



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Imperial Touchless Low

**Other means of identification**

**Product Code** 1942

**Recommended use** Vehicle Wash

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Malco Products, Inc.

**Address** 361 Fairview Ave  
Barberton, OH 44203  
United States

**Telephone** Phone 800-253-2526  
Fax 330-753-2025

**Website** www.malcopro.com

**E-mail** msdsinfo@malcopro.com

**Contact person** Technical Department

**Emergency phone number** Phone 1-800-424-9300

**Supplier** Not available.

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Acute toxicity, oral Category 4  
Skin corrosion/irritation Category 1  
Health hazards not otherwise classified Category 1

**Environmental hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Causes severe skin burns and eye damage.

**Precautionary statement**

**Prevention** Do not breathe vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If swallowed: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Rinse mouth. Obtain medical assistance if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. 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 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/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of waste and residues in accordance with local authority requirements. Dispose of contents/container (in accordance with related regulations). Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards** None known.

**Supplemental information** % of the mixture consists of component(s) of unknown acute inhalation toxicity.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
"Sulfonic Acids, C14-16-alkane Hydroxy And C14-16-alkene, Sodium Salts"		68439-57-6	2.5 - 10
Ethylene Glycol Monobutyl Ether		111-76-2	2.5 - 10
Natriumphosphat-dodecahydrat		10101-89-0	2.5 - 10
Propylene Glycol Monomethyl Ether		107-98-2	2.5 - 10
Sulfuric Acid		7664-93-9	2.5 - 10
Other components below reportable levels			60 - 80

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.

### 4. First-aid measures

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Move to fresh air. 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. For breathing difficulties, oxygen may be necessary. Call a physician or poison control center immediately. Get medical attention immediately. Call a POISON CENTER or doctor/physician. 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. Rinse skin with water/shower. Call a physician or poison control center immediately. Get medical attention immediately. Chemical burns must be treated by a physician. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse. Wash clothing separately before reuse.

#### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. 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. Get medical attention immediately. Call a physician or poison control center immediately.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Call a physician or poison control center immediately. Rinse mouth. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. Do not induce vomiting. 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.

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

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Direct contact with eyes may cause temporary irritation.

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

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. 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. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). 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>).

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Wear suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	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. Do not breathe mist or vapor. 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. Should not be released into the environment.

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** Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

## 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 prolonged exposure. Do not get this material on clothing. Do not taste or swallow. When using, do not eat, drink or smoke. 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 hands thoroughly after handling. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. 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	Form
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	100 ppm	
Sulfuric Acid (CAS 7664-93-9)	TWA	50 ppm	
	TWA	0.2 mg/m3	Thoracic fraction.

**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/m3
		20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	553 mg/m3
		150 ppm
	TWA	369 mg/m3
Sulfuric Acid (CAS 7664-93-9)		100 ppm
	STEL	3 mg/m3
	TWA	1 mg/m3

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

Components	Type	Value	Form
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	75 ppm	
Sulfuric Acid (CAS 7664-93-9)	TWA	50 ppm	
	TWA	0.2 mg/m3	Mist.

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

Components	Type	Value	Form
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	100 ppm	
Sulfuric Acid (CAS 7664-93-9)	TWA	50 ppm	
	TWA	0.2 mg/m3	Thoracic fraction.

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

Components	Type	Value	Form
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	100 ppm	
Sulfuric Acid (CAS 7664-93-9)	TWA	50 ppm	
	TWA	0.2 mg/m3	Thoracic fraction.

**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
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	553 mg/m3
		150 ppm
	TWA	369 mg/m3
Sulfuric Acid (CAS 7664-93-9)		100 ppm
	STEL	3 mg/m3
	TWA	1 mg/m3

## 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	*

\* - 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. Eye wash facilities and emergency shower must be available when handling this product.

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

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended. Face-shield. Do not get in eyes. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves. Wear protective gloves. Chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

##### Other

Do not get this material in contact with skin. Do not get this material on clothing. Wear appropriate chemical resistant clothing. Wear chemical protective equipment that is specifically recommended by the manufacturer. Use of an impervious apron is recommended. It may provide little or no thermal protection. Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

#### Respiratory protection

Do not breathe dust/fume/gas/mist/vapors/spray. 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. Chemical respirator with organic vapor cartridge.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using, do not eat, drink or smoke. Do not get this material on clothing. Wash hands after handling. 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

### Appearance

Clear.

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Red

### Odor

None.

### Odor threshold

Not available.

### pH

0.3 - 1.5

### Melting point/freezing point

-45.69 °F (-43.16 °C) estimated

### Initial boiling point and boiling range

406.12 °F (207.85 °C) estimated

### Flash point

> 200.0 °F (> 93.3 °C)

### Evaporation rate

Not available.

### Flammability (solid, gas)

Not applicable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not available.

#### Flammability limit - upper (%)

Not available.

#### Explosive limit - lower (%)

Not available.

