



SAFETY DATA SHEET

Armor All® Air Freshener Card Warm Apple Spice

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® Air Freshener Card Warm Apple Spice
Product number 17203ML

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

Identified uses Hanging air freshener.
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 Not Classified
Environmental hazards Aquatic Chronic 3 - H412

Environmental

The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Hazard statements H412 Harmful to aquatic life with long lasting effects.
 EUH208 Contains cinnamaldehyde, eugenol, coumarin. May produce an allergic reaction.

Precautionary statements P102 Keep out of reach of children.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

2-tert-butylcyclohexyl acetate	5 - <10%
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CAS number: 88-41-5	EC number: 233-732-6
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Classification

Aquatic Chronic 2 - H411

diethyl malonate	1 - <2.5%
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CAS number: 105-53-3	EC number: 203-305-9
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Classification

Eye Irrit. 2 - H319

cinnamaldehyde	0.5 - <1%	
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CAS number: 104-55-2	EC number: 203-213-9	REACH registration number: 01-2119935242-45-XXXX
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Classification

Acute Tox. 4 - H312
 Skin Irrit. 2 - H315
 Eye Irrit. 2 - H319
 Skin Sens. 1 - H317

eugenol	0.5 - <1%
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CAS number: 97-53-0	EC number: 202-589-1
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Classification

Eye Irrit. 2 - H319
 Skin Sens. 1 - H317

coumarin	0.5 - <1%
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CAS number: 91-64-5	EC number: 202-086-7
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Classification

Acute Tox. 4 - H302
 Skin Sens. 1 - H317
 STOT RE 2 - H373

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

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Ingestion Rinse mouth thoroughly with water. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact Wash skin thoroughly with soap and water.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation Vapours may cause drowsiness and dizziness.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact May cause temporary eye irritation.

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

Notes for the doctor The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

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

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 Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

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.

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 Absorb in vermiculite, dry sand or earth and place into containers. 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

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Usage precautions Read and follow manufacturer's recommendations.

Advice on general occupational hygiene Avoid contact with eyes and prolonged skin contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a cool and well-ventilated place.

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

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Eye/face protection No specific eye protection required during normal use.

Hand protection 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.

Hygiene measures No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Solid.
Colour	Various colours.
Odour	Characteristic.
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	Not determined.
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	Not determined.
Bulk density	Not determined.
Partition coefficient	Not determined.

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Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
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.
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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 excessive heat for prolonged periods of time.
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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	None at ambient temperatures.
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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.
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Acute toxicity - dermal

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

Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
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Skin corrosion/irritation

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

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

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

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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.

diethyl malonate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 15,794.0

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 15,794.0

Skin corrosion/irritation

Animal data Dose: 0.01 ml, Rabbit, REACH dossier information. Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 ml, 1 hour, Rabbit REACH dossier information. Moderately irritating.

Germ cell mutagenicity

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

cinnamaldehyde

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,220.0

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 2,220.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,260.0

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Species	Rabbit
Notes (dermal LD₅₀)	REACH dossier information.
ATE dermal (mg/kg)	1,260.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	68.88
Species	Rat
Notes (inhalation LC₅₀)	REACH dossier information. QSAR
ATE inhalation (vapours mg/l)	68.88
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.02, 0.1, 0.8%, 6 weeks, Human REACH dossier information. Skin Irrit. 2 - H315 Causes skin irritation.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 8%, Human, REACH dossier information. Eye Irrit. 2 - H319 Causes serious eye irritation.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. REACH dossier information. Skin Sens. 1 - H317
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. REACH dossier information.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Multi-generation study - LOAEL 5 mg/kg/day, Oral, Rat F2a, F2b REACH dossier information.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 1200 mg/kg/day, Oral, Mouse REACH dossier information.
<u>eugenol</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ > 2000 mg/kg, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 ml, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 ml, Rabbit, REACH dossier information. Eye Irrit. 2 - H319 Causes serious eye irritation.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information. Skin Sens. 1 - H317 May cause an allergic skin reaction.

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Carcinogenicity

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

coumarin

Acute toxicity - oral

Notes (oral LD₅₀) REACH dossier information. Converted acute toxicity point estimate (cATpE)

ATE oral (mg/kg) 500.0

Skin corrosion/irritation

Animal data Primary dermal irritation index: 1.15 REACH dossier information. Read across data. Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation REACH dossier information. Read across data. Not irritating.

Skin sensitisation

Skin sensitisation Sensitising. REACH dossier information.

