

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	AQUASHIELD PROTECT GLASS
SUPPLIER	AQUASHIELD SRL
LOCATION	5, Gheorghe Doja street, 410163, Oradea, Romania
INFO CONTACT	0040 729 278 276
INFO CONTACT	orders@aquashield.eu
EMERGENCY CONTACT	0040 773 964 655

SECTION 2. COMPOSITION, INFORMATION ON INGREDIENTS

HYDROPHOBIC GLASS COATING - COMPOSITION FROM MODIFIED HYBRID MATERIALS IN DENATURED ETHANOL SOLUTION

NAME	CAS	Concentration	ACGIH TL	OSHA PE
ETHANOL ALCOHOL	64-17-5	60 %	1000 ppm 1880 mg/m	1000 ppm 1900 mg/m
ISOPROPANOL	67-63-0	3 %	400 ppm	400 ppm
AMORPHOUS SILICA	7631-86-9	2- 5 %	none	none
H2O	7732-18-5	2- 5 %	none	none
BONDING AGENTS	2530-	1- 2 %	none	none
NON HAZARDOUS		to make 100%	none	none

SECTION 3. HAZARD IDENTIFICATION

Regulation (EC) No 1272/2008 (CLP)

Hazard classes / Hazard categories

Flammable liquids, Category 2

67/548/EEC or 1999/45/EC

Hazard Characteristics

Highly flammable.

Hazard Statement

H225

R-phrases(s)

R11

Label elements: Hazard pictograms



Label elements: Signal word: Hazard statements: Danger Highly flammable liquid and vapour

Health Hazards	May cause irritation to respiratory system. May cause moderate irritation to skin. May cause eye irritation. Ingestion may cause drowsiness and dizziness. Possibility of organ or organ system damage from prolonged exposure; see Chapter 11 for details. Target organ(s): Liver.
Safety Hazards	Highly flammable. Flammable liquid and vapour

Not classified as dangerous for the environment



Environmental Hazards

See Toxicological Information (section 11)

Label elements: Signal word: Hazard statements: Danger Highly flammable liquid and vapour

Health Hazards

May cause irritation to respiratory system. May cause moderate irritation to skin. May cause eye irritation. Ingestion may cause drowsiness and dizziness. Possibility of organ or organ system damage from prolonged exposure; see Chapter 11 for details. Target organ(s): Liver.

Safety Hazards

Highly flammable. Flammable liquid and vapour

Environmental Hazards

Not classified as dangerous for the environment

See Toxicological Information (section 11)

SECTION 4. FIRST AID MEASURES

Eye Contact

Irritating to eyes. Can be damaging if large amount is splashed into eyes. Wash eyes promptly with plenty of water, while lifting the eye lids. Continue to rinse for at least 15 minutes, and get medical attention.

Skin Contact

Irritating to skin. Remove affected person from source of contamination. Wash contaminated skin promptly with soap or mild detergent and water. Remove clothing promptly, if soaked through, and wash

Inhalation

Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment

Ingestion

If swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration

Occupational

Occupational exposure limits (8-hour reference period) 1000 ppm (1900 mg/m³) Intoxicating if continuously inhaled for a long period of time. Move the person to fresh air, immediately perform artificial respiration if breathing has stopped. When breathing is difficult, properly-trained personnel may administer oxygen. Keep the person warm and at rest. Get medical attention promptly.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media

Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only

Unsuitable Extinguishing Media

Do not use water in a jet

Special hazards arising from substance or mixture



Advice for fire-fighters	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Ethanol burns with a smokeless blue flame that is not always visible in normal light Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space
Additional Advice	If possible remove containers from the danger zone. If the fire cannot be extinguished the only course of action is to evacuate immediately. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways

SECTION 6. ACCIDENTAL RELEASE MEASURES

Large Spill and Leak	Small quantities can be mopped or wiped up with rags. Eliminate all ignition sources. Keep unnecessary personnel away. Stop leak if without risk. Use suitable protective equipment (Section 8). For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways. Vapor can travel for considerable distances both above and below the ground surface. Underground services (drains, pipelines, cable ducts) can provide preferential flow paths. Do not breathe fumes, vapor.
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SECTION 7. HANDLING AND STORAGE

Handling	Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling equipment).
Storage	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep container tightly closed
General Precautions	Avoid breathing vapors or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine Appropriate controls for safe

handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering

SECTION 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Control Parameters: Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3
Ethanol	FH40 WFI	TWA	1 000 ppm	1.920 mg/m3
	ACGIH	STEL	1,000 ppm	
Isopropanol	EH40 WEL	TWA	400 ppm	983 mg/m3
	ACGIH	STEL	500 ppm	1,230 mg/m3