#### Explosive limit - upper (%)

Not available.

<b>Vapor pressure</b>	0.63 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>	5 cP
<b>Viscosity temperature</b>	68 °F (20 °C)
<b>Other information</b>	
<b>Density</b>	8.78 lbs/gal
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIA estimated
<b>Kinematic viscosity</b>	4.747 cSt
<b>Kinematic viscosity temperature</b>	68 °F (20 °C)
<b>Oxidizing properties</b>	Not oxidizing.
<b>VOC</b>	0.1 % w/w By Weight

## 10. Stability and reactivity

<b>Reactivity</b>	Reacts violently with strong alkaline substances. This product may react with reducing agents.
<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. Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.
<b>Incompatible materials</b>	Bases. Reducing agents. Do not mix with other chemicals.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Toxic if inhaled. May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Corrosive effects. Causes severe skin burns. Harmful in contact with skin.  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.
<b>Eye contact</b>	Causes severe eye burns. Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns. Harmful if swallowed. Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Contact with this material will cause burns to the skin, eyes and mucous membranes. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

### Information on toxicological effects

**Acute toxicity** Toxic if inhaled. Causes severe burns. Causes burns. Harmful in contact with skin. Harmful if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	400 mg/kg

Components	Species	Test Results
<b>Oral</b> LD50	Rat	560 mg/kg

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

<b>Skin corrosion/irritation</b>	Hazardous by OSHA criteria. Corrosive to skin and eyes. Causes severe skin burns and eye damage. Corrosive effects.	
<b>Serious eye damage/eye irritation</b>	Causes severe eye burns. Causes serious eye damage.	
<b>Respiratory or skin sensitization</b>		
<b>Canada - Alberta OELs: Irritant</b>		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	Irritant	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer. Due to partial or complete lack of data the classification is not possible.	
<b>Skin sensitization</b>	Causes severe skin burns. This product is not expected to cause skin sensitization. Due to partial or complete lack of data the classification is not possible.	
<b>Germ cell mutagenicity</b>	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.	
<b>Carcinogenicity</b>	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.	
<b>ACGIH Carcinogens</b>		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	A4 Not classifiable as a human carcinogen.	
<b>Canada - Alberta OELs: Carcinogen category</b>		
Sulfuric Acid (CAS 7664-93-9)	Suspected human carcinogen.	
<b>Canada - Manitoba OELs: carcinogenicity</b>		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	Confirmed animal carcinogen with unknown relevance to humans.	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	Not classifiable as a human carcinogen.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.	
<b>Reproductive toxicity</b>	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.	
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible. Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified. Due to partial or complete lack of data the classification is not possible.	
<b>Aspiration hazard</b>	Not an aspiration hazard. Due to partial or complete lack of data the classification is not possible.	
<b>Chronic effects</b>	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.	
<b>Further information</b>	Symptoms may be delayed.	

## 12. Ecological information

<b>Ecotoxicity</b>	Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the environment. Components of this product are hazardous to aquatic life. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.	
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Components	Species	Test Results
"Sulfonic Acids, C14-16-alkane Hydroxy And C14-16-alkene, Sodium Salts" (CAS 68439-57-6)		
<b>Aquatic</b>		
Crustacea	EC50 Water flea (Ceriodaphnia dubia)	4.14 - 4.95 mg/l, 48 hours

Components	Species	Test Results
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
<b>Aquatic</b>		
Fish	LC50	Inland silverside (Menidia beryllina) 1250 mg/l, 96 hours
Sulfuric Acid (CAS 7664-93-9)		
<b>Aquatic</b>		
Fish	LC50	Western mosquitofish (Gambusia affinis) 42 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

**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**

**Disposal instructions** Consult authorities before disposal. 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. Incinerate the material under controlled conditions in an approved incinerator. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not discharge into drains, water courses or onto the ground. 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.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]  
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** 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.

**Contaminated packaging** 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**

**UN number** UN3264  
**UN proper shipping name** Corrosive Liquid,Acidic,Inorganic,N.O.S  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards** Not available.  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IATA**

**UN number** UN3264  
**UN proper shipping name** Corrosive Liquid,Acidic,Inorganic,N.O.S  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards** No.  
**ERG Code** 8L

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** UN3264

**UN proper shipping name** Corrosive Liquid, Acidic, Inorganic, N.O.S

**Transport hazard class(es)**

**Class** 8

**Subsidiary risk** -

**Packing group** II

**Environmental hazards**

**Marine pollutant** No.

**EmS** F-A, S-B

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

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

**IATA; IMDG; TDG**



## 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.

**Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)**

Sulfuric Acid (CAS 7664-93-9)

**Precursor Control Regulations**

Sulfuric Acid (CAS 7664-93-9)

Class B

**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. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. 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**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
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>	02
<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  
Composition / Information on Ingredients: Component Summary  
Physical & Chemical Properties: Multiple Properties  
Transport Information: Proper Shipping Name/Packing Group  
GHS: Classification