

SAFETY DATA SHEET

AQUASHIELD S1315

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product code : 204832-01
Product name : AQUASHIELD S1315

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

Relevant uses : Lubricating grease
Uses advised against : Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier : Quaker Houghton Sales BV
Beacon Road
Trafford Park
Manchester
M17 1AF
Tel: +44 (0)161 874 5000

ProductStewardship-EMEA@quakerhoughton.com
www.quakerhoughton.com

1.4 Emergency telephone number

Telephone number : CHEMTREC UK: +(44)-870-8200418 (National) or +(44)-203-8073798 (London)
NHS Direct (England): 111

NHS Direct (Wales): 0845 46 47

NHS 24 (Scotland): 08454 24 24 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

Product definition : Mixture

Classification according to UK CLP/GHS

Not classified.

2.2 Label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

SECTION 2: Hazards identification

Precautionary statements

- Prevention** : Not applicable.
- Response** : Not applicable.
- Storage** : Not applicable.
- Disposal** : Not applicable.
- Supplemental label elements** : Contains Naphthenic acids, zinc salts, basic. May produce an allergic reaction. Safety data sheet available on request.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

2.3 Other hazards

- Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
- Other hazards which do not result in classification** : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Limestone	EC: 215-279-6 CAS: 1317-65-3	≤3	Not classified.	[2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≤3	Not classified.	[2]
Naphthenic acids, zinc salts, basic	EC: 282-762-6 CAS: 84418-50-8	≤3	Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
Phosphorodithioic acid, mixed O, O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	EC: 288-917-4 CAS: 85940-28-9	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	[1]

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

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

SECTION 4: First aid measures

4.1 Description of 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** : 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.

4.2 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.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically.
- Specific treatments** : No specific treatment.
- 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: Firefighting measures

5.1 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.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : In a fire, hazardous decomposition products may be produced. carbon oxides (CO, CO₂) nitrogen oxides metal oxide/oxides

5.3 Advice for firefighters

- 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

6.1 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.
- 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".

6.2 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.

6.3 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. 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. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 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 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.

7.2 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.

7.3 Specific end use(s)

- Recommendations** : Observe technical data sheet/instructions for use.
- Industrial sector specific solutions** : Observe technical data sheet/instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Limestone	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 4 mg/m ³ 8 hours. Form: Respirable dust TWA: 10 mg/m ³ 8 hours. Form: inhalable dust TWA: 4 mg/m ³ 8 hours. Form: respirable TWA: 10 mg/m ³ 8 hours. Form: total inhalable
titanium dioxide	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 4 mg/m ³ 8 hours. Form: respirable TWA: 10 mg/m ³ 8 hours. Form: total inhalable

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
titanium dioxide	DNEL	Long term Inhalation	10 mg/m ³	Workers	Local
	DNEL	Long term Oral	700 mg/kg bw/day	General population	Systemic
Naphthenic acids, zinc salts, basic	DNEL	Long term Inhalation	0.9 mg/m ³	General population	Systemic
	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.7 mg/kg bw/day	Workers	Systemic
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	DNEL	Long term Inhalation	3 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.19 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.67 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	4.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	6.6 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	9.6 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Engineering controls should be considered as the first line of protection against adverse exposure to harmful substances. Administrative controls and PPE should be used in the absence of engineering controls or as supplemental controls where engineering controls are insufficient in reducing specific exposures to an acceptable level

Individual protection measures

SECTION 8: Exposure controls/personal protection

- Eye/face protection** : If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields
- Skin protection**
- Hand protection** : For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn. The following glove type may be suitable for handling this product. Protective gloves complying with EN374
- | | | |
|----------------|----------------------------------|---|
| nitrile rubber | Glove Thickness : ≥ 0.38 mm | Break through time : ≥ 480 minutes |
| butyl rubber | Glove Thickness : ≥ 0.64 mm | Break through time : ≥ 480 minutes |
- The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Always ensure that gloves are free from defects and that they are stored and used correctly. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.**
- Other skin protection** : 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. Wear suitable working clothes.
- Respiratory protection** : No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection. If heated and ventilation is inadequate, use respirator which will protect against organic vapor and dust/mist. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification.
- This information is based on the state in which the specific product is delivered and on the intended use specified within this SDS. This information is provided based on literature reference, manufacturer specifications and recommendations and/or derived by analogy with similar substances. The level of protection and types of exposure controls will vary depending on potential exposure conditions.**
- 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. Ensure regular inspection, cleaning and maintenance of equipment and machines.
- 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.
- Thermal hazards** : Not expected under normal use. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid. [grease]
- Color** : Green.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : $>180^{\circ}\text{C}$

Section 9. Physical and chemical properties

Initial boiling point and boiling range	: Not available.
Flash point	: Open cup: >200°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Density	: Not available.
Solubility(ies)	:

Media	Result
water	Not soluble

Partition coefficient: n-octanol/ water : Not applicable.

Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 460 mm ² /s (460 cSt)
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Numerical measures of toxicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
titanium dioxide Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit	>20000 mg/kg	-
	LD50 Oral	Rat	3080 mg/kg	-

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

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-

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.

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

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

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

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.

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.

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

None identified.

SECTION 12: Ecological information

12.1 Toxicity

No known significant effects or critical hazards.

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water Acute LC50 6.5 mg/l Fresh water Acute LC50 >1000000 µg/l Marine water	-	48 hours 48 hours 96 hours
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	Acute EC50 2.1 mg/l Acute EC50 5.4 mg/l Acute LC50 4.5 mg/l	-	72 hours 48 hours 96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Naphthenic acids, zinc salts, basic	-	60960	high

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

14.6 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.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
UK (GB) /REACH

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Substances of very high concern

This product does not contain candidate substances of very high concern at a concentration => 0.1%

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

SECTION 15: Regulatory information

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.

15.2 Chemical Safety Assessment

: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

🔍 Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative
IMDG = International Maritime Dangerous Goods
IATA = International Air Transport Association
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

Key literature references and sources for data

: The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 No. 720 as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] Annex II as amended by UK REACH Regulation SI 2019/758
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .

Procedure used to derive the classification

Not classified.

Full text of abbreviated H statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Full text of classifications

SECTION 16: Other information

Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1

Training advice : **Users of this product should be provided the information in this safety data sheet, including possible hazards, safe handling, and proper use of chemical products.**

Version : 1.01

Disclaimer

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is correct to the best of our knowledge, information and belief at the date of its publication. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.