



SAFETY DATA SHEET

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

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® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe
Product number 18514

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

Identified uses Remove haze and yellowing caused by oxidation on headlight.
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

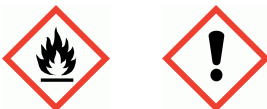
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225
Health hazards Eye Irrit. 2 - H319
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

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.
	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.
Supplementary precautionary statements	P240 Ground and bond container and receiving equipment.
	P241 Use explosion-proof electrical equipment.
	P242 Use non-sparking tools.
	P243 Take action to prevent static discharges.
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
	P403+P235 Store in a well-ventilated place. Keep cool.

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

1-propoxypropan-2-ol		50 - 100%
CAS number: 1569-01-3	EC number: 216-372-4	
Classification Flam. Liq. 3 - H226 Eye Irrit. 2 - H319		

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	Brush off loose particles from skin. Wash with plenty of water. 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.
----------------------------	---

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

Inhalation	Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Drowsiness. Dizziness.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur. Gastrointestinal symptoms, including upset stomach.
Skin contact	Due to the physical nature of this product, exposure by this route is unlikely. Prolonged contact may cause dryness of the skin.
Eye contact	Due to the physical nature of this product, exposure by this route is unlikely. Irritating to eyes. Particles in the eyes may cause irritation and smarting.

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	Highly flammable liquid and vapour. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up.
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

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

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.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

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

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.

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

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-impregnated wipe.
Colour	Blue.
Odour	Characteristic.
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	20°C Tag closed cup. : Liquid.
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	0.9234 - 0.9634 @ 20°C : Liquid.
Bulk density	Not determined.
Partition coefficient	Not determined.
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.

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

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame. Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid None known.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO₂). Carbon monoxide (CO). Toxic gases or vapours.

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.

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 Causes serious eye irritation.

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 Based on available data the classification criteria are not met.

Toxicological information on ingredients.

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

1-propoxypropan-2-ol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,490.0

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 2,490.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,775.0

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information.

ATE dermal (mg/kg) 3,775.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >1725 ppm, Inhalation, Vapour, Rat 4 hours REACH dossier information.

Skin corrosion/irritation

Animal data Dose: 0.5 ml, 4 hours, Rabbit Not irritating. REACH dossier information.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 ml, 21 days, Rabbit Causes serious eye irritation. REACH dossier information.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information.

Germ cell mutagenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOEL 300 mg/kg/day, Oral, Rat P, F1 REACH dossier information. Read-across data.

Reproductive toxicity - development Maternal toxicity:, Developmental toxicity: - NOEL: 750 ppm, Inhalation, Rat REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 300 ppm, Inhalation, Rat REACH dossier information.

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.

1-propoxypropan-2-ol

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)
REACH dossier information.

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 3440 mg/l, Pseudokirchneriella subcapitata
REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

1-propoxypropan-2-ol

Biodegradation Water - Degradation 91.5%: 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.

Ecological information on ingredients.

1-propoxypropan-2-ol

Partition coefficient log Pow: 0.621 REACH dossier information.

12.4. Mobility in soil

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Ecological information on ingredients.

1-propoxypropan-2-ol

Mobility Miscible with water.

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.

1-propoxypropan-2-ol

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3175
UN No. (IMDG)	3175
UN No. (ICAO)	3175
UN No. (ADN)	3175

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (1-propoxypropan-2-ol, Dimethyl carbonate)
Proper shipping name (IMDG)	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (1-propoxypropan-2-ol, Dimethyl carbonate)
Proper shipping name (ICAO)	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (1-propoxypropan-2-ol, Dimethyl carbonate)
Proper shipping name (ADN)	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (1-propoxypropan-2-ol, Dimethyl carbonate)

14.3. Transport hazard class(es)

ADR/RID class	4.1
ADR/RID classification code	F1
ADR/RID label	4.1
IMDG class	4.1
ICAO class/division	4.1
ADN class	4.1

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-A, S-I
ADR transport category	2
Emergency Action Code	1Z

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

Hazard Identification Number 40
(ADR/RID)

Tunnel restriction code (E)

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.
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 Flam. Liq. 2 - H225: On basis of test data. Eye Irrit. 2 - H319: Calculation method.

Revision comments This is the first issue.

Revision date 30/01/2018

SDS number 1171

Armor All® Headlight Restorer Wipes Kit - Step 1 - Cleaning/Oxidation Removal Wipe

Hazard statements in full

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H319 Causes serious eye irritation.

