

Revision: 13.05.2008

Publication No. XRB228F(EN)

1 Identification of the substance / preparation and of the company

**Product:** TRW Brake Cleaner, 5 Liter can

Registration number:not applicableUse:Brake CleanerIdentified use:Cleaner

Method of operation:See product information.Company:TRW KFZ Ausrüstung GmbH

Rudolf-Diesel-Str. 7 56566 Neuwied / Germany

 Phone:
 (+49) 02631-912 0

 Fax:
 (+49) 02631-912 110

 Emergency phone:
 +49 (0) 89-19240 (24h)

 Responsible:
 Haensler@chemiebuero.de

2 Hazards identification

**Physico-chemical hazards:** See chapter 10 and R-phrases.

**Human health dangers:** See R-phrases.

Frequent persistent contact with the skin can cause skin irritation.

If swallowed or in the event of vomiting, risk of product entering the lungs.

Environmental hazards: See chapter 12.

See R-phrases.

Other hazards:

Hazard symbols:

×

none

Highly flammable Harr

Y

Dangerous for the environment

R-phrases:

R 11: Highly flammable. R 38: Irritating to skin.

R 65: Harmful - may cause lung damage if swallowed.

R 67: Vapours may cause drowsiness and dizziness.

R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

# 3 Composition / Information on ingredients

n-Hexane	2,5 - < 5%
F-Xn-N, R11-38-48/20-51/53-62-65-67 CAS: 110-54-3, EINECS/ELINCS: 203-777-6, EU-INDEX: 601-037-00-0, ECBnr:	
Naphtha (petroleum), hydrotreated light	50 - < 100%
F-Xn-N, R11-38-51/53-65-67 CAS: 64742-49-0, EINECS/ELINCS: 265-151-9, EU-INDEX: 649-328-00-1, ECBnr:	

# Comment on component parts:

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



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### 4 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:

In case of contact with skin wash off immediately with soap and water.

Consult a doctor if skin irritation persists.

#### Eve contact:

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

# Ingestion:

Supply with medical care.

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

## Advice to doctor:

If swallowed or in the event of vomiting, risk of product entering the lungs.

### 5 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:

Not combusted hydrocarbons. Carbon monoxide (CO). Unknown risk of formation of toxic pyrolysis products.

## Special protective equipment for firefighters:

Use self-contained breathing apparatus.

## Additional information:

Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

### 6 Accidental release measures

# Personal precautions:

Keep away from all sources of ignition.

Ensure adequate ventillation.

High risk of slipping due to leakage/spillage of product.

# Environmental precautions:

Prevent spread over a wide area (e.g. by containment or oil barriers).

Do not discharge into the drains/surface waters/groundwater.

# Methods for cleaning up:

Take up with absorbent material (e.g. sand).

Dispose of absorbed material in accordance within the regulations.



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# 7 Handling and storage

# Advice on safe handling:

Provide good room ventilation even at ground level (vapours are heavier than air).

Use solvent-resistant equipment.

Use only in well-ventilated areas.

The dried product contains bounded silicous dusts. In the case that it will be treated afterwards by scrubbing, brushing etc suitable respiratory protective equipment or vacuuming unit has to be used.

### Advice on protection against fire and explosion:

Keep away from all sources of ignition - Refrain from smoking.

Ignitable mixtures can be formed in the empty container.

Take precautionary measures against static discharges.

# Requirements for storage rooms and vessels:

Provide solvent-resistant and impermeable floor.

Prevent penetration into the ground.

### Advice on storage compatibility:

Do not store together with oxidizing agents.

# Further information on storage conditions:

Protect from heat/overheating.

Keep container in a well-ventilated place.

Keep container tightly closed.

# 8 Exposure controls / personal protection

#### Additional advice on system design:

Ensure adequate ventilation on workstation.

### Ingredients with occupational exposure limits to be monitored:

Naphtha (petroleum), hydrotreated light	50 - < 100%
1200mg/m³*,	
n-Hexane	2,5 - < 5%
20ppm*, 72mg/m³*, General remarks: 72,80,88,96	

<sup>\*</sup> 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:

Solvent-resistant protective clothing.

## General protective measures:

Do not inhale gases/vapours/aerosols.

Avoid contact with eyes and skin.

# Hygiene measures:

Cloths contaminated with product should not be kept in trouser pockets.

