SAFETY DATA SHEET
Armor All® Heavy Duty Car Wash
According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name Armor All® Heavy Duty Car Wash

Product number 26001

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

Identified uses Auto shampoo.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Armored Auto UK Ltd
Unit 16, Rassau Industrial Estate
Ebbw Vale
Gwent NP23 5SD
UK
Tel: +44 1495 350234
Fax: + 44 1495 350431
euregulatory@eu.spectrumbrands.com

1.4. Emergency telephone number

Emergency telephone

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms

Signal word Warning

Hazard statements

EUH208 Contains d-Limonene. May produce an allergic reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements	P102 Keep out of reach of children. P273 Avoid release to the environment. P280 Wear eye and face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	Contains a preservative (IODOPROPYNYL BUTYLCARBAMATE, DMDM HYDANTOIN) to control microbial deterioration.
Detergent labelling	< 5% anionic surfactants, < 5% non-ionic surfactants, < 5% perfumes, < 5% polycarboxylates, Contains D-LIMONENE, DMDM HYDANTOIN, IODOPROPYNYL BUTYLCARBAMATE
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling.

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

Sodium dodecylbenzenesulfonate **2 - <3%**

CAS number: 25155-30-0 EC number: 246-680-4

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Eye Irrit. 2 - H319

2-dodecoxyethyl hydrogen sulfate **1 - <2.5%**

CAS number: 9004-82-4 EC number: 618-398-5

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Aquatic Chronic 3 - H412

d-Limonene **0.5 - <1%**

CAS number: 5989-27-5 EC number: 227-813-5

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

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Sodium hydroxide	**<0.025%**
CAS number: 1310-73-2	EC number: 215-185-5
Classification Skin Corr. 1A - H314 Eye Dam. 1 - H318	

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.

Inhalation If throat irritation or coughing persists, proceed as follows. Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.

Ingestion Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms are severe or persist.

Skin contact Remove contaminated clothing and rinse skin thoroughly with water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.

Eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms are severe or persist after washing.

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 Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Drowsiness. Dizziness.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Prolonged skin contact may cause redness and irritation. Prolonged contact may cause dryness of the skin.

Eye contact Irritating to eyes. 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.

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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 conforming to European standard EN469 (including helmets, protective boots and gloves) 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. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Keep away from heat, sparks and open flame. Provide adequate ventilation.

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. For further information, see attached Exposure Scenario.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Sodium hydroxide

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Short-term exposure limit (15-minute): WEL 2 mg/m³
WEL = Workplace Exposure Limit

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

DNEL

Workers - Inhalation; Long term systemic effects: 73.4 mg/m³
Workers - Dermal; Long term systemic effects: 4.16 mg/kg/day
Workers - Dermal; Long term local effects: 0.09 mg/cm²
General population - Inhalation; Long term systemic effects: 21.73 mg/m³
General population - Dermal; Long term systemic effects: 2.5 mg/kg/day
General population - Dermal; Long term local effects: 0.056 mg/cm²
General population - Oral; Long term systemic effects: 6.25 mg/kg/day

PNEC

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

Linalool (CAS: 78-70-6)

DNEL

Workers - Inhalation; Long term systemic effects: 2.8 mg/m³
Workers - Inhalation; Short term systemic effects: 16.5 mg/m³
Workers - Dermal; Long term systemic effects: 2.5 mg/kg/day
Workers - Dermal; Short term systemic effects: 5 mg/kg/day
Workers - Dermal; Long term local effects: 3 mg/cm²
Workers - Dermal; Short term local effects: 3 mg/cm²
General population - Inhalation; Long term systemic effects: 0.7 mg/m³
General population - Inhalation; Short term systemic effects: 4.1 mg/m³
General population - Dermal; Long term systemic effects: 1.25 mg/kg/day
General population - Dermal; Short term systemic effects: 23.5 mg/kg/day
General population - Dermal; Long term local effects: 1.5 mg/cm²
General population - Dermal; Short term local effects: 1.5 mg/cm²
General population - Oral; Long term systemic effects: 0.2 mg/kg/day
General population - Oral; Short term systemic effects: 1.2 mg/kg/day

PNEC

Fresh water; 0.2 mg/l
marine water; 0.02 mg/l
STP; 10 mg/l
Sediment (Freshwater); 2.22 mg/kg
Sediment (Marinewater); 0.222 mg/kg
Soil; 0.327 mg/kg
Oral; 7.8 mg/kg

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.

