



## SAFETY DATA SHEET

### Armor All® Shield Snow Foam Car Wash

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended).

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

##### 1.1. Product identifier

**Product name** Armor All® Shield Snow Foam Car Wash  
**Product number** 28520

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

**Identified uses** Automotive car wash.  
**Uses advised against** No specific uses advised against are identified.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Energizer Trading Ltd  
 Sword House  
 Totteridge Road  
 High Wycombe  
 HP13 6DG  
 UK  
 Tel: +44 845 602 1995  
 euregulatory@energizer.com

##### 1.4. Emergency telephone number

**Emergency telephone** +44 1495 350234  
 Monday - Thursday: 0830 - 1700  
 Friday: 0830 - 1530

**National emergency telephone number** Product information has been submitted to the UK National Poisons Information Service (NPIS) and is accessible to medical health professionals.

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (SI 2019 No. 720)

**Physical hazards** Not Classified  
**Health hazards** Skin Irrit. 2 - H315 Eye Dam. 1 - H318  
**Environmental hazards** Not Classified

##### 2.2. Label elements

###### Hazard pictograms



**Signal word** Danger  
**Hazard statements** H315 Causes skin irritation.  
 H318 Causes serious eye damage.

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<b>Precautionary statements</b>	P102 Keep out of reach of children. P280 Wear protective gloves and eye protection. P302+P352 IF ON SKIN: Wash with plenty of water. P332+P313 If skin irritation occurs: Get medical advice/ attention. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor.
<b>Supplemental label information</b>	Contains a preservative (IODOPROPYNYL BUTYLCARBAMATE, DMDM HYDANTOIN) to control microbial deterioration. May produce an allergic reaction.
<b>Contains</b>	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts, Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)
<b>Detergent labelling</b>	5 - < 15% anionic surfactants, < 5% non-ionic surfactants, < 5% perfumes, Contains DMDM HYDANTOIN, IODOPROPYNYL BUTYLCARBAMATE, METHYLCHLOROISOTHIAZOLINONE, METHYLISOTHIAZOLINONE
<b>Supplementary precautionary statements</b>	P264 Wash contaminated skin thoroughly after handling. P362+P364 Take off contaminated clothing and wash it before reuse.

### 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

<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.</b> <span style="float: right;"><b>2.5 - &lt;5%</b></span>
CAS number: 85536-14-7 <span style="margin-left: 100px;">EC number: 287-494-3</span>
<b>Classification</b> Acute Tox. 4 - H302 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412
<b>Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts</b> <span style="float: right;"><b>1 - &lt;2.5%</b></span>
CAS number: — <span style="margin-left: 100px;">EC number: 931-534-0</span>
This substance has specific concentration limits.
<b>Classification</b> Skin Irrit. 2 - H315 Eye Dam. 1 - H318



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**Eye contact** Causes serious eye damage. May cause discomfort. Pain. Profuse watering of the eyes. Redness.

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

**Notes for the doctor** Treat symptomatically. Keep affected person under observation.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**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** Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Use water to keep fire exposed containers cool and disperse vapours.

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all ignition sources if safe to do so. Avoid contact with skin and eyes.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Eliminate all ignition sources if safe to do so. Do not touch or walk into spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Use only non-sparking tools. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### 6.4. Reference to other sections

**Reference to other sections** 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** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with eyes. Keep away from heat, sparks and open flame. Provide adequate ventilation.

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### Advice on general occupational hygiene

Avoid contact with eyes and prolonged skin contact. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage precautions

Store in a cool and well-ventilated place. Keep away from heat, sparks and open flame. Take precautionary measures against static discharges.

### 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

##### Sodium hydroxide

Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

##### Glycerol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> mist

WEL = Workplace Exposure Limit.

#### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. (CAS: 85536-14-7)

##### DNEL

Workers - Inhalation; Long term systemic effects: 7.6 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 119 mg/kg/day  
 General population - Inhalation; Long term systemic effects: 1.3 mg/m<sup>3</sup>  
 General population - Dermal; Long term systemic effects: 42.5 mg/kg/day  
 General population - Oral; Long term systemic effects: 0.425 mg/kg/day

##### PNEC

Fresh water; 0.268 mg/l  
 marine water; 0.027 mg/l  
 Intermittent release; 0.017 mg/l  
 STP; 3.43 mg/l  
 Sediment (Freshwater); 8.1 mg/kg  
 Sediment (Marinewater); 6.8 mg/kg  
 Soil; 35 mg/kg

#### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

##### DNEL

Workers - Inhalation; Long term systemic effects: 152.22 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 2158.33 mg/kg/day  
 General population - Inhalation; Long term systemic effects: 45.04 mg/m<sup>3</sup>  
 General population - Dermal; Long term systemic effects: 1295 mg/kg/day  
 General population - Oral; Long term systemic effects: 12.95 mg/kg/day

##### PNEC

Fresh water; 0.024 mg/l  
 Fresh water, Intermittent release; 0.02 mg/l  
 marine water; 0.002 mg/l  
 STP; 4 mg/l  
 Sediment (Freshwater); 0.767 mg/kg  
 Sediment (Marinewater); 0.077 mg/kg  
 Soil; 1.21 mg/kg

#### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

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<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 73.4 mg/m <sup>3</sup>
	Workers - Dermal; Long term systemic effects: 4.16 mg/kg/day
	Workers - Dermal; Long term local effects: 93.6 µg/cm <sup>2</sup>
	General population - Inhalation; Long term systemic effects: 21.73 mg/m <sup>3</sup>
	General population - Dermal; Long term systemic effects: 2.5 mg/kg/day
	General population - Dermal; Long term local effects: 56.2 µg/cm <sup>2</sup>
	General population - Oral; Long term systemic effects: 6.25 mg/kg/day
<b>PNEC</b>	Fresh water; 0.007 mg/l
	marine water; 0.001 mg/l
	STP; 830 mg/l
	Sediment (Freshwater); 0.195 mg/kg
	Sediment (Marinewater); 0.019 mg/kg
	Soil; 0.035 mg/kg

### Alcohols, C12-14, ethoxylated, sulfates, sodium salts (CAS: 68891-38-3)

<b>DNEL</b>	Workers - Dermal; Long term systemic effects: 2750 mg/kg
	Workers - Inhalation; Long term systemic effects: 175 mg/m <sup>3</sup>
	General population - Oral; Long term systemic effects: 15 mg/kg
	General population - Dermal; Long term systemic effects: 1650 mg/kg
	General population - Inhalation; Long term systemic effects: 52 mg/m <sup>3</sup>
<b>PNEC</b>	Fresh water; 0.24 mg/l
	marine water; 0.024 mg/l
	Sediment (Freshwater); 0.917 mg/kg
	Sediment (Marinewater); 0.092 mg/kg
	STP; 10000 mg/l
	Soil; 7.5 mg/kg

### tetramethyl acetyloctahydronaphthalenes

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 30 mg/m <sup>3</sup>
	Workers - Dermal; Long term systemic effects: 28.7 mg/kg/day
	Workers - Dermal; Long term local effects: 648 µg/cm <sup>2</sup>
	General population - Inhalation; Long term systemic effects: 9 mg/m <sup>3</sup>
	General population - Dermal; Long term systemic effects: 17.2 mg/kg/day
	General population - Dermal; Long term local effects: 380 µg/cm <sup>2</sup>
	General population - Oral; Long term systemic effects: 3 mg/kg/day
<b>PNEC</b>	Fresh water; 0.0028 mg/l
	marine water; 0.00028 mg/l
	STP; 10 mg/l
	Sediment (Freshwater); 3.73 mg/kg
	Sediment (Marinewater); 0.75 mg/kg
	Soil; 2.7 mg/kg
Oral; 10 mg/kg	

### Linalool (CAS: 78-70-6)

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<b>DNEL</b>	<p>Workers - Inhalation; Long term systemic effects: 2.8 mg/m<sup>3</sup></p> <p>Workers - Inhalation; Short term systemic effects: 16.5 mg/m<sup>3</sup></p> <p>Workers - Dermal; Long term systemic effects: 2.5 mg/kg/day</p> <p>Workers - Dermal; Short term systemic effects: 5 mg/kg/day</p> <p>Workers - Dermal; Long term local effects: 3 mg/cm<sup>2</sup></p> <p>Workers - Dermal; Short term local effects: 3 mg/cm<sup>2</sup></p> <p>General population - Inhalation; Long term systemic effects: 0.7 mg/m<sup>3</sup></p> <p>General population - Inhalation; Short term systemic effects: 4.1 mg/m<sup>3</sup></p> <p>General population - Dermal; Long term systemic effects: 1.25 mg/kg/day</p> <p>General population - Dermal; Short term systemic effects: 23.5 mg/kg/day</p> <p>General population - Dermal; Long term local effects: 1.5 mg/cm<sup>2</sup></p> <p>General population - Dermal; Short term local effects: 1.5 mg/cm<sup>2</sup></p> <p>General population - Oral; Long term systemic effects: 0.2 mg/kg/day</p> <p>General population - Oral; Short term systemic effects: 1.2 mg/kg/day</p>
<b>PNEC</b>	<p>Fresh water; 0.2 mg/l</p> <p>marine water; 0.02 mg/l</p> <p>STP; 10 mg/l</p> <p>Sediment (Freshwater); 2.22 mg/kg</p> <p>Sediment (Marinewater); 0.222 mg/kg</p> <p>Soil; 0.327 mg/kg</p> <p>Oral; 7.8 mg/kg</p>

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. All handling should only take place in well-ventilated areas. Avoid inhalation of vapours and spray/mists. Use explosion-proof electrical, ventilating and lighting equipment.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Wear tight-fitting, chemical splash goggles or face shield.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Frequent changes are recommended.

#### Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### Hygiene measures

Do not smoke in work area. Wash promptly with soap and water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

#### Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked.

#### Environmental exposure controls

Keep container tightly sealed when not in use.

### SECTION 9: Physical and chemical properties

## Armor All® Shield Snow Foam Car Wash

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Violet.
<b>Odour</b>	Fresh.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	pH (concentrated solution): 9 - 10
<b>Melting point</b>	Not relevant.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Evaporation factor</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not relevant.
<b>Upper/lower flammability or explosive limits</b>	Not relevant.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	0.993 - 1.023
<b>Bulk density</b>	Not determined.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not relevant.
<b>Decomposition Temperature</b>	Not relevant.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Other information</b>	No information required.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Will not polymerise.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid excessive heat for prolonged periods of time.
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## Armor All® Shield Snow Foam Car Wash

### 10.5. Incompatible materials

**Materials to avoid** Avoid contact with acids.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE oral (mg/kg)** 38,481.68

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Skin corrosion/irritation** Skin Irrit. 2 - H315 Causes skin irritation.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Eye Dam. 1 - H318 Causes serious eye damage.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### 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

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

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

#### Aspiration hazard

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

### Toxicological information on ingredients.

#### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

#### Acute toxicity - oral

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**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 1,470.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** Harmful if swallowed.

**ATE oral (mg/kg)** 1,470.0

### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Dermal, Rat Read-across data.

### Skin corrosion/irritation

**Animal data** Dose: 0.5 mL, 4 hours, Rabbit Primary dermal irritation index: 5.33 Not fully reversible in 14 days Corrosive to skin.

### Serious eye damage/irritation

**Serious eye damage/irritation** Dose: 0.1 mL, 6 days, Rabbit Single application only. Causes serious eye damage.

### Skin sensitisation

**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Bacterial reverse mutation test: Negative.

**Genotoxicity - in vivo** Chromosome aberration: Negative.

### Reproductive toxicity

**Reproductive toxicity - fertility** Three-generation study - NOAEL 350 mg/kg/day, Oral, Rat P, F1 Read-across data.

**Reproductive toxicity - development** Developmental toxicity: - NOAEL: 300 mg/kg, Oral, Rat Read-across data.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** LOAEL 300 mg/kg/day, Oral, Rat Read-across data.

### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Oral, Rat

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Dermal, Rabbit

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** LC<sub>50</sub> >52 mg/l, Inhalation, Rat

#### Skin corrosion/irritation

**Animal data** Dose: 500 mg, 4 hours, Rabbit Irritating to skin.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Dose: 100 mg, 24 hours, Rabbit Causes serious eye damage.

