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SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

DIESEL INJECTOR CLEANER

Version Number: 14 | Dated: 14.11.2016

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

1.1 Product Identifier

Trade Name: TEC-2000 DIESEL INJECTOR CLEANER

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

Application of the substance / the preparation: Diesel injector cleaner.

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 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2	H225	Highly flammable liquid and vapour.
Repr. 2	H361d	Suspected of damaging the unborn child.
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 Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H336	May cause drowsiness or dizziness.

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:

toluene
permethrin (ISO)
acetone
Distillates (petroleum), hydrotreated light

Hazard statements:

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging the unborn child.
H336	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.
H410	Very 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/sparks/open flames/hot surfaces. - 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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P331	Do NOT induce vomiting.
P337+P313	If eye irritation persists: Get medical advice/attention.
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:

CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<25%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	10-<25%
CAS: 64742-47-8 EINECS: 265-149-8 Index number: 649-422-00-2	Distillates (petroleum), hydrotreated light Flam. Liq. 3, H226; Asp. Tox. 1, H304	10-<25%
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: 52645-53-1 EINECS: 258-067-9 Index number: 613-058-00-2	permethrin (ISO) Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4,H302; Acute Tox. 4, H332; Skin Sens. 1, H317	3-<10%
CAS: 51-03-6 EINECS: 200-076-7	2-(2-butoxyethoxy)ethyl 6-propylpiperonylether Acute Tox. 3, H331; Aquatic Chronic 2, H411	3-<10%
CAS: 27247-96-7 EINECS: 248-363-6	2-ethylhexyl nitrate Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	1-<2.5%
CAS: 64742-94-5 EINECS: 265-198-5 Index number: 649-424-00-3	Solvent naphtha (petroleum), heavy arom. Resp. Sens. 1, H334; Asp. Tox. 1, H304	0.3-<1%
CAS: 95-63-6 EINECS: 202-436-9 Index number: 601-043-00-3	1,2,4-trimethylbenzene Flam. Liq. 3, H226; Aquatic Chronic 2, H411; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.3-<1%
CAS: 28434-00-6 EINECS: 249-013-5 Index number: 006-025-00-3	S-bioallethrin Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H332	0.1-<0.3%
CAS: 108-67-8 EINECS: 203-604-4 Index number: 601-025-00-5	mesitylene Flam. Liq. 3, H226; Aquatic Chronic 2, H411; STOT SE 3, H335	0.1-<0.25%
CAS: 103-65-1 EINECS: 203-132-9 Index number: 601-024-00-X	propylbenzene Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335	0.1-<0.25%
CAS: 91-20-3 EINECS: 202-049-5 Index number: 601-052-00-2	naphthalene Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	0.1-<0.25%

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: Call for a doctor 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

Can form explosive gas-air mixtures..

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 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:
None.

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:	
67-64-1 acetone	
WEL (Great Britain)	Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm
IOELV (EU)	Long-term value: 1210 mg/m³, 500 ppm
67-63-0 Propan-2-ol	
WEL (Great Britain)	Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm
108-88-3 toluene	
WEL (Great Britain)	Short-term value: 384 mg/m³, 100 ppm Long-term value: 191 mg/m³, 50 ppm Sk

DNELs		
Dermal	DNEL - Long-term exposure - systemic effects	1 mg/kg bw/day (workers)
	DNEL - Short-term exposure - local effects	0.044 mg/cm² (workers)
Inhalative	DNEL - Long-term exposure - systemic effects	0.35 mg/m³ (workers)

PNECs	
27247-96-7 2-ethylhexyl nitrate	
PNEC	0.8 µg/L (Water (Freshwater)) 0.08 µg/L (Water (Marine Water)) 0.74 µg/L (Sediment)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

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

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: Orange

Odour: Characteristic.

Odour threshold: Not determined.

pH-value: Not determined.

Melting point/Melting range: <0 °C

Boiling point/Boiling range: 56 °C (IBC)

Flash point: 0 °C

Flammability (solid, gaseous):	Not determined.
Ignition temperature:	> 240 °C
Decomposition temperature:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	0.7 Vol %
Upper:	13.3 Vol %
Oxidising properties:	Not determined.
Vapour pressure:	Not determined.
Density at 15 °C:	0.817 G/MI
Relative density:	Not determined.
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 data 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: Protect against moisture.

