

SAFETY DATA SHEET

QUANTUM PREMIUM SCREENWASH CONCENTRATE

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

1.1. Product identifier

Product name	QUANTUM PREMIUM SCREENWASH CONCENTRATE
Product number	ZGBOOQPSWC100, ZGBOOQPSWC01L, ZGBOOQPSWC05L
Internal identification	B18907, 18517, 18518, 18519
Container size	1 Litre Cans to 25 Litre Drums

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

Identified uses	All purpose automotive windscreen cleaner
Uses advised against	This product is not recommended for any industrial, professional or consumer use other than the identified uses stated above.

1.3. Details of the supplier of the safety data sheet

Supplier	Volkswagen Group United Kingdom Ltd Yeomans Drive Blakelands Milton Keynes
	MK14 5AN 01908 601601

1.4. Emergency telephone number

Emergency telephone	Tel: +44 1604 701111 (Office Hours Monday - Friday (0900 Hrs - 1700 Hrs))
----------------------------	---

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Eye Irrit. 2 - H319 STOT SE 2 - H371
Environmental hazards	Not Classified

2.2. Label elements

Pictogram



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H371 May cause damage to organs .

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> <p>P102 Keep out of reach of children.</p>
---------------------------------	---

Contains METHANOL

Detergent labelling < 5% perfumes, Contains CITRAL, BENZISOTHIAZOLINONE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANOL	10-30%
CAS number: 64-17-5	EC number: 200-578-6
	REACH registration number: 01-2119457610-43-XXXX
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
METHANOL	5-10%
CAS number: 67-56-1	EC number: 200-659-6
	REACH registration number: 01-2119433307-44-XXXX
Classification	
Flam. Liq. 2 - H225	
Acute Tox. 3 - H301	
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
STOT SE 1 - H370	

QUANTUM PREMIUM SCREENWASH CONCENTRATE

ETHANEDIOL		1-5%
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01-2119456816-28-XXXX
Classification		
Acute Tox. 4 - H302 STOT RE 2 - H373		
2-BUTOXYETHANOL		1-5%
CAS number: 111-76-2	EC number: 203-905-0	REACH registration number: 01-2119475108-36-XXXX
Classification		
Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319		
CITRAL		<1%
CAS number: 5392-40-5	EC number: 226-394-6	REACH registration number: 01-2119462829-23-XXXX
Classification		
Skin Irrit. 2 - H315 Skin Sens. 1 - H317		
PROPYLENE GLYCOL		<1%
CAS number: 57-55-6	EC number: 200-338-0	REACH registration number: 01-2119456809-23-XXXX
Classification		
Not Classified		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Inhalation	Remove affected person from source of contamination. Keep affected person away from heat, sparks and flames. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Skin contact	Remove affected person from source of contamination. Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	In the unlikely event of over exposure to organic solvent vapours from this product, symptoms which may develop include headache, fatigue, dizziness and nausea.
Ingestion	Ingestion of large amounts may result in unconsciousness, blindness and death.
Skin contact	Skin irritation.
Eye contact	Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
-----------------------------	---

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Alcohol-resistant foam. Carbon dioxide (CO ₂). Water spray, fog or mist. Dry chemicals, sand, dolomite etc.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). May explode when heated or when exposed to flames or sparks. Solvent vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. May form explosive or toxic mixtures with air. Vapour explosion and poison hazard indoors, outdoors and in sewers.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters	Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Personal precautions Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. DO NOT touch spilled material! Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Cover large spillages with alcohol-resistant foam. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. During application and drying, solvent vapours will be emitted. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from oxidising materials, heat and flames. Take precautionary measures against static discharges.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

METHANOL

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
 Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
 Long-term exposure limit (8-hour TWA): 2006/15/EC 200 ppm 260 mg/m³
 Sk

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 52 mg/m³ 20 ppm
 Short-term exposure limit (15-minute): WEL 104 mg/m³ 40 ppm vapour
 Sk
 Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³
 Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m³
 Sk

PROPYLENE GLYCOL

Long-term exposure limit (8-hour TWA): WEL 474 mg/m³ 150 ppm particulate vapour
 Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

WEL = Workplace Exposure Limit
 Sk = Can be absorbed through skin.
 Sk = Can be absorbed through the skin.