The information supplied here is accurate to the best knowledge and belief of Armored Auto UK Ltd, it is however, not intended as a warranty or representation, and should not be construed as such, for which Armored Auto UK Ltd assumes any legal responsibility. Any information or advice obtained from Armored Auto UK Ltd other than by means of this publication, and whether relating to Armored Auto UK Ltd's products or other materials is also given in good faith. It remains at all times the responsibility of the customer, and user, to ensure that the materials are suitable for the particular purpose intended. Materials not manufactured, or supplied, by Armored Auto UK Ltd when used instead of, or in conjunction with materials supplied by Armored Auto UK Ltd, it is the customer's responsibility to ensure that all technical, and other information related to such materials is obtained from the manufacturer or supplier. Armored Auto UK Ltd accepts no liability for the data contained within this document, as the information herein may be applied under conditions beyond our control, and in situations with which we may be unfamiliar. The information contained within this document is furnished upon condition that the customer and user of this product makes his own determination of the suitability of the product for his particular purpose.



SAFETY DATA SHEET

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

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® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe
Product number 18514

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

Identified uses Protects headlight surface from UV damage.
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 Acute Tox. 4 - H302 Eye Irrit. 2 - H319
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Warning
Hazard statements H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Precautionary statements	P102 Keep out of reach of children. 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.
Contains	Hexan-1-ol
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P330 Rinse mouth.

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

Hexan-1-ol CAS number: 111-27-3 EC number: 203-852-3	50 - 100%
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Eye Irrit. 2 - H319	
2-(2-butoxyethoxy)ethanol CAS number: 112-34-5 EC number: 203-961-6	25 - <50%
Classification Eye Irrit. 2 - H319	
toluene CAS number: 108-88-3 EC number: 203-625-9	0.025 - <0.25%
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

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	Brush off loose particles from skin. Wash with plenty of water. 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	Due to the physical nature of this product, it is unlikely that ingestion will occur. Harmful if swallowed. Gastrointestinal symptoms, including upset stomach.
Skin contact	Due to the physical nature of this product, exposure by this route is unlikely. Prolonged contact may cause dryness of the skin.
Eye contact	Due to the physical nature of this product, exposure by this route is unlikely. Irritating to eyes. Particles in the eyes may cause irritation and smarting.

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.
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.

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

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.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

2-(2-butoxyethoxy)ethanol

Long-term exposure limit (8-hour TWA): WEL 10 ppm 67.5 mg/m³

Short-term exposure limit (15-minute): WEL 15 ppm 101.2 mg/m³

toluene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

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	Liquid-impregnated wipe.
Odour	Characteristic.
Odour threshold	Not determined.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	65.6°C : Liquid.
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.

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Bulk density	Not determined.
Partition coefficient	Not determined.
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.
--------------------------	--------------------------

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	Keep away from heat, sparks and open flame. Avoid excessive heat for prolonged periods of time.
----------------------------	---

10.5. Incompatible materials

Materials to avoid	None known.
---------------------------	-------------

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO ₂). Carbon monoxide (CO). Toxic gases or vapours.
---	---

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)	Harmful if swallowed.
-------------------------------------	-----------------------

ATE oral (mg/kg)	1,402.69
-------------------------	----------

Acute toxicity - dermal

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

ATE dermal (mg/kg)	2,922.27
---------------------------	----------

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.
----------------------------------	--

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

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

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 Based on available data the classification criteria are not met.

Toxicological information on ingredients.

Hexan-1-ol

Acute toxicity - oral

Acute toxicity oral (LD₅₀) 720.0
mg/kg)

Species Rat

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 720.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 1,500.0
mg/kg)

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information.

ATE dermal (mg/kg) 1,500.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >21 mg/l, Inhalation, Dust/Mist, Rat REACH dossier information.

Skin corrosion/irritation

Animal data Not irritating. REACH dossier information.

Serious eye damage/irritation

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Serious eye damage/irritation Dose: 0.1 ml, 21 days, Rabbit Causes serious eye irritation. REACH dossier information.

Skin sensitisation

Skin sensitisation Draize test - Guinea pig: Not sensitising. REACH dossier information.

Germ cell mutagenicity

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

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

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 1127 mg/kg/day, Oral, Rat P REACH dossier information.

Reproductive toxicity - development Maternal toxicity:, Teratogenicity: - NOAEL: 1000 mg/kg/day, Oral, Rat REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 1127 mg/kg/day, Oral, Rat REACH dossier information.

2-(2-butoxyethoxy)ethanol**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 2,410.0

Species Mouse

Notes (oral LD₅₀) REACH dossier information.

ATE oral (mg/kg) 2,410.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 27,640.0

Species Rabbit

Notes (dermal LD₅₀) REACH dossier information.

ATE dermal (mg/kg) 27,640.0

Skin corrosion/irritation

Animal data Dose: 0.5 ml, 1 hour, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Eye Irrit. 2 - H319 Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information.

