



## Gun Wash

### Recochem Inc.

Version No: 4.5

Safety Data Sheet according to WHMIS 2015 requirements

Issue Date: 02/27/2024

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S.GHS.CAN.EN

#### SECTION 1 Identification

##### Product Identifier

Product name	Gun Wash
Synonyms	53-388X48
Proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S. (acetone, methanol)
Other means of identification	Not Available

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

Relevant identified uses	Use according to manufacturer's directions.
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##### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Recochem Inc.
Address	8725 Holgate Crescent, Milton Ontario Canada
Telephone	1-800-361-6030 (Monday-Friday, 9 AM to - 5 PM)
Fax	Not Available
Website	<a href="http://recochem.com">recochem.com</a>
Email	sds@recochem.com

##### Emergency phone number

Association / Organisation	POISON CONTROL/ANTIPOLSON (24 heures/ours):
Emergency telephone numbers	Alberta 1-800-332-1414 British Columbia 1-800-567-8911 Manitoba 1-855-776-4766 New Brunswick 911 Newfoundland and Labrador 1-866-727-1110 Northwest Territories 1-800-332-1414 Nova Scotia and Prince Edward Island 1-800-565-8161, 1-800-332-1414 or 911
Other emergency telephone numbers	Nunavut 1-800-268-9017 Ontario 1-800-268-9017 Quebec 1-800-463-5060 Saskatchewan 1-866-454-1212 Yukon Territory 867-393-8700 United States 1-800-222-1222

#### SECTION 2 Hazard(s) identification

##### Classification of the substance or mixture

Classification	Flammable Liquids Category 2, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 3, Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity (Inhalation) Category 3, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Reproductive Toxicity Category 1B, Specific Target Organ Toxicity - Single Exposure Category 1
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##### Label elements

Hazard pictogram(s)	
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Signal word	Danger
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##### Hazard statement(s)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H360	May damage fertility or the unborn child.

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H370	Causes damage to organs. (Gastrointestinal system, Kidneys, Nervous system, Respiratory system, Skin, Optic) (Oral, Dermal, Inhalation)
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Physical and Health hazard(s) not otherwise classified  
Not Applicable

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P270	Do not eat, drink or smoke when using this product.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician/first aider.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P330	Rinse mouth.

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
67-64-1*	65-85	<u>acetone</u>
540-88-5	5-10	<u>tert-butyl acetate</u>
67-56-1	10-30	<u>methanol</u>

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"><li>▶ Immediately hold eyelids apart and flush the eye continuously with running water.</li><li>▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li><li>▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li><li>▶ Transport to hospital or doctor without delay.</li><li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li></ul>
Skin Contact	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"><li>▶ Quickly but gently, wipe material off skin with a dry, clean cloth.</li><li>▶ Immediately remove all contaminated clothing, including footwear.</li><li>▶ Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</li><li>▶ Transport to hospital, or doctor.</li></ul>

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Inhalation	<ul style="list-style-type: none"> <li>▶ If fumes or combustion products are inhaled remove from contaminated area.</li> <li>▶ Lay patient down. Keep warm and rested.</li> <li>▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>▶ Transport to hospital, or doctor, without delay.</li> </ul>
Ingestion	<ul style="list-style-type: none"> <li>▶ <b>If swallowed do NOT induce vomiting.</b></li> <li>▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>▶ Observe the patient carefully.</li> <li>▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>▶ Seek medical advice.</li> <li>▶ Avoid giving milk or oils.</li> <li>▶ Avoid giving alcohol.</li> <li>▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>

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

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute and short term repeated exposures to methanol:

- Toxicity results from accumulation of formaldehyde/formic acid.
- Clinical signs are usually limited to CNS, eyes and GI tract. Severe metabolic acidosis may produce dyspnea and profound systemic effects which may become intractable. All symptomatic patients should have arterial pH measured. Evaluate airway, breathing and circulation.
- Stabilise obtunded patients by giving naloxone, glucose and thiamine.
- Decontaminate with Ipecac or lavage for patients presenting 2 hours post-ingestion. Charcoal does not absorb well; the usefulness of cathartic is not established.
- Forced diuresis is not effective; haemodialysis is recommended where peak methanol levels exceed 50 mg/dL (this correlates with serum bicarbonate levels below 18 mEq/L).
- Ethanol, maintained at levels between 100 and 150 mg/dL, inhibits formation of toxic metabolites and may be indicated when peak methanol levels exceed 20 mg/dL. An intravenous solution of ethanol in D5W is optimal.
- Folate, as leucovorin, may increase the oxidative removal of formic acid. 4-methylpyrazole may be an effective adjunct in the treatment. 8-Phenytoin may be preferable to diazepam for controlling seizure.