ETHANOL (CAS: 64-17-5)

DNEL	Workers - Dermal; Long term systemic effects: 343 mg/kg Workers - Inhalation; Long term systemic effects: 950 mg/m ³ Workers - Inhalation; Short term Acute, local effects: 1900 mg/m ³ Consumer - Inhalation; Short term Acute, local effects: 950 mg/m ³ Consumer - Dermal; Long term systemic effects: 206 mg/kg Consumer - Inhalation; Long term systemic effects: 114 mg/m ³ Consumer - Oral; Long term systemic effects: 87 mg/kg
PNEC	- Fresh water; 0.96 mg/l - Marine water; 0.79 mg/l - STP; 580 mg/l - Intermittent release; 2.75 mg/l - Sediment (Freshwater); 3.6 mg/kg sediment dw - Sediment (Marinewater); 2.9 mg/kg sediment dw - Soil; 0.63 mg/kg soil dw

METHANOL (CAS: 67-56-1)

DNEL	Industry - Dermal; Short term Acute: 40 mg/kg bw/day Industry - Dermal; Long term systemic effects: 40 mg/kg bw/day Industry - Inhalation; Short term Acute: 260 mg/m ³ Industry - Inhalation; Long term systemic effects: 260 mg/m ³ Consumer - Dermal; Short term Acute: 8 mg/kg bw/day Consumer - Dermal; Long term systemic effects: 8 mg/kg bw/day Consumer - Inhalation; Long term systemic effects: 50 mg/m ³ Industry - Inhalation; Short term Acute: 260 mg/m ³ Industry - Inhalation; Long term local effects: 260 mg/m ³ Consumer - Inhalation; Short term Acute: 50 mg/m ³ Consumer - Inhalation; Long term local effects: 50 mg/m ³
-------------	---

QUANTUM PREMIUM SCREENWASH CONCENTRATE

- PNEC**
- Fresh water; 20.8 mg/l
 - Marine water; 2.08 mg/l
 - Soil; 3.18 mg/kg soil dw
 - STP; 100 mg/l
 - Sediment (Freshwater); 77 mg/kg sediment dw
 - Intermittent release; 1540 mg/l
 - Sediment (Marinewater); 7.7 mg/kg sediment dw

2-BUTOXYETHANOL (CAS: 111-76-2)

- DNEL**
- Industry - Dermal; Short term : 89 mg/kg/day
 - Industry - Inhalation; Short term : 663 mg/m³
 - Industry - Dermal; Long term : 75 mg/kg/day
 - Industry - Inhalation; Long term : 98 mg/m³
 - Consumer - Dermal; Short term : 44.5 mg/kg/day
 - Consumer - Oral; Short term : 13.4 mg/kg/day
 - Consumer - Inhalation; Short term : 123 mg/m³
 - Consumer - Inhalation; Long term : 49 mg/m³

- PNEC**
- Fresh water; 8.8 mg/l
 - Marine water; 0.88 mg/l
 - Soil; 3.13 mg/kg soil dw
 - Intermittent release; 9.1 mg/l
 - Sediment (Freshwater); 34.6 mg/kg sediment dw
 - Sediment (Marinewater); 3.46 mg/kg sediment dw
 - STP; 463 mg/l

ETHANEDIOL (CAS: 107-21-1)

- DNEL**
- Industry - Dermal; Long term systemic effects: 106 mg/kg bw/day
 - Industry - Inhalation; Long term local effects: 35 mg/m³
 - Consumer - Dermal; Long term systemic effects: 53 mg/kg bw/day
 - Consumer - Inhalation; Long term local effects: 7 mg/m³

