

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING**1.1 Product Identifier**Material name : Engine Flush
Product code :**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Product use : Solvent

1.3 Details of the supplier of the safety data sheetManufacturer/Supplier: Emissco Ltd
New Haden Road
Brookhouses Ind Est
Cheadle
Staffordshire
ST10 1UF

Tel. : 01538 752561

Email (for SDSs) : info@emissco.co.uk

1.4 Emergency tel. no.: 01538 752561 (Available 9am-5pm)**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

According to 1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation:

Physical and Chemical Hazards	Flam.Liq.3; H226
Human health	Asp. Tox.1; H304; Sk.Irrit.2; H315; Eye Irrit.2; H319; STOT SE3; H336
Environment	Not classified

2.2 Label elements

Labelling according to EC Directives: 1272/2008/EC

Signal word: Danger

Pictogram(s):

Contains: Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclics, <2% aromatics, 2-Butoxyethanol



Hazard Statements:	H226	Flammable liquid and vapour.
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.

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Precautionary

Statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
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 local/national regulations.

2.3 Other hazards: No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (1272/2008/EC)	Content
HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	64742-48-9 919-857-5 01-2119463258-33-xxxx	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE3; H336 EUH066	80-90%
2-BUTOXYETHANOL (BUTYL GLYCOL)	111-76-2 203-905-0 01-2119475108-36-xxxx	Ac.Tox.4; H302+H312+H332 Sk.Irrit.2; H315 Eye Irrit 2; H319	5-10%

See Section 16 for the full text of the H-statements noted above.

(1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation).

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Remove casualty from exposure ensuring one's own safety whilst doing so. Take off any contaminated clothing and shoes/boots immediately. Never give anything by mouth to an unconscious person.

Skin contact: Wash with soap and water. Seek medical advice if irritation develops.

Eye contact: Rinse with water for 10 minutes and seek medical advice if irritation persists.

Ingestion: Rinse mouth with water and give water to drink. Do not induce vomiting. Seek medical advice.

Inhalation: No undue effects in normal circumstances, if affected remove to fresh air and seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: May cause eye irritation. May cause irritation to skin with prolonged or repeated contact.

4.3 Indication of any immediate medical attention and special treatment needed: See skin and eye contact information above.

5. FIRE-FIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing media: Use Carbon Dioxide, Dry Powder or Foam.
 Unsuitable extinguishing media: Water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Irritating/toxic fumes may be released at elevated temperatures.

5.3 Advice for fire-fighters:

Special protective equipment: Wear self-contained breathing apparatus. Use personal protective equipment.
 Further information: Standard procedure for chemical fires. Use water spray to cool unopened containers.
 Do not allow fire run-off to enter drains.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Evacuate personnel to safe areas. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Use personal protective equipment to deal with spillage.

6.2 Environmental precautions

Do not discharge into drains or rivers, but if contamination to waterways has occurred, inform local authorities.

6.3 Methods and materials for containment and cleaning up

Use absorbent material, sand, earth, vermiculite, etc. and place in a container for disposal; flush spillage site with water.

6.4 References to other sections: See sections 8 and 13 for personal protection and disposal information.

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Handle with care. General good housekeeping practices. Do not eat or drink whilst using the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well ventilated area. Keep container tightly closed.

7.3 Specific end use(s): No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters**

Chemical name	8hr TWA	15min STEL	Reference
HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	1000 mg/m ³ /150 ppm	-	UK SIA
2-BUTOXYETHANOL	123 mg/m ³ (25 ppm)	246 mg/m ³ (50 ppm)	Sk, BMGV; EH40/2005

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DNEL:

DNEL (workers)	HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	2-BUTOXYETHANOL	Reference
Chronic systemic effects (dermal)	300 mg/kg	75 mg/kg/day	Manufacturer
Chronic systemic effects (inhalation)	1500 mg/m ³	98 mg/m ³	Manufacturer

DNEL (consumers)	HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	2-BUTOXYETHANOL	Reference
Chronic systemic effects (dermal)	300 mg/kg	38 mg/kg/day	Manufacturer
Chronic systemic effects (inhalation)	900 mg/m ³	-	
Chronic local effects (inhalation)	-	426 mg/m ³	Manufacturer

PNEC:

Environment	2-BUTOXYETHANOL
Aquatic Compartment	
Fresh water	8.8 mg/l
Marine water	8.8 mg/l
Dry Sediment – fresh water	8.14 mg/kg
Terrestrial Compartment	
Dry soil	2.8 mg/kg

The hydrocarbon solvent is a hydrocarbon with a complex, unknown or variable composition (UVCB). Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

8.2 Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Personal protective equipment

Respiratory protection: If Workplace Exposure Limit(s) listed above are exceeded, respiratory protection may be required, in which case use a respirator fitted with an organic vapour filter.