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 determinated



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# 9 Physical and chemical properties

Form: liquid
Color: colourless
Odor: characteristic
pH-value [1%]: not applicable
pH-value: not applicable

Boiling point [°C]: 60 Flash point [°C]: -26

Flammability [°C]: not determinated
Lower explosion limit: 1,0 Vol.%
Upper explosion limit: 7,3 Vol.%
Oxidizing properties: no

Vapour pressure [kPa]: not determinated

 Density [g/ml]:
 0,693

 Density at [°C]:
 20°C

Bulk density [kg/m³]:not applicableSolubility in water:immisciblePartition coefficientnot determinated

[n-octanol/water]:

Viscosity: <7mm²/s (40°C)
Relative vapour density not determinated

determined in air:

**Evaporation speed:** not determinated **Melting point [°C]:** not determinated

Autoignition temperature: 280

**Decomposition temperature:** not determinated

# 10 Stability and reactivity

# Hazardous reactions:

Reactions with strong oxidizing agents. Evolution of highly flammable gases/vapours. Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

# Hazardous decomposition products:

Flammable gases/vapours

# 11 Toxicological information

Acute oral toxicity:LD50: > 2000 mg/kg, RatAcute dermal toxicity:LD50: > 2000 mg/kg, Rat

Acute inhalational toxicity: not determinated Irritant effect on eye: not determinated Irritant effect on skin: not determinated Sensitization: not determinated Subacute toxicity: not determinated Chronic toxicity: not determinated Mutagenicity: not determinated Reproduction toxicity: not determinated Carcinogenicity: not determinated

Experiences made in practice: none

**General remarks:** The toxicological information is based on the main components.

The product was classified on the basis of the calculation procedure of the preparation directive.



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# 12 Ecological information

Fish toxicity: not determinated

Daphnia toxicity: not determinated

Behaviour in environment not determinated

compartments:

Behaviour in sewage plant: not applicable
Bacteria toxicity: not determinated
Biological degradability: not determinated
COD: not determinated
BOD 5: not determinated

AOX-advice: No dangerous components.

**2006/11/EC:** yes

**General information:** Ecotoxicological data are not available.

Do not allow to enter soil, waterways or waste water.

Do not discharge product unmonitored into the environment.

# 13 Disposal considerations

#### Product:

Dispose of as hazardous waste.

Disposal in an incineration plant in accordance with the regulations of the local authorities.

## Contaminated packaging:

Uncontaminated packaging may be taken for recycling.

Packaging that cannot be cleaned should be disposed of as for product.

## Waste no. (recommended):

070704\*,

# 14 Transport information

Classification according to ADR: UN 3295 Hydrocarbons, liquid, n.o.s. 3, II

- Classification Code:

- Label:

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- ADR Limited Quantities: LQ4: 31

 $\textbf{Classification according to IMDG:} \ \ \text{UN 3295 Hydrocarbons, liquid, n.o.s. 3 II}$ 

- **EMS**: F-E, S-D

- Label:

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- IMDG Limited Quantities: LQ: 11

Classification according to IATA: UN 3295 Hydrocarbons, liquid, n.o.s. 3 II

- Label:



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# 15 Regulatory information

Exposure scenario: not determinated Chemical safety report: not determinated

**Labelling:** The product is classified and labelled in accordance within EC-directives.

Hazard symbols:

Highly flammable Harmful

Dangerous for the environment

Contains: Naphtha (petroleum), hydrotreated light

R-phrases: R 11: Highly flammable. R 38: Irritating to skin.

R 65: Harmful - may cause lung damage if swallowed. R 67: Vapours may cause drowsiness and dizziness.

R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-phrases:** S 2: Keep out of the reach of children.

S 9: Keep container in a well-ventilated place.

S 16: Keep away from sources of ignition - No smoking.

S 23.3: Do not breathe vapour. S 24: Avoid contact with skin.

S 29/56: Do not empty into drains. Dispose of this material and its container at hazardous or special

waste collection point.

S 62: If swallowed, do not induce vomiting. Seek medical advice immediately and show this container

or label.

Special labelling:not applicableAuthorisation, TITEL VII:not applicableRestrictions, TITEL VIII:not applicable

**EEC-REGULATIONS:** 1967/548 (2004/73, 29. ATP); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006.

TRANSPORT-REGULATIONS: ADR (2007); IMDG-Code (33. Amdt.); IATA-DGR (2008).

NATIONAL REGULATIONS EH40/2005 Workplace exposure limits with amendments October 2007.

16 Other informations

R-phrases (Chapter 03): R 67: Vapours may cause drowsiness and dizziness.

R 65: Harmful - may cause lung damage if swallowed.

R 62: Possible risk of impaired fertility.

R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 38: Irritating to skin. R 11: Highly flammable.

R 48/20: Harmful - danger of serious damage to health by prolonged exposure through inhalation.

Observe employment restrictions yes

for people:

400.0

VOC (1999/13/CE): 100 %

Customs Tariff: not determinated

Cleaner( 648/2004/CE) contains: >30% aliphatic hydrocarbons