

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date: 27.05.2009

Revision: 27.05.2009

1 Identification of substance/preparation and of the company/undertaking:

- **Product details:**
- **Trade name:** 137ULSW Diesel Treat 2000 Ultra Low Sulfur Winter Premium
- **Application of the substance / the preparation** Lubricant
- **Supplier/Manufacturer:**
FGS GmbH
Fahrzeug- und AI- Systeme
Weidenäcker 2
D-78355 Hohenfels
Tel.: +49-7557-9288-0
Fax: +49-7557-9288-18
www.fgs-systems.de
- **Email competent person:** sonja.fischer@kft.de
- **Information department:** See supplier/manufacturer
- **Emergency information:** Giftinformationszentrale Göttingen Tel.: +49-551-19240

2 Hazards identification

- **Hazard description:**



Xn Harmful
N Dangerous for the environment

- **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EC" in the latest valid version.

R 20 Harmful by inhalation.

R 36/38 Irritating to eyes and skin.

R 40 Limited evidence of a carcinogenic effect.

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

R 65 Harmful: may cause lung damage if swallowed.

- **Classification system:**

The classification was made according to the latest editions of the EC-lists, and expanded using company data and specialized literature.

- **Additional information:**

The vapours are very readily ignitable and form explosive mixtures with air which are heavier than air. Ignition by hot surfaces, sparks or open flames.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 64742-47-8	Distillates (petroleum), hydrotreated light	25-50%
EINECS: 265-149-8	Xn; R 65	
Index number: 649-422-00-2		
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom.	2.5-10%
EINECS: 265-199-0	Xn, Xi, N; R 10-36/38-51/53-65	
Index number: 649-356-00-4		

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CAS: 84605-20-9	Amines, polyethylenepoly-, reaction products with succinic anhydride polyisobutenyl derivatives Xn, Xi; R 22-36/38-52	2.5-10%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9	xylene, mixed isomers, pure Xn, Xi; R 10-20/21-38	2.5-10%
CAS: 100-41-4 EINECS: 202-849-4 Index number: 601-023-00-4	ethylbenzene Xn, F; R 11-20	2.5-10%
CAS: 111-76-2 EINECS: 203-905-0 Index number: 603-014-00-0	2-butoxyethanol Xn, Xi; R 20/21/22-36/38	2.5-10%
CAS: 64742-94-5 EINECS: 265-198-5 Index number: 649-424-00-3	Solvent naphtha (petroleum), heavy arom. Xn, N; R 51/53-65	2.5-10%
CAS: 95-63-6 EINECS: 202-436-9 Index number: 601-043-00-3	1,2,4-trimethylbenzene Xn, Xi, N; R 10-20-36/37/38-51/53	< 2.5%
CAS: 91-20-3 EINECS: 202-049-5 Index number: 601-052-00-2	naphthalene Carc. Cat. 3; Xn, N; R 22-40-50/53	< 2.5%

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

4 First aid measures

· **General information:**

Symptoms of poisoning may occur even after several hours; therefore medical observation is suggested for at least 48 hours after the accident.

Remove affected persons from danger area and lay them down.

Remove contaminated clothing and wash before reuse.

· **After inhalation:**

Remove victim from contaminated area. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Call a doctor.

In case of unconsciousness, place patients on their side in a stable position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult a doctor or better an eye specialist.

· **After swallowing:**

Drink copious amounts of water and provide fresh air. Call for a doctor immediately.

Do not induce vomiting.

If vomiting occurs spontaneously:

Hold the head of the casualty low with the body in a prone position in order to avoid penetration of vomit into the air tube (danger of aspiration).

· **Information for doctor:**

· **The following symptoms may occur:**

After swallowing:

Gastric or intestinal disorders.

Nausea

After inhalation:

Headache

Daze

Hypotension

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- **Treatment:**

Symptomatic treatment
(decontamination, vital functions)

5 Fire fighting measures

- **Suitable extinguishing agents:**

Carbon dioxide (CO₂)
Foam
Extinguishing powder
Water jet spray

Use fire fighting measures that suit the environment.

- **For safety reasons unsuitable extinguishing agents:** Direct jet water

- **Special hazards caused by the material, its products of combustion or resulting gases:**

Vapors are heavier than air
vapors travel along the ground to a distant ignition source and flash back.
Dangerous decomposition product see chapter 10: stability and reactivity

- **Protective equipment:**

Do not inhale combustion vapours.
Wear self-contained respiratory protective device.

- **Additional information:**

Heating leads to pressure increase entailing danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone

6 Accidental release measures

- **Person-related safety precautions:**



Wear protective equipment. Keep unprotected persons away.

Do not smoke - keep ignition sources away

- **Measures for environmental protection:**

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.
Do not allow to penetrate the ground/soil.
In case of seepage into the ground inform responsible authorities.

