

1 Product and Company Identification

Product identifier	Quartz Cuvette Cleaner
Synonym	P19311, Cuvette Cleaner
CAS #	Mixture
Product use	For use with Trojan P254 UV Photometer
Recommended restrictions	None known
Manufacturer information	Trojan Technologies 3020 Gore Road London, ON N5V 4T7 CA Phone: 519-457-3400 Phone: 888-220-6118
CANUTEC	Phone: 613-996-6666

2 Hazards Identification

Classification of the chemical

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Health hazards	Corrosive to Metals. Skin Corrosion/Irritation. Serious eye damage/eye irritation. Specific Target Organ Toxicity, Single Exposure.
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WHMIS 2015 defined hazard

Hazard symbol



Signal word	DANGER!
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage. May cause respiratory irritation.

Precautionary statement

Prevention	Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Keep away from combustible material.
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Response	If swallowed: Rinse mouth. DO NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician. Absorb spillage to prevent material damage.
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Storage	Keep in a cool place. Store in original, vented, closed containers.
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Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Other hazards which do not result in classification: Ingestion can cause irritation and corrosive action in the mouth, stomach and digestive tract. Toxic fumes, gases or vapors may evolve on burning. May intensify fire; Nitric acid is an oxidizer.

3 Composition/Information on Ingredients

Components	CAS#	Percent
Nitric Acid	7697-37-2	6-13

4 First Aid Measures

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Seek immediate medical attention/advice.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 30 minutes. Get medical attention. Remove contaminated clothing and launder before use.
Eye Contact	In case of contact or suspected contact, immediately flush eyes with plenty of water for at least 20 to 30 minutes and get medical attention immediately after flushing.
Ingestion	Guard against aspiration into lungs by having the individual turn on to their left side. Rinse mouth with water. Seek immediate medical attention. Do not induce vomiting. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.
General Information	If feeling unwell, seek medical advice (show the label and SDS where possible). Ensure medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Avoid contact with eyes and skin. Keep out of reach of children.

5 Fire Fighting Measures

Suitable extinguishing media	Fires should be flooded with large amounts of water. Avoid using other types of extinguishing materials, such as foam or dry chemicals.
Unsuitable extinguishing media	Avoid using Carbon dioxide or other similar extinguishing agents as they are not effective in fires involving oxidizers.
Specific hazards arising from the chemical	Substance releases oxygen when heated, which may increase the severity of an existing fire. Burning produces obnoxious and toxic fumes. Contact with most metals will generate flammable hydrogen gas. Contact with water will generate considerable heat.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Indication of immediate medical attention required	Treat patient symptomatically.
Specific methods	Fight fires from a safe distance. Evacuate personnel to safe areas. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion Products	Oxygen; Nitrogen oxides.

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6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to protective measures listed in Section 7 and Section 8 .
Methods and materials for containment and cleanup	Neutralize with lime slurry, limestone, or soda ash. Isolate spill and stop leak where safe. Flush area with water to remove trace residue. Contain spill with sand or other inert materials. Pick up solids and put in an appropriate sealed container for later disposal. Isolate hazard area and restrict access.

7 Handling and Storage

Precautions for safe handling	Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Use with adequate ventilation.
Conditions for safe storage, including any incompatibilities	Tanks must be diked. Store in a cool, dry, well ventilated area. Place away from incompatible materials. Will corrode incompatible metals and many plastic materials. 304 or 316 stainless steel are acceptable materials of construction. Tanks should be vented and painted white or in light, heat-reflecting colors. Ensure that all pumps, valves, meters are of compatible material.

8 Exposure Controls/Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
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.
Individual protection measures, such as personal protective equipment:	
Eye/face protection	Wear eye/face protection. Chemical splash goggles are recommended. A full face shield may also be necessary.
Skin protection:	Wash hands IMMEDIATELY if mercury leakage occurs.
Hand protection	Impervious gloves. Confirm with reputable supplier first.
Other	Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.
	Ensure that eyewash stations and safety showers are proximal to the work-station location.
Respiratory protection	If airborne concentrations exceed the Occupational Exposure Limit, use a NIOSH/MSHA approved full face-piece respirator with acid gas cartridges. Do not use organic vapor and acid gas combination cartridges as these contain charcoal, which is incompatible with oxidizing acids.
Thermal hazards	Not applicable
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9 Physical and Chemical Properties

Appearance	Clear to Brownish/Yellow
Physical state	Liquid
Odor	Slightly Pungent, Antiseptic like
Odor Threshold	Not available
pH	Not available
Melting Point / Freezing point	Not available
Initial Boiling point	Not applicable
Pour point	Not available

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Specific gravity	1.096
Partition coefficient (n-octanol/water)	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability(solid, gas)	Not applicable
Upper/Lower Explosive Limits	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Relative Density	Not available
Solubility(ies)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Viscous
Other information:	
Explosive properties	May be reactive and decompose violently.
Oxidizing properties	Oxidizer; Will accelerate combustion and increase the risk of fire and explosion in combustible or flammable materials.