#### Skin sensitisation

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**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Bacterial reverse mutation test: Negative.

### Reproductive toxicity

**Reproductive toxicity - development** Maternal toxicity: - NOAEL: 2 mg/kg/day, Oral, Mouse

### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Oral, Rat

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg, Dermal, Rabbit

#### Skin corrosion/irritation

**Animal data** Irritating to skin.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye damage.

#### Skin sensitisation

**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Gene mutation: Negative.

#### Reproductive toxicity

**Reproductive toxicity - development** Developmental toxicity:, Maternal toxicity: - NOAEL: >1000 mg/kg/day, Oral, Rat

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEL >750 mg/kg/day, Oral, Rat

## SECTION 12: Ecological information

### 12.1. Toxicity

**Toxicity** Not considered toxic to fish. However, large or frequent spills may have hazardous effects on the environment.

### Ecological information on ingredients.

#### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 1.67 mg/l, Lepomis macrochirus (Bluegill)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 2.9 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 235 mg/l, Pseudokirchneriella subcapitata

#### Chronic aquatic toxicity

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**Chronic toxicity - fish early life stage** NOEC, 72 days: 0.23 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Chronic toxicity - aquatic invertebrates** NOEC, 21 days: 1.18 mg/l, Daphnia magna

### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 4.2 mg/l, Brachydanio rerio (Zebra Fish)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 4.53 mg/l, Ceriodaphnia dubia

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 5.2 mg/l, Skeletonema costatum

#### Chronic aquatic toxicity

**Chronic toxicity - aquatic invertebrates** NOEC, 21 days: 6.3 mg/l, Daphnia magna

### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 2.4 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 3.2 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 24 hours: 18.6 mg/l, Desmodium subspicatus

#### Chronic aquatic toxicity

**Chronic toxicity - aquatic invertebrates** NOEC, 21 days: 0.07 mg/l, Daphnia magna

## 12.2. Persistence and degradability

**Persistence and degradability** The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

## Ecological information on ingredients.

### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

**Biodegradation** Water - Degradation 94%: 28 days  
The substance is readily biodegradable.

### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

**Biodegradation** The substance is readily biodegradable.

### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

**Biodegradation** The substance is readily biodegradable.

## 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

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**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

**Bioaccumulative potential** BCF:  $\geq 2 - \leq 1000$ , Pimephales promelas (Fat-head Minnow)

#### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

**Bioaccumulative potential** BCF: 70.8, Calculation method.

#### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

**Bioaccumulative potential** BCF: 65.36, Calculation method.

### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

### Ecological information on ingredients.

#### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

**Mobility** Miscible with water.

**Surface tension** 35.4 mN/m @ 20°C

#### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

**Henry's law constant** 0.068 Pa m<sup>3</sup>/mol @ °C Calculation method.

**Surface tension** 36.1 mN/m @ 20°C

#### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

**Henry's law constant** 0 Pa m<sup>3</sup>/mol @ 25°C Calculation method.

**Surface tension** 27.7 mN/m @ 24.5°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.

#### Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

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

#### Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

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

#### Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

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

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### 12.6. Other adverse effects

Other adverse effects Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations

**Disposal methods** Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

### 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

**National regulations** EH40/2005 Workplace exposure limits.  
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended).  
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

## Armor All® Shield Snow Foam Car Wash

<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>IATA: International Air Transport Association.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>DNEL: Derived No Effect Level.</p> <p>LC50: Lethal Concentration to 50 % of a test population.</p> <p>LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>BCF: Bioconcentration Factor.</p>
<b>Classification procedures according to SI 2019 No. 720</b>	Skin Irrit. 2 - H315, Eye Dam. 1 - H318: Calculation method.
<b>Revision comments</b>	Section 15: Regulatory information // 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.
<b>Revision date</b>	18/08/2021
<b>Revision</b>	2
<b>Supersedes date</b>	01/04/2021
<b>SDS number</b>	1442
<b>Hazard statements in full</b>	<p>H302 Harmful if swallowed.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H318 Causes serious eye damage.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>

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