Hand protection: Protective gloves; check with glove manufacturer for specific advice. “Sk” noted above means can be absorbed through skin.

Eye protection: Tightly-fitting safety goggles.

Skin and body protection: Protective overalls.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls: Do not discharge into drains or rivers.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

State and colour	Colourless liquid
Odour	Characteristic
Odour Threshold	No data available
Flammability	Flammable
Flash point	>40°C
Lower explosion limit	0.6%
Upper explosion limit	10.6%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	No data available
Oxidising properties	Non-oxidising
Solubility in water	Partially soluble
Solubility in other solvents	Not determined
pH	Not applicable
Melting point/range	No data available
Boiling point/range	No data available
Relative density	~0.8
Vapour pressure	No data available
Vapour density	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	No data available
Evaporation rate	No data available

9.2 Other information No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity	Generally non-reactive.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None if stored and used as directed.
10.4 Conditions to avoid	Hot surfaces. Sources of ignition. Flames.
10.5 Incompatible materials	Strong acids. Strong alkalis. Strong oxidising agents.
10.6 Hazardous decomposition products	Oxides of carbon, acrid smoke, irritating fumes.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Chemical name	Oral (LD50)	Inhalation (LC50)	Dermal (LD50)
HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	>5000 mg/kg (Rat)	No data available	>3000 mg/kg (Rabbit)
2-BUTOXYETHANOL	300-2000 mg/kg (Rat)	No data available	1000-2000 mg/kg (Rat)

Skin corrosion/irritation: Irritating to skin.

Serious eye damage/eye irritation: Irritating to eyes.

Respiratory or skin sensitisation: Not classed as a skin sensitiser.

Repeated dose toxicity: No data available.

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11.1 Information on toxicological effects (continued)

Carcinogenicity:	Not carcinogenic.
Mutagenicity:	Not mutagenic.
Toxicity for reproduction:	Not expected to impair fertility.
Specific target organ toxicity (STOT):	May cause drowsiness or dizziness.
Further information	May be fatal if swallowed and product is aspirated into airways following vomiting.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical name	Species	Test	Value
HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	Daphnia	LL/EL/IL50	Expected to be not toxic at limit of water solubility
	Fish	LL/EL/IL50	
	Algae	LL/EL/IL50	
2-BUTOXYETHANOL	Daphnia	EC50 24h	>100 mg/l
	Fish	LC50 96h	>100 mg/l
	Algae	EC50 7d	>100 mg/l

12.2 Persistence and degradability	Expected to be biodegradable.
12.3 Bioaccumulative potential	The hydrocarbon solvent has the potential for bioaccumulation.
12.4 Mobility in soil	Partially soluble in water.
12.5 Results of PBT and vPvB assessment	Not considered to be PBT or vPvB.
12.6 Other adverse effects	May be harmful to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal operations: Dispose of in accordance with local and national regulations. Do not dispose of waste into sewer.
 Do not dispose of together with household waste. Contact licensed waste disposal company.
 Empty containers should be taken to an approved waste handling site for recycling or disposal.
 Do not burn or use a cutting torch on the empty container.

14. TRANSPORT INFORMATION

14.1 UN number:	3295
14.2 UN proper shipping name:	HYDROCARBONS, LIQUID N.O.S
14.3 Transport hazard class(es):	Class: 3
Transport labels:	



14.4 Packing Group:	III
14.5 Environment hazards:	Marine Pollutant: No
14.6 Special precautions for user:	EMS: F-E, S-E Tunnel restriction code: (D/E)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

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

UK Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2001 No.2677) with amendments.

EU Directives

Regulations (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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation EU 453/2010 amending Regulation (EC) No 1907/2006.

Statutory Instruments

The Chemicals (Hazard information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Health and Safety Executive Workplace Exposure Limits EH40.

15.2 Chemical Safety Assessment

Chemical Safety Assessments/Reports (CSA/CSR) are not required for mixtures.

16. OTHER INFORMATION

This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals) as amended and Regulation EU 453/2010.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 (CLP):

Physical hazards: On basis of test data/Expert judgement.
Health hazards: Calculation method
Environmental hazards: Calculation method

Full text of H-statements referred to under sections 2 and 3

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.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness
EUH066 Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms

CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.

STOT: Single Target Organ Toxicity (Section 3 and 11).

DNEL: Derived No Effect Level (Section 8).

PNEC: Predicted No Effect Concentration (Section 8).

PBT: Persistent, Bioaccumulative, Toxic. (Section 12).

vPvB: very Persistent and very Bioaccumulative. (Section 12).

EC50: Effective Concentration, 50 percent. (Section 12).

LC50: Lethal Concentration, 50 percent. (Section 11/12).

LD50: Lethal Dose, 50 percent. (Section 11).

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Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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