

ORIGINATED : 11/07/1996

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name : Troubleshooter
 Product Code : TS 105
 Use/Description of Product : Carburettor and Air intake cleaner for automotive Use.
 Blend of Solvents to Safely Remove Coked on Deposits.
 Excellent for use on EGR Valves.

Company Name : Rotec Industries
 Unit 3a Broad Oak
 Redbrook Maelor
 Whitchurch
 Shropshire
 SY13 3AQ

Telephone : 01948 780111
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients :

Substance Name	EINECS No.	CAS No.	% Conc Range	Hazard Symbols	Risk Phrases
TOLUENE	203-625-9	108-88-3	30 - 50	F,Xi,Xn,-.	11,38,48/20 63,65,67.
XYLENE	215-535-7	1330-20-7	10 - 30	Xn,-.	10,20/21,38
Ethyl Methyl Ketone	201-159-0	78-93-3	01 - 10	F,Xi,-.	11,36,66,67.
Methanol	200-659-6	67-56-1	01 - 10	F,T	11,23/24/25/39.
PROPANE	200-827-9	74-98-6	10 - 30	F+	12
Isobutane	200-857-2	75-28-5	01 - 10	F+	12
BUTANE	203-448-7	106-97-8	01 - 10	F+,	12

3. HAZARD IDENTIFICATION

Classifications : Highly Flammable.

Risk Phrases : Harmful by inhalation, in contact with skin and if swallowed.
 Irritating to skin. Harmful : danger of serious damage by Prolonged exposure though inhalation.
 Possible risk of harm to the unborn child. Harmful : possible Risk of irreversible effects through inhalation, in contact With skin and if swallowed.

Main Hazard Overview :
 Avoid haphazard use of product, where contact with eyes and skin will follow. Pressurised container.
 Protect from sunlight and do not expose to temperatures exceeding 50 deg C. do not pierce or burn even after use. Do not spray on a naked flame or any incandescent material. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

4. FIRST AID MEASURES (SYMPTOMS) part 1

Skin Contact	:	Harmful in contact with skin, This may cause mild irritation at the site of contact.
Eye Contact	:	There may be irritation and/or redness.
Ingestion	:	Harmful to ingest There may be irritation of the throat. There May Be nausea stomach pain vomiting or irritation.
Inhalation	:	Harmful to inhale. There may be irritation of the throat with a Tightness of the chest.

4. FIRST AID MEASURES (ACTIONS) part 2

General :
In all cases of doubt or when symptoms persist seek medical attention. Never give anything by mouth to an unconscious person.

Skin Contact :
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do NOT use solvents or thinners.

Eye Contact :
Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advise.

Ingestion :
If accidentally swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting. Show medical personnel a copy of this SDS.

Inhalation :
Harmful by inhalation. Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious, and breathing is correct, place in the recovery position. If conscious, ensure the casualty sits or lies down. Seek medical advise.

5. FIRE-FIGHTING MEASURES

Extinguishing Media :
Carbon Dioxide (CO2) Alcohol or polymer foam.
Dry chemical powder. Use water spray to cool containers.

Protection of Fire-fighters :
Fire will produce dense black smoke containing hazardous products of combustion (See section 10). Flash back can be possible over considerable distances. Vapours may form explosive mixture with Air. Decomposition products may be a hazard to health. Appropriate self contained breathing apparatus may be required. Cool closed containers exposed to fire with a water spray. Do NOT allow run off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	:	Main issue is to ensure adequate ventilation. Refer to section 8 of SDS for personal protection details.
Environmental Precautions	:	Do not allow large quantities to enter drains or water Courses. If this happens contact Local Water Company or In the case of rivers, the Local Rivers Authority.
Clean-up Procedures	:	Contain and collect spillage with non combustible absorbent materials., e.g., sand or earth and place in suitable Container for disposal in accordance with waste regulations Light remnants may be flushed from surface with water, but Note above warning about water sources and rivers.

7. HANDLING AND STORAGE

Handling requirements :

Do not use in areas where potential sources of ignition exist. Electrical equipment should be protected to the appropriate standard. Use non-sparking tools and exclude sources of heat, sparks and flames. Avoid skin and eye contact. For personal protection see section 8 of the SDS. Good housekeeping and regular removal of waste materials will minimise risk.

Storage Conditions :

Store in accordance with the conditions of the licence which is necessary under the Petroleum (Consolidation) Act. See the HSE guidance note; storage of flammable liquids in containers. Observe the label precautions. Store between 5 and 30 deg c in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. NO smoking. The principles contained in the HSE's guidance note; storage of packaged dangerous substances should be observed when storing this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients :

Substance Name	Occupational Exposure Limit				Notation
	15 min WEL		8 hr WEL		
	ppm	Mg/m3	ppm	Mg/m3	
TOLUENE		574.00		191.00	OES
XYLENE	100.00	441.00	50.00	220.00	Sk OES
ETHYL METHYL KETONE		899.00		600.00	
METHANOL		333.00		266.00	
PROPANE		7200.00		1800.00	
ISOBUTANE		9600.00		2400.00	
BUTANE	750.00	1810.00	600.00	1450.00	OES

Engineering Measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If extraction methods are insufficient to maintain concentrations of particulates and/or solvent vapours below relevant OEL's, suitable respiratory protective equipment should be worn.

Respiratory Protection

Air fed respiratory equipment should be worn when sprayed if levels cannot be controlled below OEL's and engineering methods cannot be reasonably improved.