[Ellenhorn Barceloux: Medical Toxicology]

Methanol poisoning can be treated with fomepizole, or if unavailable, ethanol. Both drugs act to reduce the action of alcohol dehydrogenase on methanol by means of competitive inhibition. Ethanol, the active ingredient in alcoholic beverages, acts as a competitive inhibitor by more effectively binding and saturating the alcohol dehydrogenase enzyme in the liver, thus blocking the binding of methanol. Methanol is excreted by the kidneys without being converted into the very toxic metabolites formaldehyde and formic acid. Alcohol dehydrogenase instead enzymatically converts ethanol to acetaldehyde, a much less toxic organic molecule. Additional treatment may include sodium bicarbonate for metabolic acidosis, and hemodialysis or hemodiafiltration to remove methanol and formate from the blood. Folinic acid or folic acid is also administered to enhance the metabolism of formate.

## BIOLOGICAL EXPOSURE INDEX - BEI

Determinant	Index	Sampling Time	Comment
1. Methanol in urine	15 mg/l	End of shift	B, NS
2. Formic acid in urine	80 mg/gm creatinine	Before the shift at end of workweek	B, NS

B: Background levels occur in specimens collected from subjects **NOT** exposed.

NS: Non-specific determinant - observed following exposure to other materials.

for simple esters:

## BASIC TREATMENT

- ▶ Establish a patent airway with suction where necessary.
- ▶ Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- ▶ Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- ▶ Monitor and treat, where necessary, for pulmonary oedema.
- ▶ Monitor and treat, where necessary, for shock.
- ▶ **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- ▶ Give activated charcoal.

## ADVANCED TREATMENT

- ▶ Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- ▶ Positive-pressure ventilation using a bag-valve mask might be of use.
- ▶ Monitor and treat, where necessary, for arrhythmias.
- ▶ Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- ▶ Drug therapy should be considered for pulmonary oedema.
- ▶ Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- ▶ Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation.

## EMERGENCY DEPARTMENT

- ▶ Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- ▶ Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- ▶ Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L. *EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994*

## SECTION 5 Fire-fighting measures

## Extinguishing media

- ▶ Alcohol stable foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

Continued...

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‣ Water spray or fog - Large fires only.

Special hazards arising from the substrate or mixture

Fire Incompatibility	‣ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Special protective equipment and precautions for fire-fighters

Fire Fighting	<ul style="list-style-type: none"><li>‣ Alert Fire Brigade and tell them location and nature of hazard.</li><li>‣ Wear breathing apparatus plus protective gloves in the event of a fire.</li><li>‣ Prevent, by any means available, spillage from entering drains or water courses.</li><li>‣ Use fire fighting procedures suitable for surrounding area.</li><li>‣ <b>DO NOT</b> approach containers suspected to be hot.</li><li>‣ Cool fire exposed containers with water spray from a protected location.</li><li>‣ If safe to do so, remove containers from path of fire.</li><li>‣ Equipment should be thoroughly decontaminated after use.</li></ul>
Fire/Explosion Hazard	carbon dioxide (CO2) formaldehyde other pyrolysis products typical of burning organic material. May emit poisonous fumes.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"><li>‣ Remove all ignition sources.</li><li>‣ Clean up all spills immediately.</li><li>‣ Avoid breathing vapours and contact with skin and eyes.</li><li>‣ Control personal contact with the substance, by using protective equipment.</li><li>‣ Contain and absorb small quantities with vermiculite or other absorbent material.</li><li>‣ Wipe up.</li><li>‣ Collect residues in a flammable waste container.</li></ul>
Major Spills	

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"><li>‣ Avoid all personal contact, including inhalation.</li><li>‣ Wear protective clothing when risk of exposure occurs.</li><li>‣ Use in a well-ventilated area.</li><li>‣ Prevent concentration in hollows and sumps.</li><li>‣ <b>DO NOT enter confined spaces until atmosphere has been checked.</b></li><li>‣ <b>DO NOT allow material to contact humans, exposed food or food utensils.</b></li><li>‣ Avoid contact with incompatible materials.</li><li>‣ <b>When handling, DO NOT eat, drink or smoke.</b></li><li>‣ Keep containers securely sealed when not in use.</li><li>‣ Avoid physical damage to containers.</li><li>‣ Always wash hands with soap and water after handling.</li><li>‣ Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li><li>‣ Use good occupational work practice.</li><li>‣ Observe manufacturer's storage and handling recommendations contained within this SDS.</li><li>‣ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li></ul>
Other information	<ul style="list-style-type: none"><li>‣ Store in original containers.</li><li>‣ Keep containers securely sealed.</li><li>‣ Store in a cool, dry, well-ventilated area.</li><li>‣ Store away from incompatible materials and foodstuff containers.</li><li>‣ Protect containers against physical damage and check regularly for leaks.</li><li>‣ Observe manufacturer's storage and handling recommendations contained within this SDS.</li></ul>