Germ cell mutagenicity

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

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

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOEC > 0.25 %, Oral, Mouse P, F1 REACH dossier information.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Aquatic Chronic 3 - H412

2-tert-butylcyclohexyl acetate

Toxicity Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

diethyl malonate

Acute toxicity - aquatic invertebrates EC₀, 48 hours: 100 mg/l, Daphnia magna
EC₅₀, 48 hours: 202.3 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants EC₅₀, 72 hours: 508.2 mg/l, Scenedesmus subspicatus
REACH dossier information.

cinnamaldehyde

Acute toxicity - fish LC₅₀, 96 hours: 105.7637 mg/l, Pimephales promelas (Fat-head Minnow)
REACH dossier information.
QSAR

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 119.5578 mg/l, Daphnia magna REACH dossier information. QSAR
Acute toxicity - microorganisms	IC ₅₀ , 48 hours: 131.1951 mg/l, Tetrahymena pyriformis REACH dossier information. QSAR
Acute toxicity - terrestrial	EC ₅₀ , 24 hours: 8.612171 mg/l, Soil micro-organisms LC ₅₀ , 14 days: 895.9267 mg/kg, Eisenia Fetida (Earthworm) QSAR LOEL, 5 days: 1 %, Colinus Virginianus (Bobwhite Quail) REACH dossier information.

eugenol

Acute toxicity - fish	NOEC, 24+48+72+96 hours: 10 mg/l, Brachydanio rerio (Zebra Fish) LC ₅₀ , 24+48+72+96 hours: 13 mg/l, Brachydanio rerio (Zebra Fish) LC ₁₀₀ , 24+48+72+96 hours: 18 mg/l, Brachydanio rerio (Zebra Fish) REACH dossier information.
Acute toxicity - aquatic invertebrates	EC ₀ , 48 hours: 0.36 mg/l, Daphnia magna EC ₅₀ , 48 hours: 1.05 mg/l, Daphnia magna EC ₁₀₀ , 48 hours: 3.08 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	NOEC, 72 hours: 23 mg/l, Scenedesmus subspicatus LOEC, 72 hours: 38 mg/l, Scenedesmus subspicatus EC ₁₀ , 72 hours: 23 mg/l, Scenedesmus subspicatus EC ₅₀ , 72 hours: 24 mg/l, Scenedesmus subspicatus EC ₁₀₀ , 72 hours: 38 mg/l, Scenedesmus subspicatus REACH dossier information.

coumarin

Acute toxicity - fish	LC ₅₀ , 96 hours: 1.324 mg/l, REACH dossier information. QSAR
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 8.012 mg/l, Daphnia sp. REACH dossier information. QSAR
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 1.452 mg/l, NOEC, 96 hours: 0.408 mg/l, REACH dossier information. QSAR
Acute toxicity - microorganisms	NOEC, 28 days: 100 mg/l, Activated sludge REACH dossier information.
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.448 mg/l, Daphnia sp. REACH dossier information. QSAR

12.2. Persistence and degradability

Persistence and degradability No data available.

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diethyl malonate

Biodegradation Water - Degradation (95%): 14 days
 Water - Degradation (99%): 21 days
 Water - Degradation (99%): 28 days
 The substance is readily biodegradable.
 REACH dossier information.

cinnamaldehyde

Biodegradation Water - Half-life : 30 days
 REACH dossier information.
 Calculation method.
 The substance is readily biodegradable.

eugenol

Biodegradation Water - Degradation (50%): 7 days
 Water - Degradation (66%): 14 days
 Water - Degradation (77%): 21 days
 Water - Degradation (82%): 28 days
 REACH dossier information.
 The substance is readily biodegradable.

coumarin

Biodegradation Water - Degradation (100%): 28 days
 REACH dossier information.
 The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

diethyl malonate

Partition coefficient log Pow: 0.96 REACH dossier information.

cinnamaldehyde

Bioaccumulative potential BCF: 8.33 l/kg, Algae Calculation method. REACH dossier information.

Partition coefficient Pow: 68.5 REACH dossier information.

eugenol

Partition coefficient log Pow: 1.83 REACH dossier information.

coumarin

Partition coefficient log Pow: 1.39 REACH dossier information.

12.4. Mobility in soil

Mobility The product is soluble in water.

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diethyl malonate

Surface tension 30.56 mN/m @ 30°C REACH dossier information.

cinnamaldehyde

Adsorption/desorption coefficient Water - Koc: 36.82 @ 25°C Calculation method. REACH dossier information.

Henry's law constant 0.162 Pa m³/mol @ 25°C Calculation method. REACH dossier information.

Surface tension 38.962 mN/m @ 25°C REACH dossier information. Calculation method.

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

SECTION 14: Transport information

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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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

Classification procedures according to Regulation (EC) 1272/2008	Aquatic Chronic 3 - H412, EUH208: Calculation method.
Revision comments	Section 2: Hazards identification // 2.2. Label elements
Revision date	17/08/2016
Revision	1
Supersedes date	16/12/2014
SDS number	617
Hazard statements in full	H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains cinnamaldehyde, eugenol, coumarin. May produce an allergic reaction.

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