- PNEC**
- Fresh water; 10 mg/l
 - Marine water; 1 mg/l
 - Sediment (Freshwater); 37 mg/kg sediment dw
 - Intermittent release; 10 mg/l
 - Soil; 1.53 mg/kg
 - STP; 199.5 mg/l
 - Sediment (Marinewater); 3.7 mg/kg sediment dw
 - Soil; 1.53 mg/kg soil dw

CITRAL (CAS: 5392-40-5)

- DNEL**
- Workers - Inhalation; Long term systemic effects: 9 mg/m³
 - Workers - Dermal; Long term systemic effects: 1.7 mg/kg bw/day
 - Workers - Dermal; Long term local effects: 0.14 mg/cm²
 - General population - Inhalation; Long term systemic effects: 2.7 mg/m³
 - General population - Dermal; Long term systemic effects: 1 mg/kg bw/day
 - General population - Dermal; Long term local effects: 0.14 mg/cm²
 - General population - Oral; Long term systemic effects: 0.6 mg/kg bw/day

QUANTUM PREMIUM SCREENWASH CONCENTRATE

- PNEC**
- Fresh water; 0.00678 mg/l
 - Marine water; 0.000678 mg/l
 - Intermittent release; 0.0678 mg/l
 - STP; 1.6 mg/l
 - Sediment (Freshwater); 0.125 mg/kg sediment dw
 - Sediment (Marinewater); 0.0125 mg/kg sediment dw
 - Soil; 0.0209 mg/kg soil dw

PROPYLENE GLYCOL (CAS: 57-55-6)

- DNEL**
- Industry - Inhalation; Long term systemic effects: 168 mg/m³
 - Industry - Inhalation; Long term local effects: 10 mg/m³
 - Consumer - Inhalation; Long term systemic effects: 50 mg/m³
 - Consumer - Inhalation; Long term local effects: 10 mg/m³

- PNEC**
- Fresh water; 260 mg/l
 - Marine water; 26 mg/l
 - STP; 20000 mg/kg
 - Sediment (Freshwater); 572 mg/kg
 - Sediment (Marinewater); 57.2 mg/kg
 - Soil; 50 mg/kg
 - Intermittent release; 183 mg/l

GERANIOL (CAS: 106-24-1)

- DNEL**
- Workers - Inhalation; Long term systemic effects: 161.6 mg/m³
 - Workers - Dermal; Long term systemic effects: 12.5 mg/kg bw/day
 - Workers - Dermal; Long term local effects: 11.8 mg/cm²
 - General population - Inhalation; Long term systemic effects: 47.8 mg/m³
 - General population - Dermal; Long term systemic effects: 7.5 mg/kg bw/day
 - General population - Dermal; Long term local effects: 11.8 mg/cm²
 - General population - Oral; Long term systemic effects: 13.75 mg/kg bw/day

- PNEC**
- Fresh water; 0.0108 mg/l
 - Marine water; 0.00108 mg/l
 - Intermittent release; 0.108 mg/l
 - STP; 0.7 mg/l
 - Sediment (Freshwater); 0.115 mg/kg
 - Sediment (Marinewater); 0.0115 mg/kg
 - Soil; 0.0167 mg/kg

BENZYL VIOLET 4B (CAS: 1694-09-3)

DNEL No DNEL available.

PNEC No PNEC available.