- **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Send for recovery or disposal in suitable receptacles.
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Avoid inhalation of vapours.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

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- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Store container tightly sealed at a cool and dry place with sufficient ventilation.
Observe national regulations for storage of flammable liquids.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.
Store away from feed.
Do not store near strong oxidizing agents and amines.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.
Protect from heat and direct sunlight.

- **Storage class** 3B Flammable Liquids

8 Exposure controls and personal protection

- **Additional information about design of technical systems:**

Mechanically ventilation/exhaustion is strongly recommended.
Keep away from open flames and other ignition sources.
No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

1330-20-7 xylene, mixed isomers, pure

IOELV (European Union)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
WEL (Great Britain)	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
OEL (Ireland)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Sk, IOELV

100-41-4 ethylbenzene

IOELV (European Union)	Short-term value: 884 mg/m ³ , 200 ppm Long-term value: 442 mg/m ³ , 100 ppm Skin
WEL (Great Britain)	Short-term value: 552 mg/m ³ , 125 ppm Long-term value: 441 mg/m ³ , 100 ppm
OEL (Ireland)	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm Sk, IOELV

111-76-2 2-butoxyethanol

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IOELV (European Union) Short-term value: 246 mg/m³, 50 ppm
 Long-term value: 98 mg/m³, 20 ppm
 Skin

WEL (Great Britain) Short-term value: 50 ppm
 Long-term value: 25 ppm
 Sk

OEL (Ireland) Short-term value: 246 mg/m³, 50 ppm
 Long-term value: 98 mg/m³, 20 ppm
 Sk, IOELV

95-63-6 1,2,4-trimethylbenzene

IOELV (European Union) Long-term value: 100 mg/m³, 20 ppm
 WEL (Great Britain) Long-term value: 125 mg/m³, 25 ppm
 ILV

OEL (Ireland) Long-term value: 100 mg/m³, 20 ppm
 IOELV

91-20-3 naphthalene

IOELV (European Union) Long-term value: 30 mg/m³, 10 ppm
 OEL (Ireland) Short-term value: 75 mg/m³, 15 ppm
 Long-term value: 50 mg/m³, 10 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures:**

Do not inhale gases / fumes / aerosols.
 Do not eat, drink, smoke or sniff while working.
 Be sure to clean skin thoroughly after work and before breaks.
 Use skin protection cream for skin protection.
 Do not carry product impregnated cleaning cloths in trouser pockets.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
 Provide eye bath.

· **Breathing equipment:**

In case of unintentional release of substance, exceeding the occupational exposure limit value:

Short term filter device:

Filter A

· **Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves:**

Nitrile rubber, NBR

Fluorocarbon rubber (Viton)

The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material:**

The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles.

If a splashing of the product is possible wear full face protection.

· **Body protection:**

Oil resistant protective clothing

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rubber boots

9 Physical and chemical properties:

- **General Information**

Form:	Fluid
Colour:	Dark
Odour:	Like aromatic solvents

- **Change in condition:**

Melting point/Melting range:	not determined
Boiling point/Boiling range:	148.8°C

- **Flash point:** 46-54°C

- **Self ignition temperature:** Product is not self-igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density:** 0.9206-0.9256 g/cm³

- **Solubility in / Miscibility with**

Water:	Dispersible
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- **Viscosity:**

dynamic at 40°C:	3-5 mPas
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**

To avoid thermal decomposition do not overheat.
No decomposition if used and stored according to specifications.

- **Materials to be avoided:**

Strong oxidants
Halogens
Tertiary amines
Amines
Halogen compounds
Phenols

- **Dangerous reactions:** No dangerous reactions known

- **Dangerous products of decomposition:**

In the case of fire or at high temperatures the formation of the following decomposition products is possible.
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Danger of toxic pyrolysis products
other decomposition products, in the case of incomplete combustion.

- **Additional information:**

The 2-Ethylhexyl Nitrate contained in this product may undergo a self-accelerating exothermic reaction if the product is heated above 100°C.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD ₅₀	>6800 mg/kg (rat)
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Dermal	LD ₅₀	>3400 mg/kg (rab)
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Inhalative LC₅₀/4 h >10.2 mg/l (rat)**64742-94-5 Solvent naphtha (petroleum), heavy arom.**Oral LD₅₀ > 2000 mg/kg (rat)Dermal LD₅₀ > 2000 mg/kg (rabbit)**91-20-3 naphthalene**Oral LD₅₀ 5000 mg/kg (rat)Dermal LD₅₀ 5000 mg/kg (rat)**1330-20-7 xylene, mixed isomers, pure**Oral LD₅₀ 4300 mg/kg (rat)Dermal LD₅₀ 2000 mg/kg (rabbit)Inhalative LC₅₀/4 h 6350 mg/l (rat)**84605-20-9 Amines, polyethylenepoly-, reaction products with succinic anhydride polyisobutenyl derivatives**Oral LD₅₀ >5000 mg/kg (rat)

NOEL 1000 mg/kg/day (rat)

Dermal LD₅₀ >2000 mg/kg (rat)**111-76-2 2-butoxyethanol**Oral LD₅₀ 1480 mg/kg (rat)Dermal LD₅₀ 320 mg/kg (rab)**100-41-4 ethylbenzene**Oral LD₅₀ 3500 mg/kg (rat)Dermal LD₅₀ 17800 mg/kg (rabbit)**Primary irritant effect:****on the skin:**

Continuing or repeated contact with the skin may cause dermatitis.