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"><li>‣ Lined metal can, lined metal pail/ can.</li><li>‣ Plastic pail.</li><li>‣ Polyliner drum.</li><li>‣ Packing as recommended by manufacturer.</li><li>‣ Check all containers are clearly labelled and free from leaks.</li></ul> <p>For low viscosity materials</p> <ul style="list-style-type: none"><li>‣ Drums and jerricans must be of the non-removable head type.</li><li>‣ Where a can is to be used as an inner package, the can must have a screwed enclosure.</li></ul> <p>For materials with a viscosity of at least 2680 cSt. (23 deg. C) and solids (between 15 C deg. and 40 deg C.):</p>
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	<ul style="list-style-type: none"> <li>▶ Removable head packaging;</li> <li>▶ Cans with friction closures and</li> <li>▶ low pressure tubes and cartridges</li> </ul> <p>may be used.</p> <p>-</p> <p>Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages *.</p> <p>-</p> <p>In addition, where inner packagings are glass and contain liquids of packing group I and II there must be sufficient inert absorbent to absorb any spillage *.</p> <p>-</p> <p>* unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.</p> <p>All inner and sole packagings for substances that have been assigned to Packaging Groups I or II on the basis of inhalation toxicity criteria, must be hermetically sealed.</p>
Storage incompatibility	<p>Butyl acetates:</p> <ul style="list-style-type: none"> <li>▶ reacts violently with oxidisers</li> <li>▶ are incompatible with strong acids, nitrates, potassium tert-butoxide</li> <li>▶ attacks some plastics, rubber and coatings</li> </ul> <p>Methanol:</p> <ul style="list-style-type: none"> <li>▶ reacts violently with strong oxidisers, acetyl bromide, alkyl aluminium salts, beryllium dihydride, bromine, chromic acid, 1-chloro-3,3-difluoro-2-methoxycyclopropane, cyanuric chloride, diethylzinc, isophthaloyl chloride, nitric acid, perchloric acid, potassium-tert-butoxide, potassium sulfur diimide, Raney nickel catalysts, 2,4,6-trichlorotriazine, triethylaluminium, 1,3,3-trifluoro-2-methoxycyclopropane</li> <li>▶ is incompatible with strong acids, strong caustics, alkaline earth and alkali metals, aliphatic amines, acetaldehyde, benzoyl peroxide, 1,3-bis(di-n-cyclopentadienyl iron)-2-propen-1-one, calcium carbide, chloroform, chromic anhydride, chromium trioxide, dialkylzinc, dichlorine oxide, dichloromethane, ethylene oxide, hypochlorous acid, isocyanates, isopropyl chlorocarbonate, lithium tetrahydroaluminate, magnesium, methyl azide, nitrogen dioxide, palladium, pentafluoroguanidine, perchloryl fluoride, phosphorus pentasulfide, phosphorus trioxide, potassium, tangerine oil, triisobutylaluminium</li> <li>▶ mixtures with lead perchlorate, sodium hypochlorite are explosive</li> <li>▶ may react with metallic aluminium at high temperatures</li> <li>▶ slowly corrodes lead and aluminium</li> <li>▶ may generate electrostatic charges, due to low conductivity, on flow or agitation</li> <li>▶ attacks some plastics, rubber and coatings.</li> </ul> <p>Static induced flash fires have happened when filling plastic containers with methanol / water solutions with as low as 30% methanol content</p> <p>Alcohols</p> <ul style="list-style-type: none"> <li>▶ are incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.</li> <li>▶ reacts, possibly violently, with alkaline metals and alkaline earth metals to produce hydrogen</li> <li>▶ react with strong acids, strong caustics, aliphatic amines, isocyanates, acetaldehyde, benzoyl peroxide, chromic acid, chromium oxide, dialkylzinc, dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium</li> <li>▶ should not be heated above 49 deg. C. when in contact with aluminium equipment</li> <li>▶ Esters react with acids to liberate heat along with alcohols and acids.</li> <li>▶ Strong oxidising acids may cause a vigorous reaction with esters that is sufficiently exothermic to ignite the reaction products.</li> <li>▶ Heat is also generated by the interaction of esters with caustic solutions.</li> <li>▶ Flammable hydrogen is generated by mixing esters with alkali metals and hydrides.</li> <li>▶ Esters may be incompatible with aliphatic amines and nitrates.</li> <li>▶ Avoid storage with reducing agents.</li> </ul>

