

SAFETY DATA SHEET

AQUASHIELD™

SDS according to the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200), Revision 2012

Section 1. Identification

Product code : 204022-01
Product name : AQUASHIELD™
Other means of identification : Not available.

Relevant identified uses of the substance or mixture and uses advised against

Relevant uses : Complex grease
Uses advised against : Any other purpose. Not intended for human consumption.

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Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : TOXIC TO REPRODUCTION - Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection.

Section 2. Hazards identification

Response	: IF exposed or concerned: Get medical advice or attention.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy naphthenic	≥25 - ≤50	64742-52-5
Mineral oil **	≥10 - ≤25	-
Mineral oil **	≤10	-
Mineral oil	≤3	-
titanium dioxide	<1	13463-67-7
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	≤0.3	68411-46-1

**** May contain** : 64742-01-4, 64742-52-5, 64742-53-6, 64742-57-0, 64742-62-7

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 4. First aid measures

Description of necessary first aid measures

General advice	: Get medical attention. If medical advice is needed, have product container or label at hand. Use personal protective equipment as required. Remove contaminated clothing and wash it before reuse. Wash skin surfaces thoroughly after contact.
Inhalation	: Move affected person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.
Skin contact	: Brush off loose particles from skin. Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse.
Eye contact	: Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do.
Ingestion	: Ingestion may cause gastrointestinal irritation and diarrhea. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Inhalation	: Not expected under normal use.
Skin contact	: Not expected under normal use.
Eye contact	: Not expected under normal use.
Ingestion	: Not expected under normal use.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Treat symptomatically.
Specific treatments	: No specific treatment.

Section 4. First aid measures

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Use personal protective equipment as required.

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : In a fire, hazardous decomposition products may be produced. carbon oxides (CO, CO₂) nitrogen oxides metal oxide/oxides

- 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.

- 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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see Section 8). Keep unnecessary personnel away. Avoid breathing vapor or mist. Provide adequate ventilation.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Evacuate area.

- Environmental precautions** : Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter any waterway, sewer or drain.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Absorb with an inert material and place in an appropriate waste disposal container. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Do not dry sweep. Avoid dust generation. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not breathe dust. Do not ingest.
- Advice on general occupational hygiene** : 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
- Storage temperature** : Not available.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
Mineral oil **	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ .
Mineral oil **	ACGIH TLV (United States) STEL 15 minutes: 10 mg/m ³ . TWA 8 hours: 5 mg/m ³ . NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ .
Mineral oil	ACGIH TLV (United States) TWA 8 hours: 5 mg/m ³ . STEL 15 minutes: 10 mg/m ³ . NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States)

Section 8. Exposure controls/personal protection

titanium dioxide	TWA 8 hours: 5 mg/m³. STEL 15 minutes: 10 mg/m³. NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m³. Form: Mist. STEL 15 minutes: 10 mg/m³. Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m³. ACGIH TLV (United States, 1/2024) TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles. OSHA PEL (United States, 5/2018) TWA 8 hours: 15 mg/m³. Form: Total dust.
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Keep equipment clean.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Hand protection** : 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.
- Other skin protection** : 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. Appropriate footwear and any additional skin protection measures 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 protection** : A respirator is not needed under normal and intended conditions of product use. Use appropriate respiratory protection if there is a risk of exceeding any exposure limits.
- Thermal hazards** : Not expected under normal use. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

Appearance

Physical state	: Solid. [grease]
Color	: Blue., -, Green.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: >150°C (>302°F) [Cleveland]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not applicable.
Vapor pressure	: Not available.
Vapor density	: Not applicable.
Density	: Not available.
Solubility	:

Media	Result
water	Not soluble

Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >30 mm ² /s (>30 cSt)

VOC content

Product	: 12 g/l
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Particle characteristics

Median particle size	: Not available.
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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific measures identified.
Incompatible materials	: Strong oxidizing materials. strong acids. strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 10. Stability and reactivity

Section 11. Toxicological information

Information on toxicological effects

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

Acute toxicity estimates

Not available.

Numerical measures of toxicity

Product/ingredient name	Result	
Distillates (petroleum), hydrotreated heavy naphthenic	Rat - Oral - LD50	>5000 mg/kg
	Rabbit - Dermal - LD50	>2000 mg/kg
titanium dioxide	Rat - Oral - LD50	>5000 mg/kg
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Rat - Oral - LD50	>2000 mg/kg
	Rabbit - Dermal - LD50	>2000 mg/kg

Irritation/Corrosion : Based on available data, the classification criteria are not met.

Product/ingredient name	Result	
Distillates (petroleum), hydrotreated heavy naphthenic	Rabbit - Skin - Severe irritant	Amount/concentration applied: 500 mg
	Rabbit - Skin - Severe irritant	Amount/concentration applied: 500 mg
titanium dioxide	Human - Skin - Mild irritant	Duration of treatment/exposure: 72 hours Amount/concentration applied: 300 ug l

Respiratory or skin sensitization : Based on available data, the classification criteria are not met.

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

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

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

Reproductive toxicity : Suspected of damaging fertility.

Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.

Product/ingredient name	Result
titanium dioxide	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.

Section 11. Toxicological information

Product/ingredient name	Result
titanium dioxide	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

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

Other information : None identified.

Information on the likely routes of exposure

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Suspected of damaging fertility.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Not expected under normal use.

Skin contact : Not expected under normal use.

Eye contact : Not expected under normal use.

Ingestion : Not expected under normal use.

Section 12. Ecological information

This material is toxic to aquatic life with long lasting effects.

Toxicity

Product/ingredient name	Result	
titanium dioxide	Acute - LC50 - Marine water	>1000 mg/l [96 hours] Fish - Mummichog - <i>Fundulus heteroclitus</i>
	Acute - LC50 - Fresh water	3 mg/l [48 hours] Crustaceans - Water flea - <i>Ceriodaphnia dubia</i> - Neonate

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Mineral oil	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	5.1	1730	High

Mobility in soil

Soil/Water partition coefficient : Not available.

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : 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 non-recyclable products via a licensed waste disposal contractor. Empty containers or liners may retain some product residues. Empty containers retain product residue and can be hazardous. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Water Act (CWA) 311

None of the components are listed.

Clean Water Act (CWA) 307

None of the components are listed.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

None of the components are listed.

Section 15. Regulatory information

SARA 302/304

None of the components are listed.

SARA 311/312

Classification : See GHS Classification in section 2 for hazard class information

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.

State regulations

Massachusetts : The following components are listed: OIL MIST, MINERAL

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California

California Prop. 65

 **WARNING:** This product can expose you to chemicals including Ethylene oxide and Methyl isobutyl ketone, which are known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Titanium dioxide, Naphthalene, Propylene oxide, 1,4-Dioxane and Ethyl acrylate, which are known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SCAQMD Rule 1144

This product has not been tested for VOC content by the ASTM E-1868-10 (2021) method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

United States : All components are active or exempted.

Canada : All components are listed or exempted.

Section 16. Other information

Date of issue/Date of revision	: 9/4/2025
Version	: 2.03
Prepared by	: Quaker Houghton Product Stewardship
Key to abbreviations	: 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) N/A = Not available SGG = Segregation Group UN = United Nations VOC = Volatile Organic Compound
References	: Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .

▀ Indicates information that has changed from previously issued version.

Notice to reader

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