Hand Protection

Full physical protection is best. PVC or other plastic material glove. Seek relevant advise from glove manufacturers. Barrier cream may be of help but should not be applied after exposure has occurred.

Eye protection

Eye protection designed to protect against liquid splashes should be worn.

Skin Protection

Cotton or cotton. synthetic overalls or coveralls are normally suitable. Chemical protective clothing for handling bulk quantities. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

Notes

Notations = Sk = risk of absorption through skin Sen – respiratory sensitizer Bmgv – Biological Monitoring may be appropriate (see Biological Monitoring Guidance Value in EH40 Table 3)

OES = Occupational Exposure Standard MEL = Maximum Exposure Limit

OEL's from EH40 (Revised annually) except where marked SUP which are assigned by the supplier of the substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Clear Solvent liquid held in aerosol container
Colour	:	Clear Fluid
Odour	:	pronounced Solvent odour
Evaporation Rate	:	No data available
Solubility in Water	:	Insoluble
Flash Point C	:	11 deg C
Specific Gravity	:	No Data

10. STABILITY AND REACTIVITY

Stability :
Stable under the recommended storage and handling conditions (see section 7). Avoid naked flames heat and sparks. In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced. Keep away from oxidising agents and strongly alkaline and acid materials to prevent the possibility of an exothermic reaction.

11. TOXICOLOGICAL INFORMATION

Toluene:	IVN Rat LD50 1960 mg/kg	ORL Mus LD50 2 gm/kg	ORL Rat LD50 6900 mg/kg
Xylene:	ORL Mus LD50 2119 mg/kg	ORL Rat LD50 4300 mg/kg	Scu Rat LD50 1700 mg/kg
Methanol:	IVN Rat LD50 2131 mg/kg	ORL Mus LD50 7300 mg/kg	ORL Rat LD50 5628 mg/kg

12. ECOLOGICAL INFORMATION

Aquatic Toxicity Effects	:	Negligible ecotoxicity
Organic Toxicity Effects	:	Readily absorbed into soil
Persistence/Mobility	:	Biodegradable
Bioaccumulation	:	No Bioaccumulation potential
Further information	:	

The air pollution control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

13. DISPOSAL INFORMATION

NB:

The users attention is drawn to the possible existence of regional or national regulation regarding disposal, Consult local Regulations.

14. TRANSPORT INFORMATION

Road/Rail	:UN No.....1950 Designation.....AEROSOLS	Packing Group....5F	Class.....2
Sea	:Packing Grp. <= 30 lts.....N/A Marine Pollutant..... EMS.....F-D-S-U Main Risk..... Shipping Name.....AEROSOLS	Packing Grp. > 30 lts.....N/A UN No.....1950 MFAG.....	Class.....2
Air	:Packing grp. <= 30 lts.....N/A UN Number.....1950	Packing Grp. > 30 lts.....N/A	Class.....2
International Road/Rail	:Item Number..... Main Risk..... Shipping Name.....AEROSOLS	UN Number.....1950	Class..... 2 Sub Risk

15. REGULATORY INFORMATION

The product is classified and labelled for supply in accordance with the Chemicals (Hazard Information & Packaging) Regulations as follows:



Classifications	:	F+ - Highly Flammable	Xn - Harmful
Contains	:	Xylene	
Risk Phrases	:	11 20/21/22 38 48/20 63 68/20/21/22	Highly Flammable Harmful by inhalation, in contact with skin and if swallowed. Irritating to skin. Harmful danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
Safety Phrases	:	16 23 36/37 38 51	Keep away from sources of ignition – No Smoking Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing and gloves. In case of insufficient ventilation, wear respiratory equipment. Use only in well ventilated areas

The information contained in this Safety data Sheet does not constitute the users own assessment of the workplace risks as required by other Health & Safety Legislations. The provisions of the Health & Safety at work Etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product in a suitable work environment.

16. ADDITIONAL INFORMATION

Risk Phrases Listed in Section 2

R 11	Highly Flammable	R12	Extremely Flammable
R48/20	Harmful danger of serious damage to health by prolonged exposure by inhalation		
R20/21	Harmful by inhalation and in contact with skin	R36	Irritating to eyes
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed	R38	Irritating to skin.
R39/23/24/25	Toxic danger of very serious irreversible effects through inhalation Contact with skin and if Swallowed.		
R63	Possible risk of harm to unborn child	65	Harmful may cause lung damage if swallowed.
R 67	Vapors may cause drowsiness and dizziness		
R 66	Repeated exposure may cause skin dryness or cracking.		

The information contained in this Safety Data Sheet is provided in accordance with the requirements of the Chemicals(Hazard Information & Packaging for Supply) Regulations 2002. The product should not be used for purposes other than those shown in section .1 without first referring to the supplier and obtaining new written instructions. As the specified conditions of use of the product are outside of the suppliers control, the user makes themselves responsible for ensuring that the relevant requirements and legislation are complied with.

The information contained in this Safety Data Sheet is based on the present state of knowledge and known current national legislation. It provides guidance on health, safety and environmental aspects of the product and its typical values; it should not be construed as any guarantee of technical performance or suitability for particular applications.

Further information and relevant advice can be found in:

The Control of Substances Hazardous to Health Regulations 1988(SI 1988: 1657)

The Manual Handling Operations Regulations 1992 (SI 1992: 2793)

Storage of Flammable Liquids in Containers. HS (G) 51

Storage of Packaged Dangerous Substances. HS (G) 71

The Environmental Protection (Duty of Care) Regulations 1992 (S) 1988: 2839