3,7-DIMETHYL-1,6-OCTADIEN-3-OL (CAS: 78-70-6)

QUANTUM PREMIUM SCREENWASH CONCENTRATE

DNEL	Workers - Inhalation; Long term systemic effects: 2.8 mg/m ³
	Workers - Inhalation; Short term Acute: 16.5 mg/m ³
	Workers - Dermal; Long term systemic effects: 2.5 mg/kg bw/day
	Workers - Dermal; Short term Acute: 5 mg/kg bw/day
	Workers - Dermal; Long term local effects: 15 mg/cm ²
	Workers - Dermal; Short term Acute: 15 mg/cm ²
	General population - Inhalation; Long term systemic effects: 0.7 mg/m ³
	General population - Inhalation; Short term Acute: 4.1 mg/m ³
	General population - Dermal; Long term systemic effects: 1.25 mg/kg bw/day
	General population - Dermal; Short term Acute: 2.5 mg/kg bw/day
	General population - Dermal; Long term local effects: 15 mg/cm ²
	General population - Dermal; Short term Acute: 15 mg/cm ²
	General population - Oral; Long term systemic effects: 0.2 mg/kg bw/day
General population - Oral; Short term Acute: 1.2 mg/kg bw/day	
PNEC	- Fresh water; 0.2 mg/l
	- Marine water; 0.02 mg/l
	- Intermittent release; 2 mg/l
	- STP; 10 mg/l
	- Sediment (Freshwater); 2.22 mg/kg sediment dw
	- Sediment (Marinewater); 0.222 mg/kg sediment dw
	- Soil; 0.327 mg/kg soil dw

CITRONELLOL (CAS: 106-22-9)

DNEL	Workers - Inhalation; Long term systemic effects: 161.6 mg/m ³
	Workers - Inhalation; Long term local effects: 10 mg/m ³
	Workers - Inhalation; Short term Acute: 10 mg/m ³
	Workers - Dermal; Long term systemic effects: 327.4 mg/kg bw/day
	General population - Inhalation; Long term systemic effects: 47.8 mg/m ³
	General population - Inhalation; Long term local effects: 10 mg/m ³
	General population - Inhalation; Short term Acute: 10 mg/m ³
	General population - Dermal; Long term systemic effects: 196.4 mg/kg bw/day
	General population - Dermal; Short term local effects, Acute: 2.950 mg/cm ²
	Workers - Dermal; Short term Acute, local effects: 2.950 mg/cm ²
General population - Oral; Long term systemic effects: 13.8 mg/kg bw/day	
PNEC	- Fresh water; 0.0024 mg/l
	- Marine water; 0.00024 mg/l
	- Intermittent release; 0.024 mg/l
	- STP; 580 mg/l
	- Sediment (Freshwater); 0.0256 mg/kg sediment dw
	- Sediment (Marinewater); 0.00256 mg/kg sediment dw
	- Soil; 0.00371 mg/kg soil dw

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Wear chemical splash goggles. Contact lenses should not be worn when working with this chemical.

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: In case of intensive contact, wear protective gloves (EN 374). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. protective gloves shall be replaced immediately when physically damaged or worn. Appropriate Material - Butyl, Material Thickness - 0.6 to 0.8mm, Breakthrough Time - 8Hrs
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear apron or protective clothing in case of contact. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2.
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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Blue.
Odour	Alcoholic. Lemon. Perfume.
pH	pH (concentrated solution): 6.0 to 9.0
Melting point	Below minus 30°C
Initial boiling point and range	circa 90°C @ 760 mm Hg
Flash point	28°C Closed cup.
Upper/lower flammability or explosive limits	: 3.3% v/v ETHANOL IN AIR
Relative density	0.950 @ 20°C
Solubility(ies)	Completely soluble in water. Very soluble in the following materials: Alcohols. Almost insoluble in the following materials: Hydrocarbons. Aromatic solvents.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of 330 g/litre.
----------------------------------	---

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
-------------------	---

QUANTUM PREMIUM SCREENWASH CONCENTRATE

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,589.71

Acute toxicity - dermal

ATE dermal (mg/kg) 9,124.09

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 91.24

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes: Category 2.

Specific target organ toxicity - single exposure

STOT - single exposure May cause damage to organs.

General information

To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

Inhalation

Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Headache. Dizziness. Drowsiness. Nausea, vomiting. Vapours in high concentrations are narcotic.

