



SAFETY DATA SHEET

Armor All® Tire Foam

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® Tire Foam

Product number 47670, 47600, 47500

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

Identified uses Enhancing automotive tyres.

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 Aerosol 1 - H222, H229

Health hazards Not Classified

Environmental hazards Not Classified

Physicochemical Containers can burst violently or explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Hazard pictograms



Signal word Danger

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Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Supplemental label information	Contains a preservative (IODOPROPYNYL BUTYLCARBAMATE, DMDM HYDANTOIN) to control microbial deterioration. May produce an allergic reaction.
Detergent labelling	5 - < 15% aliphatic hydrocarbons, < 5% non-ionic surfactants, < 5% polycarboxylates, Contains DMDM HYDANTOIN, IODOPROPYNYL BUTYLCARBAMATE

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

Petroleum gases, liquefied		5 - <10%	
CAS number: 68476-85-7	EC number: 270-704-2		
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280			
sodium nitrite		0.025 - <0.25%	
CAS number: 7632-00-0	EC number: 231-555-9	REACH registration number: 01-2119471836-27-XXXX	
M factor (Acute) = 1			
Classification Ox. Sol. 2 - H272 Acute Tox. 3 - H301 Eye Irrit. 2 - H319 Aquatic Acute 1 - H400			

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	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

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Ingestion	Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. 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 any discomfort continues.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and 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	Spray/mists may cause respiratory tract irritation.
Ingestion	Due to the physical nature of this product, exposure by this route is unlikely.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. May cause discomfort.

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

Notes for the doctor	Treat symptomatically. Keep affected person under observation.
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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. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.
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. Evacuate area. No smoking, sparks, flames or other sources of ignition near spillage. Risk of explosion.
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For non-emergency personnel No action shall be taken without appropriate training or involving any personal risk.

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. Ventilate closed spaces before entering them. 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. Keep away from heat, sparks and open flame. Provide adequate ventilation. Ground/bond container and receiving equipment. Keep away from heat, sparks and open flame.

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.

Storage class Flammable compressed gas 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

Petroleum gases, liquefied

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

WEL = Workplace Exposure Limit

2,2',2''-nitrilotriethanol (CAS: 102-71-6)

DNEL

Workers - Inhalation; Long term systemic effects: 5 mg/m³

Workers - Inhalation; Long term local effects: 5 mg/m³

Workers - Dermal; Long term systemic effects: 6.3 mg/kg/day

General population - Inhalation; Long term systemic effects: 1.25 mg/m³

General population - Inhalation; Long term local effects: 1.25 mg/m³

General population - Dermal; Long term systemic effects: 3.1 mg/kg/day

General population - Oral; Long term systemic effects: 13 mg/kg/day

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PNEC

Fresh water; 0.32 mg/l
marine water; 0.032 mg/l
STP; 10 mg/l
Sediment (Freshwater); 1.7 mg/kg
Sediment (Marinewater); 0.17 mg/kg
Soil; 0.151 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.

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/manufacture, 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	Aerosol.
Colour	White.
Odour	Characteristic.
Odour threshold	Not determined.
pH	pH (concentrated solution): 7.8 - 8.4
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Evaporation rate	Not determined.
Evaporation factor	Not determined.

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Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.00 Liquid.
Bulk density	Not determined.
Partition coefficient	Not determined.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not determined.
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.
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition. Avoid the accumulation of vapours in low or confined areas. Pressurised container: may burst if heated
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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.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Decomposition at ambient temperatures may generate the following substances: Carbon dioxide (CO ₂). Carbon monoxide (CO). Acrid smoke or fumes.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

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Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	77,253.21888412
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<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	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Based on available data the classification criteria are not met.
<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.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

Toxicological information on ingredients.

Petroleum gases, liquefied

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. REACH dossier information. Read-across data.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information.

Reproductive toxicity

Reproductive toxicity - fertility Fertility - NOAEL 10000 ppm, Inhalation, Rat P REACH dossier information.

Reproductive toxicity - development Developmental toxicity: - NOAEC: 10426 ppm, Inhalation, Rat REACH dossier information.

sodium nitrite

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Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	180.0
Species	Rat
Notes (oral LD ₅₀)	REACH dossier information.
ATE oral (mg/kg)	180.0

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.
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Ecological information on ingredients.

Petroleum gases, liquefied

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 147.54 mg/l, Fish REACH dossier information. QSAR
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 16.33 mg/l, Daphnia sp. REACH dossier information. QSAR
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 11.89 mg/l, Algae REACH dossier information. QSAR

sodium nitrite

Acute aquatic toxicity

LE(C) ₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.54 - 26.3 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute toxicity - aquatic invertebrates	EC ₀ , 48 hours: 4.6 mg/l, Daphnia magna EC ₅₀ , 48 hours: 15.4 mg/l, Daphnia magna EC ₁₀₀ , 48 hours: > 100 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Desmodesmus subspicatus NOEC, 72 hours: 100 mg/l, Desmodesmus subspicatus REACH dossier information.
Acute toxicity - microorganisms	EC ₅₀ , 24 hours: 285 mg/l, Spirostomum ambiguum EC ₅₀ , 48 hours: 281 mg/l, Spirostomum ambiguum REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 29 days: 1.05 mg/l, Cyprinus carpio (Common carp) REACH dossier information.
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Chronic toxicity - aquatic invertebrates

NOEC, 80 days: 9.86 mg/l, *Penaeus monodon* (Asian tiger shrimp)
 EC₅₀, 80 days: 114.9 mg/l, *Penaeus monodon* (Asian tiger shrimp)
 LC₅₀, 80 days: > 95.6 mg/l, *Penaeus monodon* (Asian tiger shrimp)
 REACH dossier information.

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 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.

Petroleum gases, liquefied

Phototransformation

Water - DT₅₀ : 1906 days
 REACH dossier information.
 Calculation method.

Biodegradation

Water - Degradation (100%): 385.5 hours
 REACH dossier information.
 The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

Petroleum gases, liquefied

Partition coefficient

log Pow: 2.3058 REACH dossier information. QSAR

12.4. Mobility in soil

Mobility The product has poor water-solubility.

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.

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 Do not puncture or incinerate, even when empty.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

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UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID classification code 5F

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-D, S-U

ADR transport category 2

Tunnel restriction code (D)

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.

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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.

Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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.

LC₅₀: Lethal Concentration to 50 % of a test population.

LD₅₀: 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

Aerosol 1 - H222, H229: Expert judgement.

Revision comments

Document revised.

Section 2: Hazards identification // 2.2. Label elements.

Section 8: Exposure controls/personal protection // 8.1. Control parameters.

Revision date

20/11/2018

Revision

5

Supersedes date

14/10/2015

SDS number

17

Hazard statements in full

H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H272 May intensify fire; oxidiser.

H280 Contains gas under pressure; may explode if heated.

H301 Toxic if swallowed.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

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