

SAFETY DATA SHEET

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SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: AQUABLUE			
Product Use: <i>Water/Glycol Hydraulic Fluid</i>			
Manufacturer's Name: Forsythe Lubrication Associates			
Street Address: 120 Chatham Street			
City: Hamilton	Province: ON	Postal Code: L8P 2B5	Emergency Telephone: 905-525-7192

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview:	Caution! May cause skin and eye irritation
GHS Label elements	
Hazard pictograms:	
Signal word:	Warning
Precautionary Statements – Disposal	
Take expert advice of local regulatory agency for disposing this product.	
<u>Acute effects</u>	
EYE:	Moderately irritating to eyes
SKIN:	Slightly irritating to the skin
INHALATION:	Heating can generate vapours that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room is unlikely due to the low volatility of this product.
INGESTION:	Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.



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SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	% by wt.	CAS Number
Diethylene Glycol	45-55	111-46-6
Water	30-40	7732-18-5
Polyalkylene Glycol	10-15	52624-57-4
Decanoic acid	1-2	334-48-5
N-Isopropyl ethanolamine	1-2	109-56-8

SECTION 4 – FIRST AID MEASURES

EYE CONTACT:	Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effect occurs, consult a physician, preferably an ophthalmologist.
SKIN CONTACT:	Immediately flush skin with water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Suitable emergency safety shower facility should be immediately available.
INHALATION:	Remove victim to fresh air and keep rest in a position comfortable for breathing. Seek medical attention if irritation develops.
INGESTION:	Do not induce vomiting. Seek medical attention immediately. If person is fully conscious give 1 cup of water. If medical advice is delayed and if an adult has swallowed several ounces of chemical, then give 3-4 ounces of hard liquor such as 80 proof whiskey. For children, give proportionally less liquor at a dose of 0.3 ounces of liquor for each 10 pounds of body weight, or 2 mL per kg of body weight.

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
UNSUITABLE EXTINGUISHING MEDIA:	No information available.
SPECIFIC HAZARDS DURING FIREFIGHTING:	Cool closed containers exposed to fire with water spray.
COMBUSTION PRODUCTS:	Oxides of carbon, dense smoke and possibly toxic fumes.
PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



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SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Use personal protection recommended in Section 8. Minimize skin contact.
ENVIRONMENTAL PRECAUTIONS:	Do not allow uncontrolled discharge of product into the environment.
METHOD FOR CONTAINMENT & CLEAN-UP:	Ventilate the area with fresh air. If in confined space or limited air circulation area, workers should wear appropriate respiratory protection. Stop leak if without risk. Move containers from spill area. Shovel into suitable properly marked containers for disposal or reclamation in accordance with local regulations.

SECTION 7 – HANDLING & STORAGE

HANDLING PROCEDURES:	Do not swallow. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitroamines could be formed. Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto-ignition temperatures possibly resulting in spontaneous combustion.
STORAGE PROCEDURES:	Store in the following materials: 316 stainless steel. Carbon steel. Glass-lined container. Polypropylene. Polyethylene-lined container. Stainless steel. Teflon. This material may soften and lift certain paint and surface coatings. Use product promptly after opening. Store in original unopened container. Unopened containers of material stored beyond the recommended shelf life should be retested against the sales specifications before use. Additional storage and handling information on this product can be obtained by calling your sales or customer service contact.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL PARAMETERS:	Contains no substances with occupational exposure limit values.
ENGINEERING MEASURES:	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.
<u>PERSONAL PROTECTIVE EQUIPMENT</u>	
RESPIRATORY PROTECTION:	In case of insufficient ventilation, use suitable respiratory equipment.
EYE PROTECTION:	Wear safety goggles.
SKIN & BODY PROTECTION:	Wear safety shoes and protective gloves.
HYGIENE MEASURES:	Remove and wash contaminated clothing and gloves. Ensure the eyewash stations and safety showers are close to the workstation location.



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SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Physical state	Liquid
Appearance	
Colour	Clear blue
Odour	Ammonical fishy odour
Odour Threshold	Not available
pH	9.5
Pour point (°C)	-51
Boiling point/boiling range (°C)	129.6
Flash point (°C)	None
Evaporation Rate	0.64 (butyl acetate = 1)
Flammability Limit in Air	
Upper flammability limit	Not available
Lower flammability limit	Not available
Vapour pressure	~ 6.4 mm Hg at 20°C
Vapour density	~ 2.75 (air=1)
Specific Gravity	1.08
Water Solubility	Complete
Solubility in other solvents	
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature (°C)	Not available
Kinematic viscosity (cSt)	42
VOC Content (%)	Not available

SECTION 10 – STABILITY & REACTIVITY

REACTIVITY	Non-reactive under normal temperatures and pressures.
CHEMICAL STABILITY	Stable under normal conditions.
POSSIBILITY OF HAZARDOUS REACTIONS	Hazardous polymerization does not occur.
CONDITIONS TO AVOID	Extreme temperature and direct sunlight/heat/flames
INCOMPATIBLE MATERIALS	Strong oxidizing agent
HAZARDOUS DECOMPOSITION PRODUCTS	Hazardous decomposition is not expected to form under normal conditions of storage.



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SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity: Harmful if swallowed.

Diethylene glycol :

Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, >4.6 mg/l

The LC50 value is greater than the maximum attainable concentration. No deaths occurred at this concentration.

Polyalkylene Glycol :

The LC50 has not been determined.

Decanoic acid :

Acute inhalation toxicity: No adverse effects are anticipated from inhalation. No specific, relevant data available for assessment.