## SECTION 8 Exposure controls / personal protection

## Control parameters

## Occupational Exposure Limits (OEL)

## INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	acetone	Acetone	1,000 ppm / 2,400 mg/m3	3,000 mg/m3 / 1,250 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	acetone	Acetone	500 ppm	750 ppm	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	acetone	Not Available	250 ppm	500 ppm	Not Available	TLV® Basis: URT & eye irr; CNS impair; BEI
Canada - Prince Edward Island Occupational Exposure Limits	acetone	Acetone	250 ppm	500 ppm	Not Available	TLV® Basis: URT & eye irr; CNS impair; BEI
Canada - British Columbia Occupational Exposure Limits	acetone	Acetone	250 ppm	500 ppm	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure Limits	acetone	Acetone	500 ppm	750 ppm	Not Available	TLV Basis: Upper respiratory tract & eye irritation; CNS impairment; hematologic effects
Canada - Alberta Occupational Exposure Limits	acetone	Acetone	500 ppm / 1200 mg/m3	1800 mg/m3 / 750 ppm	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	acetone	Acetone	500 ppm	750 ppm	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	acetone	Acetone	250 ppm	500 ppm	Not Available	Not Available

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	tert-butyl acetate	tert-Butyl acetate	200 ppm / 950 mg/m3	1,180 mg/m3 / 250 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	tert-butyl acetate	tert-Butyl acetate	200 ppm	250 ppm	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	tert-butyl acetate	Not Available	200 ppm	Not Available	Not Available	TLV® Basis: Eye & URT irr
Canada - Prince Edward Island Occupational Exposure Limits	tert-butyl acetate	Butyl acetate, all isomers	50 ppm	150 ppm	Not Available	TLV® Basis: Eye & URT irr
Canada - British Columbia Occupational Exposure Limits	tert-butyl acetate	tert-Butyl acetate	200 ppm	Not Available	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure Limits	tert-butyl acetate	tert-Butyl acetate	200 ppm	Not Available	Not Available	TLV Basis: eye & upper respiratory tract irritation
Canada - Alberta Occupational Exposure Limits	tert-butyl acetate	tert-Butyl acetate	200 ppm / 950 mg/m3	Not Available	Not Available	3 - Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Canada - Northwest Territories Occupational Exposure Limits	tert-butyl acetate	tert-Butyl acetate	200 ppm	250 ppm	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	tert-butyl acetate	Butyl acetate (all isomers)	50 ppm	150 ppm	Not Available	Not Available
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	methanol	Methyl alcohol (methanol) - Skin	200 ppm / 260 mg/m3	310 mg/m3 / 250 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	methanol	Methyl alcohol (methanol)	200 ppm	250 ppm	Not Available	Skin
Canada - Manitoba Occupational Exposure Limits	methanol	Not Available	200 ppm	250 ppm	Not Available	TLV® Basis: Headache; eye dam; dizziness; nausea; BEI
Canada - Prince Edward Island Occupational Exposure Limits	methanol	Methanol	200 ppm	250 ppm	Not Available	TLV® Basis: Headache; eye dam; dizziness; nausea; BEI
Canada - British Columbia Occupational Exposure Limits	methanol	Methanol	200 ppm	250 ppm	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure Limits	methanol	Methanol	200 ppm	250 ppm	Not Available	TLV Basis: headache; eye damage. BEI
Canada - Alberta Occupational Exposure Limits	methanol	Methyl alcohol (Methanol)	200 ppm / 262 mg/m3	328 mg/m3 / 250 ppm	Not Available	1 - substance may be readily absorbed through intact skin
Canada - Alberta Occupational Exposure Limits	methanol	Methanol (Methyl alcohol)	200 ppm / 262 mg/m3	328 mg/m3 / 250 ppm	Not Available	1 - substance may be readily absorbed through intact skin
Canada - Northwest Territories Occupational Exposure Limits	methanol	Methyl alcohol (methanol)	200 ppm	250 ppm	Not Available	Skin
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	methanol	Methyl alcohol	200 ppm / 262 mg/m3	328 mg/m3 / 250 ppm	Not Available	Pc: SKIN (percutaneous): Exposure is by contact with vapours or, of probable greater significance, by direct skin contact with the substance. The cutaneous route includes mucous membranes and the eyes.

Emergency Limits


Ingredient	TEEL-1	TEEL-2	TEEL-3
acetone	Not Available	Not Available	Not Available
tert-butyl acetate	600 ppm	1,700 ppm	10,000 ppm
methanol	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
acetone	2,500 ppm	Not Available
tert-butyl acetate	1,500 ppm	Not Available
methanol	6,000 ppm	Not Available

Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.</p> <p>Employers may need to use multiple types of controls to prevent employee overexposure.</p> <p>Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate</p>
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## Gun Wash

	<p>protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. An approved self contained breathing apparatus (SCBA) may be required in some situations.</p> <p>Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying 'escape' velocities which, in turn, determine the 'capture velocities' of fresh circulating air required to effectively remove the contaminant.</p> <table><tr><td>Type of Contaminant:</td><td>Air Speed:</td></tr><tr><td>solvent, vapours, degreasing etc., evaporating from tank (in still air).</td><td>0.25-0.5 m/s (50-100 f/min.)</td></tr><tr><td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td><td>0.5-1 m/s (100-200 f/min.)</td></tr><tr><td>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td><td>1-2.5 m/s (200-500 f/min.)</td></tr><tr><td>grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).</td><td>2.5-10 m/s (500-2000 f/min.)</td></tr></table> <p>Within each range the appropriate value depends on:</p> <table><tr><td>Lower end of the range</td><td>Upper end of the range</td></tr><tr><td>1: Room air currents minimal or favourable to capture</td><td>1: Disturbing room air currents</td></tr><tr><td>2: Contaminants of low toxicity or of nuisance value only.</td><td>2: Contaminants of high toxicity</td></tr><tr><td>3: Intermittent, low production.</td><td>3: High production, heavy use</td></tr><tr><td>4: Large hood or large air mass in motion</td><td>4: Small hood-local control only</td></tr></table> <p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p>	Type of Contaminant:	Air Speed:	solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)	Lower end of the range	Upper end of the range	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity	3: Intermittent, low production.	3: High production, heavy use	4: Large hood or large air mass in motion	4: Small hood-local control only
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Individual protection measures, such as personal protective equipment																					
Eye and face protection	<ul style="list-style-type: none"><li>▶ Safety glasses with side shields.</li><li>▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</li><li>▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].</li></ul>																				
Skin protection	See Hand protection below																				
Hands/feet protection	<ul style="list-style-type: none"><li>▶ Wear chemical protective gloves, e.g. PVC.</li><li>▶ Wear safety footwear or safety gumboots, e.g. Rubber</li></ul> For esters: <ul style="list-style-type: none"><li>▶ Do NOT use natural rubber, butyl rubber, EPDM or polystyrene-containing materials.</li></ul>																				
Body protection	See Other protection below																				
Other protection	<ul style="list-style-type: none"><li>▶ Overalls.</li><li>▶ Eyewash unit.</li><li>▶ Barrier cream.</li><li>▶ Skin cleansing cream.</li></ul>																				

## Respiratory protection

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the 'Exposure Standard' (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	AX-AUS / Class 1	-	AX-PAPR-AUS / Class 1
up to 25 x ES	Air-line*	AX-2	AX-PAPR-2
up to 50 x ES	-	AX-3	-
50+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

## SECTION 9 Physical and chemical properties

## Information on basic physical and chemical properties

Continued...

## Gun Wash

<b>Appearance</b>	Colourless		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	0.8
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Available
<b>pH (as supplied)</b>	Not Available	<b>Decomposition temperature (°C)</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	<0	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	HIGHLY FLAMMABLE.	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Available	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Not Available	<b>pH as a solution (1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	Not Available

## SECTION 10 Stability and reactivity

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	<ul style="list-style-type: none"> <li>▶ Unstable in the presence of incompatible materials.</li> <li>▶ Product is considered stable.</li> <li>▶ Hazardous polymerisation will not occur.</li> </ul>
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

