



SAFETY DATA SHEET

Revision Date 09-01-2019

Version 4

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code(s)	36360000-M
Product Name	AQUA QUENCH 3600
Recommended Use	Quenching
Uses advised against	Any other purpose.

Manufacturer, Importer, Supplier

Houghton International Inc. Madison & Van Buren Aves. Valley Forge, PA 19482 Telephone: 610-666-4000 FAX: 610-666-1376 Website: www.houghtonintl.com Customer Service: 888-459-9844	Houghton Canada 915 Meyerside Drive Mississauga ON L5T 1R8
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Emergency telephone number

United States of America/Canada : 3E Company - 1-866-519-4752 (Code 333938)

SECTION 2: HAZARDS IDENTIFICATION

Classification

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Workplace Hazardous Materials Information System (WHMIS) 2015

Not classified

Label elements

Precautionary Statements

Precautionary Statements - Response

Hazards not otherwise classified (HNOC)

Health	Not Applicable.
Physical	Not Applicable.

Other Information

Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients.

Chemical name	CAS No	Weight-%
2,2',2"-Nitrilotriethanol	102-71-6	1% - 5%
Borax (B ₄ Na ₂ O ₇ ·10H ₂ O)	1303-96-4	1% - 5%

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES**Description of first-aid measures**

General advice	If symptoms persist, call a physician.
Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms and effects, both acute and delayed

Main Symptoms None

Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.; Use CO₂, dry chemical, or foam, Water spray or fog

Extinguishing media which shall not be used for safety reasons

None

Special hazards arising from the substance or mixture**Special Hazard**

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be generated, Products of combustion may include carbon monoxide, carbon dioxide, other gases and fumes

Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Advice for non-emergency personnel Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

Reference to other sections

See Section 8/12/13 for additional information

SECTION 7: HANDLING AND STORAGE**Precautions for safe handling**

Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep container tightly closed in a dry and well-ventilated place.

Recommended Shelf Life

Shelf life 12 months.

Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases

Specific end uses

Specific use(s) Quenching

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Legend:

(s) - Skin; TWA - Time-Weighted Average; STEL - Short Term Exposure Limit; Ceiling - Ceiling Value; TLV® - Threshold Limit Value; PEL (Permissible Exposure Limit); IDLH (immediately dangerous to life and health); WEEL (Workplace Environmental Exposure Level Guides)

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA WEEL
2,2',2''-Nitrilotriethanol 102-71-6	TWA: 5 mg/m ³			
Borax (B ₄ Na ₂ O ₇ ·10H ₂ O) 1303-96-4	TWA: 2 mg/m ³ (inhalable particulate matter) STEL: 6 mg/m ³		TWA: 5 mg/m ³	

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

Exposure controls**Engineering Measures**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Safety glasses with side-shields.

Skin and body protection

Wear protective gloves/clothing.

Respiratory protection

No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Appearance	slightly cloudy, light yellow
Odor	Mild	Odor threshold	Not Determined

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	9.4	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	102 °C / 216 °F	
Flash point	Not applicable	
Evaporation rate	< 1	(BuAc = 1)
Flammability (solid, gas)	Not Determined	
Flammability Limit in Air		
Upper flammability limit:	Not Determined	
Lower flammability limit:	Not Determined	
Vapor pressure	Not Determined	
Vapor density	Not Determined	
Relative density	1.03	@ 15.5°C
Solubility(ies)	Soluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	Not Determined	
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

Other Information

Viscosity, kinematic (100°C)	Not Determined	
Pour Point	Not Determined	
VOC Content (ASTM E-1868-10)	0 g/L	ASTM E1868-10
VOC content	Not Determined	

SECTION 10: STABILITY AND REACTIVITY**Reactivity**

None under normal use conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

None under normal use conditions

Conditions to avoid

Keep away from open flames, sparks, and sources of ignition This product is intended to be used for quenching or tempering heated parts, ensure that proper fire prevention and safety precautions are taken

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be generated Products of combustion may include carbon monoxide, carbon dioxide, other gases and fumes.

SECTION 11: TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

There is no data available for this product.

Inhalation

Based on available data, the classification criteria are not met

Eye contact

Based on available data, the classification criteria are not met

Skin contact

Based on available data, the classification criteria are not met

Ingestion

Based on available data, the classification criteria are not met

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,2',2''-Nitrilotriethanol 102-71-6		> 16 mL/kg (Rat) > 2000 mg/kg (Rabbit)	
Borax (B4Na2O7.10H2O) 1303-96-4	4500mg/kg (Rat)	> 2000 mg/kg (Rabbit)	

Information on toxicological effects**Symptoms**

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation	Based on available data, the classification criteria are not met
Sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No special environmental measures are necessary

Chemical name	Algae/aquatic plants	Fish	Crustacea
2,2',2''-Nitrilotriethanol	216: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 169: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	10600-13000: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 1000: 96 h <i>Pimephales promelas</i> mg/L LC50 static 450-1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	1386: 24 h <i>Daphnia magna</i> mg/L EC50
Borax (B ₄ Na ₂ O ₇ ·10H ₂ O)	24: 96 h <i>Scenedesmus subspicatus</i> mg/L EC10	74: 96 h <i>Limanda limanda</i> mg/L LC50	242: 24 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability No information available.

Bioaccumulation No information available

Chemical name	Partition coefficient
2,2',2''-Nitrilotriethanol 102-71-6	-2.53
Borax (B ₄ Na ₂ O ₇ ·10H ₂ O) 1303-96-4	-0.757

Mobility Will likely be mobile in the environment due to its water solubility.

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Observe all label precautions until container is cleaned, reconditioned or destroyed.

SECTION 14: TRANSPORT INFORMATION

DOT Not Regulated

TDG Not Regulated

IATA Not Regulated

IMDG Not Regulated

SECTION 15: REGULATORY INFORMATION

International Inventories

Inventory information may be utilizing alternative CAS#s or exemptions beyond those stated within this document For further information, please contact: ProductStewardship@houghtonintl.com

TSCA	Complies
DSL	Complies
AICS	Does not Comply
PICCS	Does not Comply
KECL	Does not Comply
IECSC	Complies
ENCS	Does not Comply
TCSI	Complies
NZIoC	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
AICS - Australian Inventory of Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
ENCS - Japan Existing and New Chemical Substances
TCSI - Taiwan National Existing Chemical Inventory
NZIoC - New Zealand Inventory of Chemicals

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

- No EPCRA 311/312 hazards

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this regulation, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

SCAQMD Rule 1144

The sale or distribution in the SCAQM District of California for metal working fluids or direct-contact lubricants is allowed if EITHER the VOC of the product itself OR the VOC of the diluted product at the point of use is less than the following limits: (1) 75 g VOC/L for metal forming, metal removal, metal treating; (2) 50 g VOC/L for metal protection, direct-contact lubricant. The VOC of this product as sold is: 0 g/L gVOC/L (ASTM E-1868-10)

California Proposition 65

WARNING: This product contains a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm.

Chemical name	CAS No	California Prop. 65
Diethanolamine	111-42-2	Carcinogen

International Regulations**Ozone-depleting substances (ODS)**

Not applicable

Persistent Organic Pollutants

Not applicable

Chemicals Subject to Prior Informed Consent (PIC)

Not applicable

Other Information

Not applicable

SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

STOT SE - Specific target organ systemic toxicity (Single exposure)
 STOT RE - Specific target organ systemic toxicity (repeated exposure)
 VOC - Volatile organic compounds
 NIOSH IDLH: Immediately Dangerous to Life or Health

Revision Date 09-01-2019

Revision Note Company Logo

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet