

Material Safety Data Sheet

1. Product and company identification

Product name	: AQUA-SHIELD
Supplier	: Palayesh Paraffin Khavaran Co. West 3 rd Floor, No 251, Shahid Beheshti Ave, Tehran- Iran
	For Product Information/MSDSs/ Emergency Call: +98-21-88500600 +98-9101450130
Material Uses	: Special:Water Base Shale Inhibitor
Code	: AQUA-SHIELD
Validation date	: 10/9/2016.
Print date	: 10/9/2016.
Version	: 1.01

2. Hazards identification

Physical state	: Liquid
Odor	: Slight Organic
Color	: Colorless liquid
Emergency overview	: WARNING! CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE EYE AND SKIN IRRITATION.

Avoid contact with eyes, skin and clothing.
Use only with adequate ventilation. Keep container tightly closed and sealed until ready for
Wash thoroughly after handling.

Routes of entry : Dermal contact. Inhalation.

Potential acute health effects

Inhalation	: Irritating to respiratory system.
Ingestion	: Ingestion may cause gastrointestinal irritation
Skin	: Moderately irritating to the skin.
Eyes	: Moderately irritating to eyes. No significant irritation expected other than possible mechanical irritation.

Potential chronic health effects

Chronic effects : Repeated or prolonged inhalation may lead to chronic respiratory irritation.

Over-exposure signs/symptoms

Inhalation	: respiratory tract irritation, coughing
Ingestion	: None known.
Skin	: Moderate irritation,
Eyes	: Moderate irritation, watering, redness

3 . Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
1,2,3-Trihydroxypropane	56-81-5	40-50%
Polyoxayalkylene Glycol	52624-57-4	5-10%
Monoethylene glycol	107-21-1	20-30%
<u>Additional information</u>	Trade Secret	
This product is a mixture of Chemical family		

4 . First aid measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wear suitable protective clothing and gloves. Remove contaminated clothing and shoes.

5 . Fire-fighting measures

Extinguishing media

Suitable : Use dry chemical powder.

Not suitable : Use water jet.

Special exposure hazards : 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.

Hazardous thermal decomposition products : carbon dioxide, carbon monoxide

Special protective : Fire-fighters should wear appropriate protective equipment and self-contained breathing

6 . Accidental release measures

Personal precautions : 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. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

- Respiratory** : Approved/certified disposable particulate dust mask. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant gloves.
- Eyes** : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.
- Skin** : Wear long sleeves and other protective clothing to prevent repeated or prolonged skin contact.

9 . Physical and chemical properties

- Physical state** : Liquid
- Flash point** : Not Available
- Auto-ignition temperature** : Not available
- Flammable limits** : Not available.
- Color** : Colorless
- Odor** : Slight Organic
- pH** : 11.7.
- Boiling/condensation point** : Not available
- Initial Boiling Point** : Not available.
- Melting/freezing point** : Not available
- Density** : 1.012 gr/cm
- Vapor density** : Not available.
- Odor threshold** : Not available.
- Evaporation rate** : Not available.
- VOC** : Not available.
- Viscosity** : Not available.
- Solubility (Water)** : soluble
- Vapor pressure** : Not available.
- Pour Point** : Not available.
- Partition coefficient (LogKow)** : Not available.

10 . Stability and Reactivity

- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Conditions of reactivity** : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

11. Disposal considerations

Waste disposal

- : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.