## SECTION 11 Toxicological information

## Information on toxicological effects

<b>Inhaled</b>	<p>Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects. The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.</p> <p>The main effects of simple esters are irritation, stupor and insensibility. Headache, drowsiness, dizziness, coma and behavioural changes may occur.</p> <p>Minor but regular methanol exposures may effect the central nervous system, optic nerves and retinae. Symptoms may be delayed, with headache, fatigue, nausea, blurring of vision and double vision. Continued or severe exposures may cause damage to optic nerves, which may become severe with permanent visual impairment even blindness resulting.</p> <p><b>WARNING:</b> Methanol is only slowly eliminated from the body and should be regarded as a cumulative poison which cannot be made non-harmful [CCINFO]</p>
<b>Ingestion</b>	<p><b>Toxic effects</b> may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 40 gram may be fatal or may produce serious damage to the health of the individual.</p> <p>Methanol may produce a burning or painful sensation in the mouth, throat, chest, and stomach. This may be accompanied by nausea, vomiting, headache, dizziness, shortness of breath, weakness, fatigue, leg cramps, restlessness, confusion, drunken behaviour, visual disturbance, drowsiness, coma and death. 60-200 ml of methanol is a fatal dose for most adults with as little as 10 ml producing blindness. In massive overdose, liver, kidney, heart and muscle injury have been described. Even ingestion of small amounts of methanol is enough to seriously damage parts of the central nervous system, leading to permanent brain and/or nerve problems.</p> <p>Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)</p>
<b>Skin Contact</b>	<p>Skin contact with the material may produce toxic effects; systemic effects may result following absorption.</p> <p>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p>

Continued...



## Gun Wash

	<p>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p> <p>There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs.</p> <p>There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.</p>																
Eye	<p>Methanol is a mild to moderate eye irritant. High vapor concentration or liquid contact with eyes causes irritation, tearing, and burning.</p> <p>Direct contact of the eye with ethanol may cause immediate stinging and burning with reflex closure of the lid and tearing, transient injury of the corneal epithelium and hyperaemia of the conjunctiva.</p> <p>There is some evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation.</p> <p>Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.</p>																
Chronic	<p>Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.</p> <p>This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.</p> <p>Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material.</p> <p>Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.</p> <p>Long-term exposure to methanol vapour, at concentrations exceeding 3000 ppm, may produce cumulative effects characterised by gastrointestinal disturbances (nausea, vomiting), headache, ringing in the ears, insomnia, trembling, unsteady gait, vertigo, conjunctivitis and clouded or double vision. Liver and/or kidney injury may also result.</p>																
Gun Wash	<table> <tr> <th>TOXICITY</th><th>IRRITATION</th></tr> <tr> <td>Not Available</td><td>Not Available</td></tr> </table>	TOXICITY	IRRITATION	Not Available	Not Available												
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<b>Legend:</b>	<p>1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances</p>																

Gun Wash	<p>Generally, linear and branched-chain alkyl esters are hydrolysed to their component alcohols and carboxylic acids in the intestinal tract, blood and most tissues throughout the body. Following hydrolysis the component alcohols and carboxylic acids are metabolized</p> <p>Oral acute toxicity studies have been reported for 51 of the 67 esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids. The very low oral acute toxicity of this group of esters is demonstrated by oral LD50 values greater than 1850 mg/kg bw</p> <p>Genotoxicity studies have been performed in vitro using the following esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids: methyl acetate, butyl acetate, butyl stearate and the structurally related isoamyl formate and demonstrates that these substances are not genotoxic.</p> <p>The JEFCA Committee concluded that the substances in this group would not present safety concerns at the current levels of intake the esters of aliphatic acyclic primary alcohols and aliphatic linear saturated carboxylic acids are generally used as flavouring substances up to average maximum levels of 200 mg/kg. Higher levels of use (up to 3000 mg/kg) are permitted in food categories such as chewing gum and hard candy. In Europe the upper use levels for these flavouring substances are generally 1 to 30 mg/kg foods and in special food categories like candy and alcoholic beverages up to 300 mg/kg foods</p> <p><b>International Program on Chemical Safety: the Joint FAO/WHO Expert Committee on Food Additives (JECFA)</b></p> <p><b>Esters of Aliphatic acyclic primary alcohols with aliphatic linear saturated carboxylic acids.; 1998</b></p>
acetone	<p>For acetone:</p> <p>The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/m<sup>3</sup> does not negatively impact an individual's emotional regulation, behaviour, or learning ability.</p>

Gun Wash

acetone & METHANOL	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.		
Acute Toxicity	✓	Carcinogenicity	✗
Skin Irritation/Corrosion	✗	Reproductivity	✓
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification  
✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

acetone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	6098.4mg/L	5
	EC50	96h	Algae or other aquatic plants	9.873-27.684mg/l	4
	NOEC(ECx)	12h	Fish	0.001mg/L	4
	EC50	72h	Algae or other aquatic plants	5600-10000mg/l	4
	LC50	96h	Fish	3744.6-5000.7mg/L	4
tert-butyl acetate	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	350mg/l	2
	EC50	96h	Algae or other aquatic plants	5.8mg/l	2
	EC50	72h	Algae or other aquatic plants	6.1mg/l	2
	NOEC(ECx)	96h	Algae or other aquatic plants	2.3mg/l	2
	LC50	96h	Fish	240mg/l	2
methanol	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	>10000mg/l	2
	EC50	96h	Algae or other aquatic plants	14.11-20.623mg/l	4
	NOEC(ECx)	720h	Fish	0.007mg/L	4
	LC50	96h	Fish	290mg/l	2
Legend:		Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data			

