

# 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** 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 Product information has been submitted to the UK National Poisons Information Service

**number** (NPIS) and is accessible to medical health professionals.

# 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

**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%

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.

## Armor All® Tire Foam

**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.

**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

#### 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.

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

#### 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/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/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

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 '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.

#### Armor All® Tire Foam

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.

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.

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

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

10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

# 10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

3

Will not polymerise.

# 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

## 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

#### 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 (CO2). Carbon

monoxide (CO). Acrid smoke or fumes.

# SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 77.253.21888412

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) 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

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

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.

#### 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

#### Armor All® Tire Foam

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

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

180.0

Species Rat

Notes (oral LD<sub>50</sub>) 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.

## Ecological information on ingredients.

## Petroleum gases, liquefied

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 147.54 mg/l, Fish

REACH dossier information.

**QSAR** 

Acute toxicity - aquatic

invertebrates

LC<sub>50</sub>, 48 hours: 16.33 mg/l, Daphnia sp.

REACH dossier information.

**QSAR** 

Acute toxicity - aquatic

plants

EC₅o, 96 hours: 11.89 mg/l, Algae REACH dossier information.

QSAR

## sodium nitrite

Acute aquatic toxicity

**LE(C)**<sub>50</sub>  $0.1 < L(E)C50 \le 1$ 

M factor (Acute) 1

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 0.54 - 26.3 mg/l, Oncorhynchus mykiss (Rainbow trout)

REACH dossier information.

Acute toxicity - aquatic

invertebrates

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.

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 72 hours: > 100 mg/l, Desmodesmus subspicatus NOEC, 72 hours: 100 mg/l, Desmodesmus subspicatus

REACH dossier information.

## Armor All® Tire Foam

**Acute toxicity -** EC₅o, 24 hours: 285 mg/l, Spirostomum ambiguum microorganisms EC₅o, 48 hours: 281 mg/l, Spirostomum ambiguum

REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - fish early NOEC, 29 days: 1.05 mg/l, Cyprinus carpio (Common carp)

life stage REACH dossier information.

Chronic toxicity - aquatic

invertebrates

NOEC, 80 days: 9.86 mg/l, Penaeus monodon (Asian tiger shrimp) EC₅o, 80 days: 114.9 mg/l, Penaeus monodon (Asian tiger shrimp) LC₅o, 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 - DT<sub>50</sub>: 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

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

assessment

#### 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

**AEROSOLS** 

(ADR/RID)

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.

**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.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅o: 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** 

Section 1: Identification of the substance/mixture and of the company/undertaking // 1.3.

Details of the supplier of the safety data sheet.

Revision date 19/03/2020

Revision 6

Supersedes date 20/11/2018

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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