Control Parameters: Exposure Controls

GENERAL INFORMATION	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances
VENTILATION	Store in a well-ventilated area. Work area must be well ventilated. Use engineering controls to reduce air contamination to permissible exposure level
RESPIRATORS	No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL).
PROTECTIVE GLOVES	Wear gloves of impervious material e.g. laminated film or nitrile. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken
EYE PROTECTION	Wear approved chemical safety goggles where eye exposure is reasonably probable. Contact lenses should not be worn when working with this chemical!
OTHER PROTECTION	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Wear appropriate clothing to prevent repeated or prolonged skin contact.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear, colorless	Odor	A
PHYSICAL STATE:	Liquid	Odor threshold	l
BOILING POINT F:	208	pH AS SUPPLIED:	Ca 2
VAPOR PRESSURE (MMHG):	5.9 kPa [20°C]	VAPOR DENSITY (AIR)	1.6
SPECIFIC GRAVITY	0.78	Flashpoint	F: 61 C: 16
EVAPORATION RATE: BASIS (=1):	1.7	SOLUBILITY IN WATER	yes

SECTION 10. STABILITY AND REACTIVITY

STABILITY AND REACTIVITY	Stable under recommended storage conditions
CONDITIONS TO AVOID	Heat, flames and sparks. Extremes of temperature and direct sunlight
INCOMPATIBILITY WITH	Alkali metals, Ammonia, Oxidizing agents, Peroxides

SECTION 11. TOXICOLOGICAL INFORMATION

D/LC50 values that are relevant: LD50: ORL-RAT, 7,060 mg/kg (Ethanol). Carcinogenicity Classification: IARC (International Agency for Research on Cancer) - Not Listed NTP (National Toxicology Program) - Not Listed

INHALATION	Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. Vapors may cause dizziness or suffocation.
INGESTION	May cause gastrointestinal irritation with nausea, vomiting, and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea.
SKIN	Causes moderate skin irritation. Dry skin
EYES	Produces irritation, characterized by a burning sensation, redness, tearing, inflammation
CHRONIC	Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Prolonged ingestion may cause liver, kidney, and heart damage.

SECTION 12. ECOLOGICAL INFORMATION

ECO-TOXICITY	Not available
PERSISTENCE POTENTIAL	Not available



PRODUCTS OF
BIODEGRADATION

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic. The product is biodegradable and has not been shown to interfere in anyway with waste water treatment plants. In high concentrations it harms fish and plankton.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE INFORMATION	Waste must be disposed of in accordance with federal, state and local environmental control regulations
MATERIAL DISPOSAL	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Do not dispose into the environment, in drains or in water courses. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.
CONTAINER DISPOSAL	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion.

CONSULT YOUR LOCAL OR REGIONAL AUTHORITIES!

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID): ADR

UN No	1170
UN Proper Shipping Name	ETHYL ALCOHOL SOLUTION
Transport Hazard Class	3
Packing group	11
Danger label (primary risk)	3
Environmental Hazard	No
Special Precautions for user	Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

DOT

Shipping Name:	ETHYL ALCOHOL SOLUTION
Canada TDG	ETHYL ALCOHOL SOLUTION
Hazard Class	2
Packing group	11
Identification Number	UN1170. UN Number: UN1170



RID

UN No	1170
UN Proper Shipping Name	ETHYL ALCOHOL SOLUTION
Transport Hazard Class	3
Packing group	11
Danger label (primary risk)	3
Environmental Hazard	No

Special Precautions for user Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport

Sea transport (IMDG Code)

UN No	1170
UN Proper Shipping Name	ETHYL ALCOHOL SOLUTION
Transport Hazard Class	3
Packing group	11
Danger label (primary risk)	3
Environmental Hazard	No

Air transport (IATA)

UN No	1170
UN Proper Shipping Name	ETHYL ALCOHOL SOLUTION
Transport Hazard Class	3
Packing group	11
Danger label (primary risk)	3
Environmental Hazard	No
Packing group	Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport

SECTION 15. REGULATORY INFORMATION

U.S. Regulations	US INVENTORY (TSCA): Listed on inventory.
Other Regulations	AUSTRALIAN INVENTORY (AICS): inventory. CANADA INVENTORY (DSL): Listed on inventory. CHINA INVENTORY (IECS): Listed on inventory. EC INVENTORY (EINECS/ELINCS): Listed on inventory. JAPAN INVENTORY (ENCS): Listed on inventory. KOREA INVENTORY (ECL): Listed on inventory Australian Hazchem Code: No information found.



SECTION 16. OTHER INFORMATION

LABELING ACCORDING TO
REGULATION (EC) NO 1272/2008

CLP PRECAUTIONARY
STATEMENTS
PREVENTION

STORAGE

LABELING ACCORDING TO
DIRECTIVE 1999/45/EC

H225: Highly flammable liquid and vapor. ENVIRONMENTAL
HAZARDS:
Not classified as an environmental hazard under GHS criteria
P102: Keep out of reach of children.
P210: Keep away from heat/sparks/open flames/hot surfaces.
– No smoking.
P233: Keep container tightly closed.
P280: Wear protective gloves/protective clothing/eye
protection/face protection.
P403+P235: Store in a well-ventilated place. Keep cool.

EC Symbols	F Highly flammable
EC Classification	Highly flammable
EC Risk Phrases	R11 Highly flammable
EC Safety Phrases	S2 Keep out of the reach of children S7 Keep container tightly closed S16 Keep away from sources of ignition - No smoking

SECTION 17. DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.