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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 'CE'-marked.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Odour	Orange.
Odour threshold	Not determined.
pH	pH (concentrated solution): 8.3
Melting point	Not relevant.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not relevant.
Upper/lower flammability or explosive limits	Not relevant.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not determined.
Bulk density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.

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Viscosity	1500 - 2500 cP @ 40°C
Explosive properties	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information

Other information	No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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	Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.

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_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	19,665.68

Acute toxicity - dermal

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	43,264.5

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation	Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

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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.

Sodium dodecylbenzenesulfonate

Acute toxicity - oral

Notes (oral LD_{50}) Acute Tox. 4 - H302 cATpE: Converted Acute Toxicity Point Estimate.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD_{50}) Acute Tox. 4 - H312 cATpE: Converted Acute Toxicity Point Estimate.

ATE dermal (mg/kg) 1,100.0

Serious eye damage/irritation

Serious eye damage/irritation Eye Irrit. 2 - H319

d-Limonene

Acute toxicity - oral

Notes (oral LD_{50}) > 2000 mg/kg Rat REACH dossier information. Read-across data.

Skin corrosion/irritation

Animal data Irritating to skin. REACH dossier information.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 ml, 7 days, Rabbit REACH dossier information. Not irritating.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information.

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Genotoxicity - in vivo DNA damage and/or repair: Negative. REACH dossier information.

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 1650 mg/kg/day, Oral, Mouse REACH dossier information.

Aspiration hazard

Aspiration hazard 1.003 cSt @ 25°C/77°F REACH dossier information. Read-across data. Asp. Tox. 1 - H304

Sodium hydroxide

Skin corrosion/irritation

Animal data Skin Corr. 1A - H314 REACH dossier information.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 ml, 1 / 2 %, Rabbit Eye Dam. 1 - H318 REACH dossier information.

Skin sensitisation

Skin sensitisation Patch test - Human: Not sensitising. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. REACH dossier information.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

d-Limonene

Acute aquatic toxicity

$LE(C)_{50}$ 0.1 < L(E)C50 ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC_{50}, 96 hours: 0.720 mg/l, Pimephales promelas (Fat-head Minnow)
REACH dossier information.

Acute toxicity - aquatic invertebrates EC_{50}, 48 hours: 0.36 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants EC_{50}, 72 hours: 150 mg/l, Desmodesmus subspicatus
REACH dossier information.
Read-across data.

Acute toxicity - microorganisms EC_{50}, 3 hours: 209 mg/l, Activated sludge
REACH dossier information.
Read-across data.

Chronic aquatic toxicity

M factor (Chronic) 1

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Sodium hydroxide

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 40.4 mg/l, Ceriodaphnia dubia REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

d-Limonene

Phototransformation	Water - Half-life : 0.365 hours REACH dossier information. QSAR
Biodegradation	Water - Degradation (80%): 28 days REACH dossier information. Read-across data. The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

d-Limonene

Bioaccumulative potential	BCF: 1022, REACH dossier information. QSAR
Partition coefficient	log Pow: 4.38 REACH dossier information.

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

d-Limonene

Adsorption/desorption coefficient	Water - Koc : 1984 REACH dossier information. QSAR

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.

d-Limonene

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 determined.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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.

EU legislation 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).
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).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. ATE: Acute Toxicity Estimate. DNEL: Derived No Effect Level. LC_{50}: Lethal Concentration to 50 % of a test population. LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. BCF: Bioconcentration Factor.
Classification procedures according to Regulation (EC) 1272/2008	Eye Irrit. 2 - H319, Aquatic Chronic 3 - H412: Calculation method.
Revision comments	Document revised. Section 2: Hazards identification // 2.2. Label elements. Section 3: Composition/information on ingredients // 3.2 Mixtures. Section 8: Exposure controls/personal protection // 8.1. Control parameters.
Revision date	06/12/2018
Revision	16
Supersedes date	17/05/2016
SDS number	54
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains d-Limonene. May produce an allergic reaction.