available.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. Dispose of contents/container (in accordance with related regulations). When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Avoid discharge into water courses or onto the ground.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### TDG

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## 15. Regulatory information

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

### Controlled Drugs and Substances Act

Not regulated.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

### International regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

### 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)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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>	04-11-2017
<b>Revision date</b>	04-11-2017
<b>Version #</b>	04
<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA.

## References

ACGIH  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
EPA: ACQUIRE database  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)  
Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)  
Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)  
Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)  
Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice No. 1997-10, as amended)  
Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)  
Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)  
Korea. Prohibited Chemical Substances (TCCL Article 11)  
Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)  
Korea. Restricted Chemical Substances (TCCL Article 11)  
Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)  
Korea. Toxic Chemical Control Law (TCCL), pre-1997 List  
Korea. Toxic Chemicals (TCCL Article 10)  
Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)  
Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)  
Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)  
Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)  
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration)  
Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)  
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits  
Japan Chemical Industry Association (JCIA) GHS Guideline, June 2012  
JIS Z 7252:2014 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"  
JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)  
GOST 30333-2007 Chemical production safety passport. General requirements.  
GOST 31340-2013 Labeling of chemicals. General requirements.  
GOST 32419-2013 Classification of chemical products. General requirements.  
GOST 32424-2013 Classification of chemicals for environmental hazards. General principles.  
GOST 12.1.007-76 Occupational safety standard system. Noxious substances. Classification and general safety requirements.  
GOST 12.1.044-89. Occupational safety standards system. Fire and explosion hazard of substances and materials. Nomenclature of substances and materials. Nomenclature of indices and methods of their determination.  
GOST 19433-88. Dangerous goods. Classification and marking.  
GOST 12.1.004-91. Occupational safety standards system. Fire safety. General requirements.  
GOST 32425-2013 Mixtures classification of hazard for environmental.  
GOST 32423-2013 Mixtures classification of hazard for health.

## Disclaimer

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**Revision information**

Product and Company Identification: Product and Company Identification  
Physical & Chemical Properties: Multiple Properties  
GHS: Classification