

SAFETY DATA SHEET

ENDOFLUSH

Page: 1

Compilation date: 26/05/2009

Revision date: 03/03/2017

Revision No: 6.1

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

1.1. Product identifier

Product name: ENDOFLUSH

Product code: 020

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

Use of substance / mixture: * Air Conditioning internal system cleaner PC35: Washing and cleaning products
(including solvent based products).

1.3. Details of the supplier of the safety data sheet

Company name: Advanced Engineering Ltd

Guardian House

Stroudley Road

Basingstoke

Hampshire

RG24 8NL

United Kingdom

Tel: +44(0)1256460300

Fax: +44(0)1256462266

Email: sales@advancedengineering.co.uk

1.4. Emergency telephone number

Emergency tel: Advanced Engineering Ltd (24hr) +44 (0)203 394 9889

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Eye Irrit. 2: H319

Most important adverse effects: Causes serious eye irritation.

2.2. Label elements

Label elements:

Hazard statements: H319: Causes serious eye irritation.

Hazard pictograms: GHS07: Exclamation mark



Signal words: Warning

Precautionary statements: P102: Keep out of reach of children.

SAFETY DATA SHEET

ENDOFLUSH

Page: 2

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

P302+350: IF ON SKIN: Gently wash with plenty of soap and water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists: Get medical advice.

2.3. Other hazards

PBT: This product is not identified as a PBT / vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ETHYL DIGLYCOL - REACH registered number(s): 01-2119475105-42-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
203-919-7	111-90-0	-	Eye Irrit. 2: H319	50-70%

D P M

252-104-2	34590-94-8	Substance with a Community workplace exposure limit.	-	30-50%
-----------	------------	--	---	--------

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

Eye contact: * Bathe the eye with running water for 5 minutes. Consult a doctor.

Ingestion: * Wash out mouth with water. Consult a doctor.

Inhalation: * Remove casualty from exposure ensuring one's own safety whilst doing so.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after long-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

[cont...]

SAFETY DATA SHEET

ENDOFLUSH

Page: 3

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid. Remove all incompatible materials as outlined in section 10 of SDS.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water. Avoid all incompatible materials in clean-up procedure - see section 10 of SDS.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

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

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): * PC35: Washing and cleaning products (including solvent based products). Air Conditioning internal system cleaner

[cont...]

SAFETY DATA SHEET

ENDOFLUSH

Page: 4

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

Hazardous ingredients:

ETHYL DIGLYCOL

Type	Exposure	Value	Population	Effect
DNEL	Dermal (repeated dose)	50 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (repeated dose)	37 mg/m ³	Workers	Systemic
DNEL	Inhalation (repeated dose)	18 mg/m ³	Workers	Local
DNEL	Dermal (repeated dose)	25 mg/kg bw/day	Consumers	Systemic
DNEL	Inhalation (repeated dose)	18.3 mg/m ³	Consumers	Systemic
DNEL	Oral (repeated dose)	25 mg/kg bw/day	Consumers	Systemic
DNEL	Inhalation (repeated dose)	9 mg/m ³	Consumers	Local
PNEC	Fresh water	0.74 mg/l	-	-
PNEC	Marine water	0.074 mg/l	-	-
PNEC	Intermittent Rreleases	10 mg/l	-	-
PNEC	Sewage Treatment Works (STW)	200 mg/l	-	-
PNEC	Fresh water sediments	2.47 mg/kg	-	-
PNEC	Marine sediments	0.274 mg/kg	-	-
PNEC	Soil (agricultural)	0.15 mg/kg	-	-

8.2. Exposure controls

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

Respiratory protection: Respiratory protection not required.

Hand protection: Impermeable gloves.

Eye protection: Safety glasses with side-shields. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Perceptible odour

Evaporation rate: Negligible

Solubility in water: Miscible in all proportions

Viscosity: Highly viscous

[cont...]

SAFETY DATA SHEET

ENDOFLUSH

Page: 5

Kinematic viscosity: 5.0448

Viscosity test method: Kinematic viscosity in 10-6 m²/s at 40°C (ISO 3104/3105)

Boiling point/range°C: >35

Flash point°C: >93

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ETHYL DIGLYCOL

DERMAL	RBT	LD50	9143	mg/kg
ORL	MUS	LD50	6031	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated

Excluded hazards for substance:

Hazard	Route	Basis
--------	-------	-------

[cont...]

SAFETY DATA SHEET

ENDOFLUSH

Page: 6

Acute toxicity (ac. tox. 4)	-	No hazard: calculated
Acute toxicity (ac. tox. 3)	-	No hazard: calculated
Acute toxicity (ac. tox. 2)	-	No hazard: calculated
Acute toxicity (ac. tox. 1)	-	No hazard: calculated
Skin corrosion/irritation	-	No hazard: calculated
Respiratory/skin sensitisation	-	No hazard: calculated
Germ cell mutagenicity	-	No hazard: calculated
Carcinogenicity	-	No hazard: calculated
Reproductive toxicity	-	No hazard: calculated
STOT-single exposure	-	No hazard: calculated
STOT-repeated exposure	-	No hazard: calculated
Aspiration hazard	-	No hazard: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after long-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

ETHYL DIGLYCOL

ALGAE	96H EC50	> 100	mg/l
Bacteria	16H EC10	4000	mg/l
CHANNEL CATFISH (<i>Ictalurus punctatus</i>)	96H LC50	6010	mg/l
Daphnia magna	48H EC50	1982	mg/l

12.2. Persistence and degradability

Persistence and degradability: * Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil. Soluble in water.

[cont...]

SAFETY DATA SHEET

ENDOFLUSH

Page: 7

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: * Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: * Solvent reclamation/regeneration. Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

Disposal of packaging: Clean with water. May be reused following decontamination.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal. .

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of the 16th December 2008 on Classification, labeling and packaging of Substances and Mixtures. The biodegradability of the surfactants contained in this product are in accordance with the requirements of the EU Detergent Regulation (EC/648/2004).

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H319: Causes serious eye irritation.

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.