Irritant to skin and mucous membranes.

Defatting effect on the skin.

Risk of absorption

on the eye: Irritating effect.**Sensitization:** No sensitizing effects known.**Other information (about experimental toxicology):****Carcinogenic effects:** Suspicion of carcinogenic effect by one component.**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

12 Ecological information

Ecotoxicological effects:**Aquatic toxicity:****64742-94-5 Solvent naphtha (petroleum), heavy arom.**EC₅₀/72h < 10 mg/l (DM)IC₅₀/48h < 10 mg/l (Alg)LC₅₀/72h < 10 mg/l (fish)**84605-20-9 Amines, polyethylenepoly-, reaction products with succinic anhydride polyisobutenyl derivatives**EC₅₀/48h <1000 mg/l (invertebrates)EC₅₀/96h 270 mg/l (algae)LC₅₀/96h >1000 mg/l (fish)**111-76-2 2-butoxyethanol**EC₅₀/24h 1720 mg/l (dc)

1720 mg/l (daphnia magna)

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LC₅₀/24h 1700 mg/l (carrassius auratus)
 1698-1940 mg/l (daphnia magna)
 LC₅₀/96h 1490 mg/l (lepomis macrochirus)

100-41-4 ethylbenzene

EC₅₀/48h 50-120 mg/l (daphnia magna)
 EC₅₀/96h 44 mg/l (leuciscus idus)
 12.1 mg/l (Pimephales promelas)

IC₅₀/72h 438 mg/l (algae)

· **Remark:** Toxic for fish

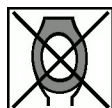
· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

According to appendix 4 of VwVwS dated 27.7.2005 (German regulation)

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms



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.

13 Disposal considerations

· **Product:**· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal according to instructions of local authorities.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** 3 (F1) Flammable liquids.

· **Danger code (Kemler):** 30

· **UN-Number:** 1993

· **Packaging group:** III

· **Label:** 3

· **Description of goods:** 1993 FLAMMABLE LIQUID, N.O.S. (ETHYLBENZENE, XYLENES), special provision 640E

· **Limited quantities (LQ)** LQ7

· **Transport category** 3

· **Tunnel restriction code** D/E

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· **Remarks:** Limited quantity: 5l per inner packaging, 30 kg gross per packaging unit

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1993
- **Label:** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ETHYLBENZENE, XYLENES)
- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
 - **UN/ID Number:** 1993
 - **Label:** 3
 - **Packaging group:** III
 - **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ETHYLBENZENE, XYLENES)
 - **Remarks:** Packing Instructions:
For Limited Quantities: Y309 (Max Net Qty/Pkg: 10 l)
Passenger and Cargo Aircraft: 309 (Max Net Qty/Pkg: 60 l)
Cargo Aircraft only: 310 (Max Net Qty/Pkg: 220 l)
 - **Environmental hazards:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID
-

15 Regulatory information:

- **Markings according to EC guidelines:**
The product has been classified and marked in accordance with EC Directives / Ordinance on Hazardous Materials

· **Code letter and hazard designation of product:**



Xn Harmful
N Dangerous for the environment

· **Hazard-determining components of labelling:**

Distillates (petroleum), hydrotreated light
Solvent naphtha (petroleum), light arom.
naphthalene

· **Risk phrases:**

- 20 Harmful by inhalation.
- 36/38 Irritating to eyes and skin.
- 40 Limited evidence of a carcinogenic effect.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmful: may cause lung damage if swallowed.

· **Safety phrases:**

- 23 Do not breathe vapour.
- 33 Take precautionary measures against static discharges.

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- 36/37 Wear suitable protective clothing and gloves.
- 57 Use appropriate container to avoid environmental contamination.

· National regulations**· Information about limitation of use:**

- Restrictions on juvenile employment must be observed.
- Employment restrictions concerning pregnant and lactating women must be observed.

· Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

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 R-phrases:

- 10 Flammable.
- 11 Highly flammable.
- 20 Harmful by inhalation.
- 20/21 Harmful by inhalation and in contact with skin.
- 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- 22 Harmful if swallowed.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 36/38 Irritating to eyes and skin.
- 38 Irritating to skin.
- 40 Limited evidence of a carcinogenic effect.
- 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 52 Harmful to aquatic organisms.
- 65 Harmful: may cause lung damage if swallowed.

· Department issuing MSDS:

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