For Methanol: Log Kow: -0.82 to -0.66; Koc: 1; Henry s Law Constant: 4.55x10-6 atm-cu m/mole; Vapor Pressure: 127 mm Hg; BCF: < 10.  
Atmospheric Fate: Methanol is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase methanol is broken down in the atmosphere by reactions with hydroxyl radicals; the half-life for this reaction in air is estimated to be 17 days.  
Terrestrial Fate: Methanol is expected to have very high mobility in soil. Evaporation of methanol from moist/dry soil surfaces is expected to be an important fate process. Biological breakdown in soil is expected to be an important fate process for methanol based on half-lives of 1 day, in sandy silt loam, and 3.2 days in sandy loam.  
Aquatic Fate: Methanol is not expected to adsorb to suspended solids and sediment and the substance mixes in water. The substance is expected to evaporate from water surfaces with half-lives, for a model river, of 3 days, and 35 days, for a model lake. Concentration of the substance in aquatic organisms is expected to be low. Breakdown by water and sunlight are not expected to be an important environmental fate processes. The substance is expected to be broken down by microorganisms in water.  
Ecotoxicity: Methanol is non-toxic to fish, including fathead minnow, rainbow trout, bluegill sunfish, and guppy. The substance is also non-toxic to aquatic invertebrates, including Daphnia pulex water fleas, brine and brown shrimp. The substances are non-toxic to shellfish, including mussels, marine bacterium, including Photobacterium phosphoreum, and the protozoan Tetrahymena pyriformis.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
tert-butyl acetate	LOW	LOW
methanol	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
acetone	LOW (BCF = 0.69)
tert-butyl acetate	LOW (LogKOW = 1.76)
methanol	LOW (BCF = 10)

Mobility in soil

Gun Wash

Ingredient	Mobility
acetone	HIGH (KOC = 1.981)
tert-butyl acetate	LOW (KOC = 13.53)
methanol	HIGH (KOC = 1)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	<div>Containers may still present a chemical hazard/ danger when empty.</div> <div>Return to supplier for reuse/ recycling if possible.</div> <div>Otherwise:<div>If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.</div><div>Where possible retain label warnings and SDS and observe all notices pertaining to the product.</div><div><b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></div><div>It may be necessary to collect all wash water for treatment before disposal.</div><div>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</div><div>Where in doubt contact the responsible authority.</div><div>Recycle wherever possible or consult manufacturer for recycling options.</div><div>Consult State Land Waste Authority for disposal.</div><div>Bury or incinerate residue at an approved site.</div><div>Recycle containers if possible, or dispose of in an authorised landfill.</div></div>
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SECTION 14 Transport information

Labels Required

	<div><div></div><div></div></div>
Marine Pollutant	NO

Land transport (TDG)

14.1. UN number or ID number	1992						
14.2. UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S. (acetone, methanol)						
14.3. Transport hazard class(es)	<table><tr><td>Class</td><td>3</td></tr><tr><td>Subsidiary Hazard</td><td>6.1</td></tr></table>	Class	3	Subsidiary Hazard	6.1		
Class	3						
Subsidiary Hazard	6.1						
14.4. Packing group	II						
14.5. Environmental hazard	Not Applicable						
14.6. Special precautions for user	<table><tr><td>Special provisions</td><td>16</td></tr><tr><td>Explosive Limit and Limited Quantity Index</td><td>1 L</td></tr><tr><td>ERAP Index</td><td>Not Applicable</td></tr></table>	Special provisions	16	Explosive Limit and Limited Quantity Index	1 L	ERAP Index	Not Applicable
Special provisions	16						
Explosive Limit and Limited Quantity Index	1 L						
ERAP Index	Not Applicable						

Air transport (ICAO-IATA / DGR)