Ingestion

Ingestion of large amounts may cause headaches, nausea, vomiting, abdominal pain, drowsiness and unconsciousness. Methanol can cause blindness when ingested.

Skin contact

Contains components which may penetrate the skin. Product has a defatting effect on skin. May cause allergic contact eczema.

Eye contact

Causes serious eye irritation.

Acute and chronic health hazards

Not expected to be a health hazard when used under normal conditions. Risk of long-term effects is considered to be minimal from exposure to concentrations below the level of OEL. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Central and/or peripheral nervous system damage. Brain damage.

Route of exposure

Inhalation Ingestion. Skin absorption

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Target organs	Central nervous system Eyes Gastro-intestinal tract Kidneys Liver Respiratory system, lungs Blood
Medical symptoms	Symptoms following overexposure may include the following: Nausea, vomiting. Severe stomach pain. Central nervous system depression. Blindness. Unconsciousness, possibly death.
Medical considerations	Irritation of eyes and mucous membranes. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Visual disturbances, including blurred vision.

Toxicological information on ingredients.

ETHANOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 7,060.0

Species Rat

ATE oral (mg/kg) 7,060.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,001.0

Species Rabbit

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 124.7

Species Rat

ATE inhalation (vapours mg/l) 124.7

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes: Category 2.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Data lacking.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Data lacking.

Aspiration hazard

Aspiration hazard No data available.

Ingestion After absorption: euphoria. After a latency period: dizziness, inebriation, paralysis, cyanosis, narcosis, respiratory paralysis.

ETHANEDIOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 7,712.0

Species Rat

Notes (oral LD₅₀) Acute oral toxicity is expected to be moderate in humans even though animals test results would suggest a low toxicity. Ingestion of approximately 100ml has caused death in humans. Ingestion may cause nausea, vomiting, abdominal discomfort or diarrhea. Excessive exposure may cause central nervous system effects, cardiopulmonary effects and kidney failure.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,501.0

Species Mouse

ATE dermal (mg/kg) 3,501.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 2.6

Species Rat

Notes (inhalation LC₅₀) At room temperature exposure to vapour is minimal due to low volatility. With good ventilation single exposure is not expected to cause adverse effect. If the product is heated or the working area has poor ventilation, vapour/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea.

Skin corrosion/irritation

Animal data Not irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Respiratory sensitisation

Respiratory sensitisation Guinea pig: Not sensitising.

Skin sensitisation

Skin sensitisation - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity The current toxicological knowledge allows to not classify the product as a carcinogen.

Reproductive toxicity

Reproductive toxicity - fertility Ingestion of large amounts has been shown to interfere with reproduction in animals.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Observations in humans include: Nystagmus (involuntary eye movement). In animals effects have been reported on the following organs: kidneys and liver.
NOAEL 150 mg/kg/day, Oral, Rat

Target organs Kidneys

Inhalation At room temperature, exposure to vapor is minimal due to low volatility. With good ventilation, single exposure is not expected to cause adverse effects. If material is heated or areas are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea.

Ingestion Oral toxicity is expected to be moderate in humans due to ethylene glycol even though tests with animals show a lower degree of toxicity. Ingestion of quantities (approximately 65 mL (2 oz.) for diethylene glycol or 100 mL (3 oz.) for ethylene glycol) has caused death in humans. May cause nausea and vomiting. May cause abdominal discomfort or diarrhea. Excessive exposure may cause central nervous system effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. For Ethylene glycol: Lethal Dose, Human, adult 100 ml LD50, rat, male and female 7,712 mg/kg.

Skin contact Prolonged skin contact is unlikely to result in absorption of harmful amounts. Repeated skin exposure to large quantities may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potentially lethal amounts.

Eye contact May cause temporary eye irritation.

Route of exposure Ingestion.