10.5 Incompatible materials: Avoid strong oxidants, strong alkalis and strong acids.

10.6 Hazardous decomposition products: Nitrogen oxides.
Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values:		
67-64-1 acetone		
Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000mg/kg (Rabbit)
67-63-0 Propan-2-ol		
Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530mg/kg (Rabbit)
Inhalative	LC50/4h	30 mg/kg (rat)
64742-47-8 Distillates (petroleum), hydrotreated light		
Inhalative	LC50/4h	5 mg/kg (rat)
108-88-3 toluene		
Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (Rabbit)
Inhalative	LC50/4h	5320 mg/kg (rat)
51-03-6 2-(2-butoxyethoxy)ethyl 6-propylpiperonylether		
Oral	LD50	7181 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (Rabbit)
Inhalative	LC50/4h	> 5.9 mg/kg (rat)
27247-96-7 2-ethylhexyl nitrate		
Oral	LD50	> 9640 mg/kg (rat)
Dermal	LD50	> 4820 mg/kg (Rabbit)
104-76-7 2-ethylhexan-1-ol		
Oral	LD50	2049 mg/kg (rat)
Dermal	LD50	1970 mg/kg (Rabbit)
64742-95-6 Solvent naphtha (petroleum), light arom.		
Oral	LD50	> 6800 mg/kg (rat)
Dermal	LD50	> 3400 mg/kg (Rabbit)
Inhalative	LC50/4h	> 10.2 mg/kg (rat)

95-63-6 1,2,4-trimethylbenzene		
Oral	LD50	5000 mg/kg (rat)
103-65-1 propylbenzene		
Oral	LD50	6040 mg/kg (rat)
91-20-3 naphthalene		
Oral	LD50	490 mg/kg (rat)
Dermal	LD50	5000 mg/kg (Rabbit)
98-82-8 cumene		
Oral	LD50	1400 mg/kg (rat)
Dermal	LD50	12300 mg/kg (Rabbit)
Inhalative	LC50/4h	24.7 mg/kg (rat)

Primary irritant effect:

on the skin: No irritant effect known.

on the eye: Irritating effect.

Sensitisation: Sensitisation possible through skin contact.

CMR effects (carcinogenity, 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.

Ecotoxical effects:

Remark: Very toxic for fish

General notes: Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very 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.

Recommended cleansing agents:

Water, if necessary together with cleansing agents.

SECTION 14: Transport Information

14.1 UN Number

ADR, ADN, IMDG, IATA 1993

14.2 UN proper shipping name

ADR 1993 FLAMMABLE LIQUID, N.O.S. (ACETONE, ISOPROPANOL (ISOPROPYL ALCOHOL)), ENVIRONMENTALLY HAZARDOUS

IMDG FLAMMABLE LIQUID, N.O.S. (ACETONE, ISOPROPANOL (ISOPROPYL ALCOHOL)), MARINE POLLUTANT

IATA FLAMMABLE LIQUID, N.O.S. (ACETONE, ISOPROPANOL (ISOPROPYL ALCOHOL))

14.3 Transport hazard class(es)

ADR, IMDG

Class 3 Flammable Liquids.
Label 3

IATA

Class 3 Flammable Liquids.
Label 3

14.4 Packing group
ADR, IMDG, IATA II
14.5 Environmental hazards: Product contains environmentally hazardous substances: permethrin (ISO)
Marine pollutant: No
14.6 Special precautions for user Warning: Flammable liquids.
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: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
Tunnel restriction code: D/E
IMDG
Limited quantities (LQ): 1L
Excepted quantities (EQ): Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

SECTION 15: Regulatory Information.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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 InternationalCarriage 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
Acute Tox. 4:	Acute toxicity, Hazard Category 4
Repr. 2:	Reproductive toxicity, Hazard Category 2
Aquatic Chronic 2:	Hazardous to the aquatic environment - Chronic Hazard, Category 2