



SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

ENGINE FLUSH

TEC-2000 LTD.

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

1.1 Product Identifier

Trade Name: TEC-2000 ENGINE FLUSH

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

Application of the substance / the preparation: Engine Flush.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: TEC-2000 LTD., P.O. Box 285, Hitchin, Herts., SG4 9WQ, U.K.

1.4 Emergency telephone number

0044 (Ø) 1462-433 660 - 0044 (Ø) 7831 105386 (24hrs)

UK - National Poisons Emergency: +44 870 600 6266 (24h - health professionals only).

Ireland - National Poisons Information Centre: +353 1 8379964.

SECTION 2: Hazards identification

2.1.2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 3	H226	Flammable liquid and vapour.
Repr. 2	H361d	Suspected of damaging the unborn child.
STOT SE 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the CLP regulation.

Hazard pictograms:



GHS02



GHS07



GHS08



GHS09

Signal word:

Danger

Hazard-determining components of labelling:

Hydrocarbons, C9, aromatics

toluene

Hazard statements:

H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand. P102	Keep out of reach of children.
P103	Read label before use.	
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. P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.	
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P312	Call a POISON CENTER/doctor if you feel unwell.	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT:	Not applicable.
vPvB:	Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Hazardous components:**

EC number: 918-668-5	Hydrocarbons, C9, aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	50-100%
CAS: 108-88-3 EINECS: 203-625-9 Index number: 601-021-00-3	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; STOT SE 3, H336	10-<25%
CAS: 68457-79-4 EINECS: 270-608-0	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	2.5-<10%

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

After inhalation:	Move patient to fresh air, if symptoms persist consult a doctor.
After skin contact:	Immediately wash with water and soap and rinse thoroughly.
After eye contact:	Rinse opened eye for several minutes under running water.
After swallowing:	Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting Measures**5.1 Extinguishing media****Suitable extinguishing agents:**

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents:

Water with full jet.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters**Protective equipment:**

Wear fully protective suit.

Wear self-contained respiratory protective device.

SECTION 6: Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Use personal protective equipment.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities**Requirements to be met by storerooms and receptacles:**

Store in a cool, dry place in tightly closed receptacles.

Information about storage in one common storage facility:

Store away from oxidising agents.

Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

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

SECTION 8: Exposure Controls/Personal Protection**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****108-88-3 toluene****WEL (Great Britain)**

Short-term value: 384 mg/m³, 100 ppm

Long-term value: 191 mg/m³, 50 ppm

Sk

Additional information: For the wording of the listed risk phrases refer to section 16.

8.2 Exposure controls**Personal protective equipment****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes

Avoid contact with the eyes and skin.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:

Protective gloves.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Material of gloves: PVC gloves. Nitrile rubber, NBR

Eye protection:

Safety glasses with side-shields (EN 166).

Body protection: Protective work clothing.

SECTION 9: Physical And Chemical Properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Liquid.
Colour:	Green
Odour:	Characteristic.
Odour threshold:	Not determined.
pH-value:	Not determined.
Melting point/Melting range:	<0 °C
Boiling point/Boiling range:	110 °C (IBP)
Flash point:	37 °C
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	240 °C
Decomposition temperature:	Not determined.
Danger of explosion:	Product does not present an explosion hazard. However, formation of explosive air/vapour mixtures are possible.

Explosion limits:

Lower:	0.7 Vol %
Upper:	10 Vol %
Oxidising properties:	Not determined.
Vapour pressure:	Not determined.
Density at 15 °C:	0.838 G/ML
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with Water:	Partly soluble.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

9.2 Other information: No further relevant information available.

SECTION 10: Stability and Reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability**Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Keep away from heat.

10.5 Incompatible materials: Water. Strong oxidizing agents.

10.6 Hazardous decomposition products: Hydrogen sulphide.
Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological Information**11.1 Information on toxicological effects****Acute toxicity****LD/LC50 values:****108-88-3 toluene**

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (Rabbit)
Inhalative	LC50/4h	5320 mg/L (Mouse)

Primary irritant effect:

Skin corrosion/irritation: No irritant effect known.

Serious eye damage/irritation: Irritating effect.

Respiratory or skin sensitisation: No sensitising effects known.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Repr. 2

SECTION 12: Ecological information**12.1 Toxicity**

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Ecotoxicological effects:

Remark: Toxic for fish

General notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal Considerations**13.1 Waste treatment methods**

Recommendation:

Do not allow product to reach sewage system.

Uncleaned packaging

Recommendation:

Disposal must be made according to official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

SECTION 14: Transport Information**14.1 UN Number**

ADR, IMDG, IATA UN 1993

14.2 UN proper shipping name

ADR 1993 FLAMMABLE LIQUID, N.O.S. (TOLUENE), ENVIRONMENTALLY HAZARDOUS
IMDG FLAMMABLE LIQUID, N.O.S. (TOLUENE, Hydrocarbons, C9, aromatics), MARINE POLLUTANT
IATA POLLUTANT
FLAMMABLE LIQUID, N.O.S. (TOLUENE)

14.3 Transport hazard class(es)

ADR, IMDG



Class Label 3 Flammable Liquids.
3

IATA



Class Label 3 Flammable Liquids.
3

14.4 Packing group

ADR, IMDG, IATA III

14.5 Environmental hazards: Product contains environmentally hazardous substances: Hydrocarbons, C9, aromatics

Marine pollutant: Yes

14.6 Special precautions for user Warning: Flammable liquids.

Danger code (Kemler): 30

EMS number: F-E,S-E

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Transport/Additional information:**ADR**

Excepted quantities (EQ): Code: E1
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 1000 ml

Tunnel restriction code: D/E

IMDG

Limited quantities (LQ): 5L
Excepted quantities (EQ): Code: E1
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 1000 ml

SECTION 15: Regulatory Information.**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients are listed

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other Information.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory 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.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG:	International Maritime Code for Dangerous Goods IATA: International Air Transport Association
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Flam. Liq. 2:	Flammable liquids, Hazard Category 2 Flam. Liq. 3: Flammable liquids, Hazard Category 3 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1:	Serious eye damage/eye irritation, Hazard Category 1 Repr. 2: Reproductive toxicity, Hazard Category 2
STOT SE 3:	Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2 Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2:	Hazardous to the aquatic environment - Chronic Hazard, Category 2