Target organs Kidneys Liver

2-BUTOXYETHANOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,414.0

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Species	Guinea pig
ATE oral (mg/kg)	1,414.0
<u>Acute toxicity - dermal</u>	
ATE dermal (mg/kg)	2,000.0
<u>Acute toxicity - inhalation</u>	
ATE inhalation (vapours mg/l)	11.0
<u>Skin corrosion/irritation</u>	
Extreme pH	Slightly irritating. Rabbit
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Slightly irritating. Rabbit
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.
.	
Inhalation	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	Irritation of eyes and mucous membranes.
Route of exposure	Ingestion Inhalation
Target organs	Brain Respiratory system, lungs Mucous membranes
Medical symptoms	Skin irritation. Irritation of eyes and mucous membranes. High concentration of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

QUANTUM PREMIUM SCREENWASH CONCENTRATE

CITRAL

Skin corrosion/irritation

Animal data Rabbit Irritating.

Skin sensitisation

Skin sensitisation Sensitising.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

ETHANOL

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 15300 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 9268 - 14221 mg/l, Daphnia magna

Acute toxicity - aquatic plants LOEC, 192 hours: 5000 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms LOEC, : 6500 (16hr) mg/l,

ETHANEDIOL

Toxicity Product not classified as dangerous to aquatic organisms.

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 6500 - 13000 mg/l, Selenastrum capricornutum

Acute toxicity - microorganisms EC20, 30 minutes: > 1995 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 7 days: 15380 mg/l, Pimephales promelas (Fat-head Minnow)

Chronic toxicity - aquatic invertebrates NOEC, 7 days: 8590 mg/l, Ceriodaphnia Sp.

2-BUTOXYETHANOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1464 mg/l, Oncorhynchus mykiss (Rainbow trout)

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1800 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 911 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 88 mg/l, Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable but it must not be discharged into drains without permission from the authorities. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

Ecological information on ingredients.

ETHANOL

Persistence and degradability The product is biodegradable.

ETHANEDIOL

Persistence and degradability The product is biodegradable.

Biodegradation Water - Degradation (%) 90 - 100%: 10 days
Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% biodegradation in OECD test(s) for inherent biodegradability).

2-BUTOXYETHANOL

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

ETHANOL

Partition coefficient log Pow: < 2

ETHANEDIOL

Bioaccumulative potential Not potentially bioaccumulative

Partition coefficient log Pow: -1.36

2-BUTOXYETHANOL

Partition coefficient log Pow: < 2 : 0.8

12.4. Mobility in soil

Mobility The product is soluble in water.

QUANTUM PREMIUM SCREENWASH CONCENTRATE

Ecological information on ingredients.

ETHANEDIOL

Mobility	The product is soluble in water. Volatilization from natural bodies of water or moist soil is not expected to be an important fate process. Potential for mobility in soil is very high.
Adsorption/desorption coefficient	Water - Koc: ~ 1 @ °C
Henry's law constant	~ 8.05E-09 atm m ³ /mol @ 25°C

2-BUTOXYETHANOL

Mobility	The product is soluble in water.
Henry's law constant	0.0098 Pa m ³ /mol @ °C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

ETHANEDIOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2-BUTOXYETHANOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. The packaging must be empty (drop-free when inverted).
Disposal methods	Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Containers should be thoroughly emptied before disposal because of the risk of an explosion.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993
UN No. (ADN)	1993

QUANTUM PREMIUM SCREENWASH CONCENTRATE

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, METHANOL)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, METHANOL)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, METHANOL)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS ETHANOL, METHANOL)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ADN packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-E

ADR transport category 3

Emergency Action Code •3Y

Hazard Identification Number (ADR/RID) 30

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

QUANTUM PREMIUM SCREENWASH CONCENTRATE

National regulations	Control of Pollution (Special Waste) Regulations 1980 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	HS&E Manager.
Revision date	29/06/2018
Revision	4
Supersedes date	12/01/2016
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H370 Causes damage to organs (Central nervous system, Optic Nerve (Nervus Opticus)). H371 May cause damage to organs . H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.