SAFETY DATA SHEET

Defoamer KOF

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Defoamer KOF**
Product code:	
Recommended use of the chemical and restrictions on use:	Anti foaming agent.
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. 440 Passmore ave. Scarborough, ON, M1V 5J8 (416) 754-7211
24 Hr. Emergency phone #	**CANUTEC (613) 996-6666**

SECTION 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).

Hazard classification:
FLAMMABLE LIQUID- CATEGORY 2
EYE IRRITANT- CATEGORY 2
STOT-SE- CATEGORY 1
STOT-RE- CATEGORY 2
ASPIRATION HAZARD- CATEGORY 2
REPRODUCTIVE TOXICITY- CATEGORY 2

Label elements:



Signal word: DANGER

Hazard statements:
H320 Causes eye irritation
H225 Highly flammable liquid and vapour
H361 Suspected of damaging fertility or the unborn child
H371 May cause damage to organs
H373 May cause damage to organs through prolonged or repeated exposure.
H305 May be harmful if swallowed and enters airways.

Precautionary statements:
P210 Keep away from heat/sparks/open flame/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P264 Wash skin thoroughly after handling.

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mists or vapour.
P270 Do not eat, drink or smoke when using this product.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378 In case of fire: Use carbon dioxide, dry chemical, alcohol foam, water fog to extinguish.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P308+P313 If exposed or concerned: Get medical advice.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of container in accordance with local/regional/national/ international regulations.

Other hazards: Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: **Mixture**

Ingredient name	***CAS Number***	***Concentration (%)***
Water	7732-18-5	60-70
Alcohol	67-63-0	15-25
Alcohols, ethoxylated	68920-66-1	1-5

Concentrations are shown as ranges due to batch variation.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Inhalation Remove the exposed person to fresh air and keep comfortable. Get medical attention if necessary.

Skin contact Wash skin with soap and water. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact Get medical attention immediately. Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open.

Most important symptoms and effects, both acute and delayed:
The product is benign if case of contact with skin. The alcohol may dehydrate the skin. Do not ingest or get on your skin.
Indication of any immediate medical attention and special treatment needed:
None. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable	None known.
Special hazards arising from the substance:	Flammable liquid.
Hazardous thermal decomposition products:	Carbon dioxide and carbon monoxide.
Special protective actions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special 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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up:	Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for

	disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
Special spill response procedures:	In case of transportation accident, contact CHEMTREC at 1-800-424-9300.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Put on appropriate personal protective equipment. Avoid exposure -obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not reuse container.
Conditions for safe storage:	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be resealed and kept upright. Do not store in unlabeled containers.
Incompatible materials:	Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Ingredient	***Exposure limits***
Alcohol	**NIOSH REL** TWA 400 ppm (980 mg/m^3) ST 500 ppm (1225 mg/m^3) **OSHA PEL** TWA 400 ppm (980 mg/m^3)

Engineering controls:	Use with adequate ventilation to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Individual protection measures:	Eyes/face: Chemical splash goggles and face shield. Skin: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Respiratory: Wear appropriate respirator when ventilation is inadequate. Be sure to use a NIOSH approved respirator or equivalent.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid. White to light yellow.
Odor:	Slightly aromatic.
Odor threshold:	Not available.
pH:	2.0-4.0
Melting point:	Not available.
Freezing point:	Not available.
Initial boiling point and boiling range:	Not available.
Flash point:	Not applicable.
Evaporation rate:	Not available.
Flammability:	Flammable.
Upper and lower flammability limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	1.0
Solubility:	Miscible.
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	Stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Heat, static discharge.
Incompatible materials:	None known.
Hazardous decomposition products:	Will not decompose under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:	SKIN AND EYES: yes INHALATION: yes INGESTION: yes
Potential health effects (acute):	EYE: Causes eye irritation. Adverse symptoms may include pain, watering, redness. INHALATION: May cause respiratory tract irritation. SKIN: May cause skin dryness with prolonged exposure. INGESTION: Harmful if swallowed.
Delayed and immediate	Alcohol being a part of the product may cause CNS depression with

effects, chronic effects from short and long term exposure:	prolonged exposure.
Potential chronic health effects:	Alcohol affects blood vessels, liver and spleen; however, this is in the case of repeated ingestion.
Carcinogenicity:	None of the ingredients are listed as suspected carcinogens.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	May have reproductive toxicity when ingested.
Sensitization:	No known significant effects or critical hazards.

Toxicological effects:

Acute toxicity:

Product	***Result***	***Species***	***Dose***	***Exposure***
Alcohol	LD50 oral	Rat	5280 mg/kg	-
	LD50 dermal	Rabbit	12870 mg/kg	-
	LC50 inhalation	Rat	72600mg/m3	4 hours

Acute toxicity estimate:

Route	***ATE value***
Oral	27,777 mg/kg

Aspiration hazard: No data available.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity :

Name	***Result***	***Species***	***Exposure***
Alcohol	LC50 >100mg/L	Oryzias latipes	96 hours

Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Mobility in soil: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	UN1993
UN proper shipping name:	Flammable liquid, N.O.S. (Isopropanol)
Transport hazard class:	3
Packing group:	III
Environmental hazard:	No.
Special precautions for user:	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

Canada inventory (DSL): All components are listed.

SECTION 16: OTHER INFORMATION

Revision date: May 10, 2017

Revision number: 1

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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