Germ cell mutagenicity

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

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 633 mg/kg/day, Oral, Rat REACH dossier information. No evidence of reproductive toxicity in animal studies.
<u>toluene</u>	
<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	5,580.0
Species	Rat
Notes (oral LD₅₀)	REACH dossier information.
ATE oral (mg/kg)	5,580.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	12,267.0
Species	Rabbit
ATE dermal (mg/kg)	12,267.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	25.7
Species	Rat
Notes (inhalation LC₅₀)	REACH dossier information.
ATE inhalation (vapours mg/l)	25.7
<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. Irritating to skin.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 ml, 7 days, Rabbit REACH dossier information. Irritating to eyes.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. REACH dossier information.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEC 1200 ppm, Inhalation, Rat REACH dossier information.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Reproductive toxicity - fertility	Two-generation study - NOAEC 2000 ppm, Inhalation, Rat P REACH dossier information.
Reproductive toxicity - development	Maternal toxicity:, Developmental toxicity: - NOAEC: 750 ppm, Inhalation, Rat REACH dossier information.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	STOT SE 3 - H336 May cause drowsiness or dizziness.
<u>Aspiration hazard</u>	
Aspiration hazard	May be fatal if swallowed and enters airways.

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.

Hexan-1-ol

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 97.2 - 97.5 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: 201 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 79.7 mg/l, Pseudokirchneriella subcapitata REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 6.8 - 13 mg/l, Daphnia magna Calculation method. REACH dossier information.
---	--

2-(2-butoxyethoxy)ethanol

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1300 mg/l, Lepomis macrochirus (Bluegill) REACH dossier information.
Acute toxicity - aquatic invertebrates	NOEC, 48 hours: ≥100 mg/l, Daphnia magna EC ₅₀ , 48 hours: >100 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	NOEC, 96 hours: ≥ 100 mg/l, Desmodesmus subspicatus REACH dossier information.
Acute toxicity - microorganisms	EC ₁₀ , 30 minutes: > 1995 mg/l, Activated sludge REACH dossier information.

toluene

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 5.5 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.
------------------------------	--

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Acute toxicity - aquatic invertebrates	LC ₅₀ , 2 days: 3.78 mg/l, Ceriodaphnia dubia REACH dossier information.
Acute toxicity - aquatic plants	EC ₅₀ , 3 hours: 207 mg/l, Chlorella vulgaris REACH dossier information.
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	NOEC, 40 days: 1.39 mg/l, Oncorhynchus kisutch (Coho salmon) REACH dossier information.
Chronic toxicity - aquatic invertebrates	EC ₅₀ , 7 days: 3.23 mg/l, Ceriodaphnia dubia NOEC, 7 days: 0.74 mg/l, Ceriodaphnia dubia REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

Hexan-1-ol

Biodegradation	Water - Degradation 61 - 77%: 30 days REACH dossier information. Weight of evidence.
-----------------------	--

2-(2-butoxyethoxy)ethanol

Biodegradation	Water - Degradation (~85%): 28 days REACH dossier information. The substance is readily biodegradable.
-----------------------	--

toluene

Phototransformation	Air - DT ₅₀ : 2.59 days REACH dossier information.
Biodegradation	Water - Degradation 81%: 5 days REACH dossier information. Weight of evidence. The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

Hexan-1-ol

Partition coefficient	log Pow: 1.8 REACH dossier information.
------------------------------	---

2-(2-butoxyethoxy)ethanol

Partition coefficient	log Pow: 1 REACH dossier information.
------------------------------	---------------------------------------

toluene

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Bioaccumulative potential BCF: 90, Leuciscus idus (Golden orfe) REACH dossier information.

Partition coefficient log Pow: 2.73 REACH dossier information.

12.4. Mobility in soil

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Ecological information on ingredients.

Hexan-1-ol

Mobility Soluble in water.

2-(2-butoxyethoxy)ethanol

Mobility Miscible with water.

toluene

Mobility Soluble in water.

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.

Hexan-1-ol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2-(2-butoxyethoxy)ethanol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

toluene

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.

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.

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

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

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

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.

Armor All® Headlight Restorer Wipes Kit - Step 2 - UV Sealant Protection Wipe

Classification procedures according to Regulation (EC) 1272/2008	Acute Tox. 4 - H302, Eye Irrit. 2 - H319: Calculation method.
Revision comments	This is the first issue.
Revision date	30/01/2018
SDS number	1180
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.

The information supplied here is accurate to the best knowledge and belief of Armored Auto UK Ltd, it is however, not intended as a warranty or representation, and should not be construed as such, for which Armored Auto UK Ltd assumes any legal responsibility. Any information or advice obtained from Armored Auto UK Ltd other than by means of this publication, and whether relating to Armored Auto UK Ltd's products or other materials is also given in good faith. It remains at all times the responsibility of the customer, and user, to ensure that the materials are suitable for the particular purpose intended. Materials not manufactured, or supplied, by Armored Auto UK Ltd when used instead of, or in conjunction with materials supplied by Armored Auto UK Ltd, it is the customer's responsibility to ensure that all technical, and other information related to such materials is obtained from the manufacturer or supplier. Armored Auto UK Ltd accepts no liability for the data contained within this document, as the information herein may be applied under conditions beyond our control, and in situations with which we may be unfamiliar. The information contained within this document is furnished upon condition that the customer and user of this product makes his own determination of the suitability of the product for his particular purpose.