



## SAFETY DATA SHEET

### Armor All® Tire Foam

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® 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** 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** 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

## Armor All® Tire Foam

### Hazard pictograms



<b>Signal word</b>	Danger
<b>Hazard statements</b>	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated.
<b>Precautionary statements</b>	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.
<b>Supplemental label information</b>	Contains a preservative (IODOPROPYNYL BUTYLCARBAMATE, DMDM HYDANTOIN) to control microbial deterioration. May produce an allergic reaction.
<b>Detergent labelling</b>	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

<b>Hydrocarbons, C3-4-rich, petroleum distillate</b>		<b>5 - &lt;10%</b>
CAS number: 68512-91-4	EC number: 270-990-9	
Contains <0.1% w/w 1,3-butadiene (CAS: 106-99-0).		
<b>Classification</b>		
Flam. Gas 1A - H220		
Press. Gas (Liq.) - H280		
<b>sodium nitrite</b>		<b>0.025 - &lt;0.25%</b>
CAS number: 7632-00-0	EC number: 231-555-9	
M factor (Acute) = 1		
<b>Classification</b>		
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

<b>General information</b>	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
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<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Spray/mists may cause respiratory tract irritation.
<b>Ingestion</b>	Due to the physical nature of this product, exposure by this route is unlikely.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	May be slightly irritating to eyes. May cause discomfort.

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

<b>Notes for the doctor</b>	Treat symptomatically. Keep affected person under observation.
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## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	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.
<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Use water to keep fire exposed containers cool and disperse vapours.
<b>Special protective equipment for firefighters</b>	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

## Armor All® Tire Foam

**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.

**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. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. 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

##### **Hydrocarbons, C3-4-rich, petroleum distillate**

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit.

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

## Armor All® Tire Foam

### DNEL

Workers - Inhalation; Long term systemic effects: 5 mg/m<sup>3</sup>  
 Workers - Inhalation; Long term local effects: 5 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 6.3 mg/kg/day  
 General population - Inhalation; Long term systemic effects: 1.25 mg/m<sup>3</sup>  
 General population - Inhalation; Long term local effects: 1.25 mg/m<sup>3</sup>  
 General population - Dermal; Long term systemic effects: 3.1 mg/kg/day  
 General population - Oral; Long term systemic effects: 13 mg/kg/day

### 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/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

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

Appearance	Aerosol.
Colour	White.
Odour	Characteristic.
Odour threshold	Not determined.

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<b>pH</b>	pH (concentrated solution): 7.8 - 8.4
<b>Melting point</b>	Not relevant.
<b>Initial boiling point and range</b>	Not relevant.
<b>Evaporation rate</b>	Not determined.
<b>Evaporation factor</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not determined.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	1.00 Liquid.
<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. Stable under the prescribed storage conditions.
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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 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

<b>Materials to avoid</b>	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

## Armor All® Tire Foam

**Hazardous decomposition products** Does not decompose when used and stored as recommended. Decomposition at ambient temperatures may generate the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Acrid smoke or fumes.

### 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)** 77,253.22

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

##### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

##### 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.

##### sodium nitrite

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 180.0

**Species** Rat

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<b>Notes (oral LD<sub>50</sub>)</b>	REACH dossier information.
<b>ATE oral (mg/kg)</b>	180.0
<b><u>Carcinogenicity</u></b>	
<b>IARC carcinogenicity</b>	IARC Group 2A Probably carcinogenic to humans.

### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>Toxicity</b>	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.

##### sodium nitrite

##### Acute aquatic toxicity

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

##### Chronic aquatic toxicity

<b>Chronic toxicity - fish early life stage</b>	NOEC, 29 days: 1.05 mg/l, Cyprinus carpio (Common carp) REACH dossier information.
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, 80 days: 9.86 mg/l, Penaeus monodon (Asian tiger shrimp) EC <sub>50</sub> , 80 days: 114.9 mg/l, Penaeus monodon (Asian tiger shrimp) LC <sub>50</sub> , 80 days: > 95.6 mg/l, Penaeus monodon (Asian tiger shrimp) REACH dossier information.

#### 12.2. Persistence and degradability

<b>Persistence and degradability</b>	The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).
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#### 12.3. Bioaccumulative potential

<b>Bioaccumulative potential</b>	No data available on bioaccumulation.
<b>Partition coefficient</b>	Not determined.

#### 12.4. Mobility in soil

<b>Mobility</b>	The product has poor water-solubility.
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## Armor All® Tire Foam

### 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
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

## Armor All® Tire Foam

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.  
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].  
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

**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 SI 2019 No. 720** Aerosol 1 - H222, H229: Expert judgement.

**Revision comments** Revised formulation.

**Revision date** 21/02/2022

**Revision** 9

**Supersedes date** 18/08/2021

**SDS number** 17

## Armor All® Tire Foam

### 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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