10 Stability and Reactivity

Reactivity	Corrosive to mild metals such as copper, aluminum, brass, iron, and mild steel. Not corrosive to 304L or 316 stainless steel. Will release flammable and potentially explosive hydrogen gas on contact with amphoteric metals.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Alkalies. Reducing agents. Combustible materials. Metals. Organic materials. Acids. Moisture.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11 Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure:	
Ingestion	Corrosive! May cause severe pain in the mouth, chest and abdomen, leading to cough, vomiting and collapse. Ingestion may cause gastritis possibly progressing to necrosis or hemorrhage.
Inhalation	Causes severe respiratory irritation. Material is irritating to mucous membrane and upper respiratory tract. Exposure can cause coughing, chest pains and difficulty in breathing. Vapors may cause pulmonary edema.
Skin contact	Corrosive. Concentrated nitric acid chars the tissue with a characteristic yellow coloration. Causes severe burns. Severe and fatal skin burns can occur with necrosis and scarring. No adverse effects due to skin contact are expected.
Eye contact	Corrosive to eye tissue and may cause severe damage or blindness.
Information on toxicological effects:	
Acute toxicity	Not available
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Exposure minutes	Not available

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Erythema value	Not available
Oedema value	Not available
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Corneal opacity value	Not available
Iris lesion value	Not available
Conjunctival reddening value	Not available
Recover days	Not available
Respiratory or skin sensitization:	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not available
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not an aspiration hazard.

12 Ecological Information

Ecotoxicity	Product may cause harm in the environment due to its low pH. Do not allow material to contaminate ground water system.
Persistence and degradability	Not available
Bioaccumulative potential	
Mobility in soil	Not available
Mobility in general	Not available
Other adverse effects	Not available
Aquatic toxicity	Toxic to aquatic life.

13 Disposal Information

Disposal instructions	Waste must be disposed of in accordance with federal, state/provincial and local environmental control regulations. This material and its container must be disposed of as hazardous waste.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	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).
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.

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14 Transport Information

DOT

UN-No UN2031
Proper Shipping Name Nitric Acid
Hazard Class 8
Subsidiary Hazard Class 5.1
Packing Group II

IATA

UN-No UN2031
Proper Shipping Name Nitric Acid
Hazard Class 8
Subsidiary Hazard Class 5.1
Packing Group II

TDG

UN-No UN2031
Proper Shipping Name Nitric Acid
Hazard Class 8
Packing Group II

IMDG/IMO

UN-No UN2031
Proper Shipping Name Nitric Acid
Hazard Class 8
Packing Group II

15 Regulatory Information

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

Canada DSL Challenge Substances: Listed substance

Nitric Acid (CAS 7697-37-2)

Listed

Export Control List (CEPA 1999, Schedule 3)

Not listed

Greenhouse Gases

Not listed

Precursor Control Regulations

Not regulated

WHMIS classification

C Oxidizing Materials

E Corrosive Materials

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Nitric acid (CAS 7697-37-2)

Listed

CERCLA Hazardous Substance List (40 CFR 302.4)

Nitric acid (CAS 7697-37-2)

Listed

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance

Nitric acid (CAS 7697-37-2)

Listed

SARA 311/312 Hazardous chemical

Nitric acid (CAS 7697-37-2)

Listed

SARA 313 (TRI reporting)

Nitric acid (CAS 7697-37-2)

Listed

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

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Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	Yes

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

16 Other Information

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

NFPA Code

(Health: 3)
 (Flammability: 0)
 (Reactivity: 0)

Issue Date

12-March-2018

Version

01

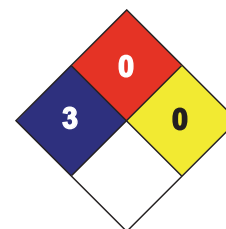
Effective Date

12-March-2018

Prepared by

Manufacturer Personnel

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0



Other Information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.