

Safety Data Sheet

Revised: 18.12.2006

Publication No.
XRB261(EN)

01. Identification of the substance / preparation and of the company

Product: TRW ESP DOT4 5I
Use: Brake Fluid
Company: TRW KFZ Ausrüstung GmbH Rudolf-Diesel-Str. 7 56566 Neuwied
Phone: (+49) 02631-912 0
Fax: (+49) 02631-912 110
Emergency phone: (+44) NHS 0845 46 47

02. Composition / Information on ingredients

Substance	EINECS/ELINCS	CAS	Range [%]	Symbol / R-phr.
2-2'-Oxydiethanol	203-872-2	111-46-6	1 - < 25	Xn-22
2-(2-Methoxyethoxy)ethanol	203-906-6	111-77-3	1 - < 5	Xn-63
2-(2-(2-Butoxyethoxy)ethoxy)ethanol	205-592-6	143-22-6	1 - < 5	Xi-41

03. Hazards identification

No special hazards have to be mentioned.

04. First aid measures

General information	Change soaked clothing.
Inhalation	Ensure supply of fresh air. In the event of symptoms seek for medical treatment.
Skin contact	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
Eye contact	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
Ingestion	Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Supply with medical care.
Advice to doctor	If swallowed or in the event of vomiting, risk of product entering the lungs.

05. Fire-fighting measures

Suitable extinguishing media:	Foam. Dry powder. Water spray jet. Carbon dioxide.
Extinguishing media that must not be used:	Full water jet.
Special exposure hazards arising from the substance or preparation itself or combustion products:	Risk of formation of toxic pyrolysis products.
Special protective equipment for firefighters:	Use self-contained breathing apparatus.
Additional information:	Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

06. Accidental release measures

Personal precautions:	Keep away sources of ignition. High risk of slipping due to leakage/spillage of product.
Environmental precautions:	Do not discharge into the drains/surface waters/groundwater.
Methods for cleaning up:	Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, silicious earth). Dispose of absorbed material in accordance with the regulations.

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07. Handling and storage

- Advice on safe handling: Use only in well-ventilated areas. Avoid spilling or spraying in enclosed areas.
- Advice on protection against fire and explosion: Keep away from sources of ignition.
- Requirements for storage rooms and vessels: Prevent penetration into the ground.
- Advice on storage compatibility: Do not store together with oxidizing agents.
- Further information on storage conditions: Keep container tightly closed. Keep container in a well-ventilated place.

08. Exposure controls / personal protection

Additional advice on system design:

Ensure adequate ventilation on workstation.

Ingredients with occupational exposure limits to be monitored: (GB)

Substance	[ppm]*	[mg/m ³]*	General remarks:
2-(2-Methoxyethoxy)ethanol	10	50,1	EU, H
2-2'-Oxydiethanol	23	101	70

* LTEL: Long-term exposure limit

- Respiratory protection: Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter A.
- Hand protection: Butyl rubber, >120 min (EN 374).
- Eye protection: Safety glasses.
- Skin protection: not applicable
- General protective measures: Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols.
- Hygiene measures: Do not eat, drink, smoke or take drugs at work. Wash hands before breaks and after work. Use barrier skin cream.
- Delimitation and monitoring of the environmental exposition: not determined

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09. Physical and chemical properties

Form:	liquid
Colour:	clear
Odour:	perceptible
pH-value:	7-10,5
pH-value (1 %):	not determinated
Boiling point [°C]:	>260
Flash point [°C]:	>100
Flammability [°C]:	not determinated
Lower explosion limit:	not determinated
Upper explosion limit:	not determinated
Combustible properties:	no
Vapour pressure [kPa]:	< 2 mbar (20°C)
Density [g/ml]:	1,04-1,09
Bulk density [kg/m ³]:	not applicable
Solubility in water:	partially miscible
Partition coefficient: n-octanol/water:	< 2,0
Viscosity:	5 - 10 cSt (20°C)
Relative vapour density determined in air:	not determinated
Evaporation speed:	not determinated
Melting point [°C]:	<-50
Autoignition temperature [°C]:	>300
Decomposition temperature [°C]:	not applicable

10. Stability and reactivity

Hazardous reactions:	Reactions with strong oxidizing agents.
Hazardous decomposition products:	No hazardous decomposition products known.

11. Toxicological information

Acute oral toxicity OECD 401:	Rat, >5000 mg/kg
Acute dermal toxicity OECD 402:	Rabbit, >2000 mg/kg
Irritant effect on skin OECD 404:	Slight irritant effect - does not require labelling.
Irritant effect on eye OECD 405:	Slight irritant effect - does not require labelling.
Experiences made in practice:	none
General remarks:	No classification on the basis of the calculation procedure of the preparation directive. The toxicological data are those of the pure product.

12. Ecological information

Fish toxicity:	LC50(96h): >100 mg/l Rainbow Trout
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Daphnia toxicity:	not determined
Behaviour in environment compartments:	not determined
Behaviour in sewage plant:	not applicable
Bacteria toxicity:	not determined
Biological degradability:	not determined
COD:	not determined
BOD 5:	not determined
AOX-advice:	No dangerous components.
76/464/EC:	not applicable
General information:	Do not discharge product unmonitored into the environment.

13. Disposal considerations

Disposal / Product:	Coordinate disposal with the authorities if necessary. Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended):	070601*
Disposal / Contaminated packaging:	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.

14. Transport information

<u>Classification according to ADR:</u>	no dangerous goods
Declaration:	
Labelling:	
Factor (ADR 1.1.3.6):	
LQ (ADR 3.4.6):	
Hazard-no.:	
Label:	
<u>Classification according to IMDG:</u>	not classified as "Dangerous Goods"
Declaration:	
Labelling:	
Label:	
LQ [l, kg]:	
EmS:	
<u>Classification according to IATA:</u>	not classified as "Dangerous Goods"
Declaration:	
Labelling:	
Label:	

15. Regulatory information

Labelling:	The product does not require a hazard warning label in accordance with EC-directives.
Hazard symbols:	

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15.1 Special labelling for certain preparations

Safety data sheet available for professional user on request.

15.2 Sources of documentation

EEC: 91/155 (2001/58); 67/548 (2004/73), 29. ATP; 1999/45 (2001/60); 91/689 (2001/118); 89/542; 1999/13
 Transport information: ADR (2005); IMDG-Code (32.Amdt.); IATA-DGR (2006)

15.3 National regulations(gb)

EH40/2002 Occupational Exposure Limits Supplement 2003

16 Other informations

(Information on ingredients - position 02)

R 22: Harmful if swallowed.

R 41: Risk of serious damage to eyes.

R 63: Possible risk of harm to the unborn child.

16.1 Additional information:

Observe employment restrictions for people: not applicable

VOC (1999/13/EG): not applicable

Customs Tariff: not determinated

16.2 Information on ingredients

UBA-Registration: not applicable

648/2004/EG, Contains: not applicable
 preservatives (TOLYLTRIAZOL)

16.3 Modified position

none