14.1. UN number	1992														
14.2. UN proper shipping name	Flammable liquid, toxic, n.o.s. * (acetone, methanol)														
14.3. Transport hazard class(es)	<table><tr><td>ICAO/IATA Class</td><td>3</td></tr><tr><td>ICAO / IATA Subsidiary Hazard</td><td>6.1</td></tr><tr><td>ERG Code</td><td>3HP</td></tr></table>	ICAO/IATA Class	3	ICAO / IATA Subsidiary Hazard	6.1	ERG Code	3HP								
ICAO/IATA Class	3														
ICAO / IATA Subsidiary Hazard	6.1														
ERG Code	3HP														
14.4. Packing group	II														
14.5. Environmental hazard	Not Applicable														
14.6. Special precautions for user	<table><tr><td>Special provisions</td><td>A3</td></tr><tr><td>Cargo Only Packing Instructions</td><td>364</td></tr><tr><td>Cargo Only Maximum Qty / Pack</td><td>60 L</td></tr><tr><td>Passenger and Cargo Packing Instructions</td><td>352</td></tr><tr><td>Passenger and Cargo Maximum Qty / Pack</td><td>1 L</td></tr><tr><td>Passenger and Cargo Limited Quantity Packing Instructions</td><td>Y341</td></tr><tr><td>Passenger and Cargo Limited Maximum Qty / Pack</td><td>1 L</td></tr></table>	Special provisions	A3	Cargo Only Packing Instructions	364	Cargo Only Maximum Qty / Pack	60 L	Passenger and Cargo Packing Instructions	352	Passenger and Cargo Maximum Qty / Pack	1 L	Passenger and Cargo Limited Quantity Packing Instructions	Y341	Passenger and Cargo Limited Maximum Qty / Pack	1 L
Special provisions	A3														
Cargo Only Packing Instructions	364														
Cargo Only Maximum Qty / Pack	60 L														
Passenger and Cargo Packing Instructions	352														
Passenger and Cargo Maximum Qty / Pack	1 L														
Passenger and Cargo Limited Quantity Packing Instructions	Y341														
Passenger and Cargo Limited Maximum Qty / Pack	1 L														

Gun Wash

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1992		
14.2. UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S. (acetone, methanol)		
14.3. Transport hazard class(es)	IMDG Class	3	
	IMDG Subsidiary Hazard	6.1	
14.4. Packing group	II		
14.5. Environmental hazard	Not Applicable		
14.6. Special precautions for user	EMS Number	F-E , S-D	
	Special provisions	274	
	Limited Quantities	1 L	

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
acetone	Not Available
tert-butyl acetate	Not Available
methanol	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
acetone	Not Available
tert-butyl acetate	Not Available
methanol	Not Available

SECTION 15 Regulatory information

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

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

acetone is found on the following regulatory lists

- Canada Categorization decisions for all DSL substances
- Canada Domestic Substances List (DSL)
- Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS

tert-butyl acetate is found on the following regulatory lists

- Canada Categorization decisions for all DSL substances
- Canada Domestic Substances List (DSL)
- Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS

methanol is found on the following regulatory lists

- Canada Categorization decisions for all DSL substances
- Canada Domestic Substances List (DSL)
- Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS
- Chemical Footprint Project - Chemicals of High Concern List

Additional Regulatory Information

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes

Gun Wash

National Inventory	Status
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	02/27/2024
Initial Date	10/10/2023

**CONTACT POINT**

IMMEDIATELY contact the local POISON CONTROL center for your area (24 hours): Alberta 1-800-332-1414 British Columbia 1-800-567-8911 Manitoba 1-855-776-4766 New Brunswick 911 Newfoundland and Labrador 1-866-727-1110 Northwest Territories 1-800-332-1414 Nova Scotia and Prince Edward Island 1-800-565-8161, 1-800-332-1414 or 911 Nunavut 1-800-268-9017 Ontario 1-800-268-9017 Quebec 1-800-463-5060 Saskatchewan 1-866-454-1212 Yukon Territory 867-393-8700 United States 1-800-222-1222 Contactez IMMÉDIATEMENT le centre ANTIPOISON de votre région (24 heures): Alberta 1-800-332-1414 Colombie-Britannique 1-800-567-8911 Manitoba 1-855-776-4766 Nouveau-Brunswick 911 Terre-Neuve-et-Labrador 1-866-727-1110 Territoires du Nord-Ouest 1-800-332-1414 Nouvelle-Écosse et Île-du-Prince-Édouard 1-800-565-8161, 1-800-332-1414 ou 911 Nunavut 1-800-268-9017 Ontario 1-800-268-9017 Québec 1-800-463-5060 Saskatchewan 1-866-454-1212 Territoire du Yukon 867-393-8700 États-Unis: 1-800-222-1222

SDS Version Summary

Version	Date of Update	Sections Updated
3.5	01/10/2024	Hazards identification - Classification, Firefighting measures - Fire Fighter (fire/explosion hazard), Composition / information on ingredients - Ingredients, Identification of the substance / mixture and of the company / undertaking - Synonyms

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

- PC - TWA: Permissible Concentration-Time Weighted Average
- PC - STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit,
- IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
- FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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