N-Isopropylethanolamine :

Acute inhalation toxicity: Vapor may cause irritation of the upper respiratory tract (nose and throat).

LC50, Rat, 4 Hour, Vapor, > 0.856mg/l No death occurred at this concentration.

Isopropyldiethanolamine:

Acute Inhalation toxicity:

LC50, Rat, 4 Hour, Vapour, >0.856 mg/l No deaths occurred at this concentration.

Ethylene Glycol :

Acute Inhalation toxicity:

At room temperature exposure to vapor is minimal due to low volatility. With good ventilation, single exposure is not cause adverse effects. If material is heated or areas are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea.



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SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY	<p>Toxicity to fish: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, 4,500 mg/L, OECD Test Guideline 203 or Equivalent</p> <p>Toxicity to daphnia and other aquatic invertebrates: EC50, Daphnia magna (Water flea), static test, 48 Hour, 4,800 mg/L, OECD Test Guideline 202 or Equivalent</p> <p>Toxicity to algae: LC50, Pseudokirchneriella subcapitata (green algae), static test, 96 Hour, Growth inhibition (cell density reduction), 467 mg/L, OECD Test Guideline 201 or Equivalent</p> <p>Toxicity to bacteria: LC50, Bacteria, static test, 16 Hour, 22,000 mg/L</p>
PERSISTENCE & DEGRADABILITY	Biodegradability: Material is readily biodegradable.
BIOACCUMULATION	No bioconcentration is expected because of the relatively high water solubility
OTHER ADVERSE EFFECTS	No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	Do not dump into any sewers, on the ground, or into any body of water. All disposal practices must be in compliance with all federal, state/provincial, and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.
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SECTION 14 – TRANSPORT INFORMATION

DOT	Not regulated as dangerous goods
TDG	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
IMDG/IMO	Not regulated as dangerous goods



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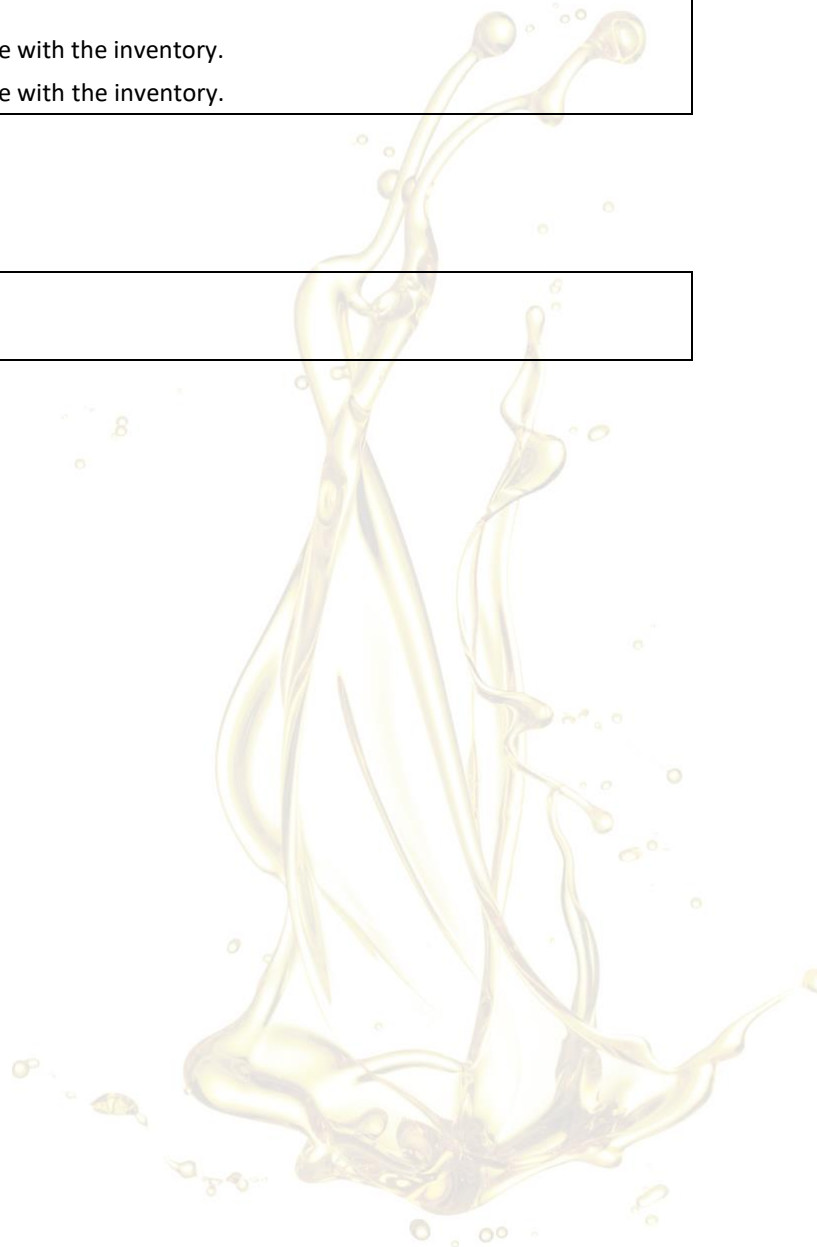
SECTION 15 – REGULATORY INFORMATION

INTERNATIONAL INVENTORIES

TSCA	All chemical substances in this product are either listed on or in compliance with the TSCA Inventory.
DSL	On the inventory, or in compliance with the inventory.
IECSC	On the inventory, or in compliance with the inventory.

SECTION 16 – OTHER INFORMATION

Revision date: APRIL 2019



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