Abnie Paidar Sabz
Water & Wastewater
Environmental Management

SAFETY DATA SHEET
STP® Engine Flush
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 STP® Engine Flush

Product number 62450

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

Identified uses Oil additive. Engine cleaner.

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 Asp. Tox. 1 - H304

Environmental hazards Not Classified

Human health Pneumonia may be the result if vomited material containing solvents reaches the lungs.

2.2. Label elements

Pictogram



STP® Engine Flush

Signal word	Danger
Hazard statements	H304 May be fatal if swallowed and enters airways.
Precautionary statements	P102 Keep out of reach of children. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics
Supplementary precautionary statements	P405 Store locked up.

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

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics — **50 - 100%**

CAS number: — | EC number: 926-141-6 | REACH registration number: 01-2119456620-43-XXXX

Classification
Asp. Tox. 1 - H304

1,2-diaminoethane — **<0.025%**

CAS number: 107-15-3 | EC number: 203-468-6 | REACH registration number: 01-2119480383-37-XXXX

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Acute Tox. 3 - H311
Acute Tox. 4 - H332
Skin Corr. 1B - H314
Resp. Sens. 1B - H334
Skin Sens. 1B - H317
Aquatic Chronic 3 - H412

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.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately.

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Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if symptoms are severe or persist after washing.

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. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

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 Avoid breathing fire gases or vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. 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 Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. 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.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations.

Advice on general occupational hygiene Avoid contact with eyes and prolonged skin contact. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

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. Store locked up.

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

1,2-diaminoethane

Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m³
WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



Eye/face protection 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. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Straw.

Odour Characteristic.

Odour threshold Not determined.

pH Not determined.

Melting point Not determined.

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Initial boiling point and range	Not determined.
Flash point	70°C
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	0.8242
Bulk density	822.7 kg/m³
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	3.02 cSt @ 40°C
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	Oxidising agents.

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	Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Heating may generate the following products: Carbon dioxide (CO2). Carbon monoxide (CO). Hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

STP® Engine Flush

Acute toxicity - oral

Notes (oral LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

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

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Kinematic viscosity ≤ 20.5 mm²/s. Asp. Tox. 1 - H304 Aspiration hazard if swallowed.

Skin contact Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	15,000.0
Species	Rat
Notes (oral LD_{50})	REACH dossier information. Read-across data.
ATE oral (mg/kg)	15,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	3,160.0

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Species	Rabbit
Notes (dermal LD_{50})	REACH dossier information. Read-across data.
ATE dermal (mg/kg)	3,160.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	4,951.0
Species	Rat
Notes (inhalation LC_{50})	REACH dossier information. Read-across data.
ATE inhalation (vapours mg/l)	4,951.0

Skin corrosion/irritation

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. Read-across data.

Serious eye damage/irritation

Serious eye damage/irritation	Dose: 0.1 ml, 1 second, Rabbit Not irritating. REACH dossier information. Read-across data.

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

Carcinogenicity	NOAEC 1100 mg/m³, Inhalation, Mouse REACH dossier information. Read-across data.

Reproductive toxicity

Reproductive toxicity - fertility	Fertility, One-generation study - NOAEL 750 mg/kg/day, Oral, Rat F1 REACH dossier information. Read-across data.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: >= 5220 mg/m³, Inhalation, Rat REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEC > 10400 mg/m³, Inhalation, Rat REACH dossier information. Read-across data.

Aspiration hazard

Aspiration hazard	2.4 cSt @ 20°C Asp. Tox. 1 - H304

1,2-diaminoethane

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	866.0

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Species	Rat
Notes (oral LD_{50})	REACH dossier information.
ATE oral (mg/kg)	866.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	560.0
Species	Rabbit
Notes (dermal LD_{50})	REACH dossier information.
ATE dermal (mg/kg)	560.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	14.7
Species	Rat
Notes (inhalation LC_{50})	REACH dossier information.
ATE inhalation (vapours mg/l)	14.7
Skin corrosion/irritation	
Animal data	Dose: 2.5 x 2.5 cm, 1, 5, 15 minutes, Rabbit Erythema/eschar score: Moderate to severe erythema (3). REACH dossier information. Skin Corr. 1B - H314
Serious eye damage/irritation	
Serious eye damage/irritation	Dose: 50 µl, 1 second, Rabbit REACH dossier information. Eye Dam. 1 - H318
Skin sensitisation	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. REACH dossier information.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information.
Carcinogenicity	
Carcinogenicity	NOAEL 9 mg/kg/day, Oral, Rat REACH dossier information.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL 227 mg/kg/day, Oral, Rat F1 REACH dossier information.
Reproductive toxicity - development	Maternal toxicity: - LOAEL: 454 mg/kg/day, Oral, Rat REACH dossier information.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	NOAEL 22 mg/kg/day, Oral, Rat REACH dossier information.
Aspiration hazard	
Aspiration hazard	1.265 - 1.725 mPa s @ 25°C/77°F REACH dossier information.

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SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute toxicity - fish	LL_{50}, 96 hours: > 1000 mg/l, Onchorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute toxicity - aquatic invertebrates	EL_{50}, 48 hours: > 1000 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EL_{50}, 72 hours: > 1000 mg/l, Pseudokirchneriella subcapitata REACH dossier information.
Chronic toxicity - fish early life stage	NOELR, 28 days: 0.173 mg/l, Onchorhynchus mykiss (Rainbow trout) QSAR REACH dossier information.
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 1.22 mg/l, Daphnia magna QSAR REACH dossier information.

1,2-diaminoethane

Acute toxicity - fish	LC_{50}, 96 hours: 640 mg/l, Poecilia reticulata (Guppy) REACH dossier information.
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 16.7 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 645 mg/l, Pseudokirchneriella subcapitata REACH dossier information.
Acute toxicity - microorganisms	EC_{50}, 2 hours: 3.2 mg/l, Nitrifying bacteria REACH dossier information.
Chronic toxicity - fish early life stage	NOEC, 28 days: > 10 mg/l, Gasterosteus aculeatus (Three-spined stickleback) REACH dossier information.
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.16 mg/l, Daphnia magna REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Biodegradation	Water - Degradation ~ 5%: 3 days Water - Degradation 69: 28 days REACH dossier information. Readily biodegradable but failing the 10-day window.

1,2-diaminoethane

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Persistence and degradability	REACH dossier information. Read across data.
Phototransformation	Water - DT_{50} : 6.076 hours REACH dossier information. QSAR
Biodegradation	Water - Degradation (95%): 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.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Partition coefficient Scientifically unjustified. REACH dossier information.

1,2-diaminoethane

Partition coefficient log Pow: -4.42 REACH dossier information. QSAR

12.4. Mobility in soil

Mobility The product is soluble in water.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Mobility	The product has poor water-solubility.
Surface tension	26.4 mN/m @ 25°C

1,2-diaminoethane

Adsorption/desorption coefficient	Water - log Koc: 3.68 @ 25°C/77°F REACH dossier information.
Henry's law constant	0.6 Pa m³/mol @ 25°C/77°F REACH dossier information. Estimated value.

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

STP® Engine Flush

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 Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

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

Classification procedures according to Regulation (EC) 1272/2008	Asp. Tox. 1 - H304: Calculation method. EUH066: Expert judgement.
Revision comments	Classification according to CLP Annex I.
Revision date	30/05/2014
Revision	10
Supersedes date	01/01/2014
SDS number	300

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Hazard statements in full

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H412 Harmful to aquatic life with long lasting effects.

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