

Model Technics Ltd
MSDS Diesel Model Engine Fuel

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Company Information

Model Technics Ltd
54 Vanguard Way
Shoeburyness
Essex SS3 9Q

Telephone No +44 (0)1702 292244

Fax No +44 (0)1702 298744

Email motec@modeltechnics.com

Identification of the substance or mixture

Name Model Engine Diesel Fuel
UN No UN1993 Flammable Liquid Toxic N.O.S
Class 3
Packing group 11

Hazard Identification

Note:- This mixture has the predominant characteristics of diethyl ether and the majority of the data relates to that substance. However the relevant characteristics of the other ingredients have been taken into account in preparing this data sheet.

Classification and Label Elements



Highly flammable

Harmful

Hazard Statements

H225 Extremely flammable liquid and vapour.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H336 May cause drowsiness or dizziness.

Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces-No Smoking.
P233 Keep container tightly closed.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well ventilated area.
P280 Wear protective gloves/protective clothing.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Supplemental Hazard Information (EU)

- EUH019 May form explosive peroxides.
EUH066 Repeated exposure may cause skin dryness or cracking.

Other Hazards

Vapours of diethyl ether which are heavier than air can flow (like a river) and can be ignited at a considerable distance by a stray ignition source.

Composition and Ingredients

Substance is a mixture of Diethyl ether, kerosene, oil and ignition/power additives.

First Aid Measures

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of danger area.

If Inhaled

If inhalation of mists, fumes or vapour causes irritation to nose or throat or the patient is coughing, remove patient to fresh air. If symptoms persist obtain medical advice. If not breathing give artificial respiration.

Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Clothing

Remove at once (remember fire risk) and launder or dry clean before re use.

Fire fighting measures

Suitable extinguishing media

For small (incipient) fires, use water spray, alcohol resistant foam, dry chemical, or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

Accidental release

If spillage occurs all sources of ignition must be extinguished. If it occurs inside a building use personal protective equipment. Avoid breathing vapours. The ventilation should be increased by opening all doors and windows in order to disperse vapours. Beware of vapours accumulating to form explosive concentrations. Evacuate personnel to safe areas. Small spillages may be drenched with water and washed away. Large spillages should be covered with sand or similar inert material which should be stored in a closed container to await safe disposal. Residues may be dealt with as for small spillages.

Handling and storage

Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition, No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage, including any incompatibles. Store in cool place. Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

General: This substance should only be stored and handled in the container supplied by the Company and the lids should be kept tightly closed at all times. The instructions of the local fire authority and your insurers must be followed. Keep containers standing upright and in a cool well ventilated space. Smoking and naked lights should be prohibited in areas where the material is stored or where it is displayed for retail

sale. The appropriate standard of flame proof electrical equipment must be provided. Good mechanical ventilation provided by a flame proof fan is required when open containers of this substance are being handled inside a building.

Containers up to and including 5 litres capacity.

Bulk storage: It is recommended that the material should be stored in a fire resistant container with a sealed base adequate to retain the contents + 10% of any of our containers which may become damaged. The bulk store should be provided with a suitable lockable closure to prevent unauthorised access or interference with the contents.

Retail display : The areas where this material is stored or displayed for retail sale should be carefully selected so that they are away from direct sunlight and preferably out of direct reach of customers. These areas should also be away from any spark producing apparatus such as light switches or power points.

Containers larger than 5 Litres capacity.

These containers will normally be United Nations tested drums with a nominal capacity of 200 litres. The general guidelines given above apply to these containers. Before attempting to open any drum of this substance it must be properly earthed to prevent static discharges. A non-sparking tool must be used to open the drum. Vehicles such as fork lift trucks used to move drums of diesel fuel inside a building must have protection fitted to prevent them becoming sources of ignition in the event of the contents being spilled.

Exposure controls/Personal protection

Wear suitable gloves and eye/face protection. Wear suitable respiratory protective equipment if exposure to levels above the Occupational Exposure Limit is likely.

Occupational exposure limits:

There is no standard for this preparation. However we recommend that the following standards should be applied.

Diethyl Ether:

UK EH40 WEL. TWA -100 ppm (310 mg m⁻³); STEL 200 ppm (620 mg m⁻³)

At the time of press no exposure limits have been found for the other components.

Physical and chemical properties:

Appearance	Volatile mobile liquid. Colour will depend upon oil used in mixture.
Odour	Characteristic of diethyl ether.
Flash point	-45c
Initial Boiling point	36c

Stability and reactivity

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Vapours may form explosive mixture with air

Conditions to avoid

Heat, flames , sparks, extremes of temperature and direct sunlight.

Hazardous reactions and decomposition products

Possible violent reaction with oxidising agents and strong acids. Diethyl ether oxides under varying circumstances form peroxides of ether. These peroxides can become concentrated and detonate with violence. The preparation must not be decanted into containers which have a ground glass stoppers. . Decomposition products carbon oxides water.

Toxicological information

This is based on the principle active component diethyl ether.

Acute toxicity

LD50 Oral - rat – 1,215 mg/kg

LC50 Inhalation - mouse – 30min - 31000 ppm

Remarks: Behavioral Convulsions or effect on seizure threshold.

LD50 Dermal - rabbit – 14.2gm/kg

Diethyl ether is harmful. It is readily absorbed into the body through inhalation or ingestion from the intestinal tract. It appears not to metabolise within the body and is rapidly excreted by the lungs; urine, perspiration and other body fluids. The lowest published LD₅₀ (oral rat) for diethyl ether is 1215 mg/kg (NIOSH Register of Toxic Substances 1994 update).

INHALATION : Exposure to vapour can have a strong narcotic effect and may induce effects similar to alcoholic intoxication with symptoms of exhilaration; excitement, irritability or pugnacity. Further exposure will induce confusion; drowsiness; dizziness, stupor and finally unconsciousness. Death follows due to respiratory failure. A person removed from sub-lethal concentrations will make rapid recovery in most cases.

SKIN CONTACT : A few persons may suffer the dermatitic effects of dryness or cracking caused by repeated exposure to diethyl ether in this preparation. This is thought to be caused by the solvents defatting the skin.

INGESTION : Harmful.

EYE CONTACT : Splashes of diethyl ether to the eyes can cause severe irritation. Repeated exposure to diethyl ether may cause chronic inflammation of the membranes of the eyes.

LONG TERM EXPOSURE :

There is some evidence to suggest that chronic exposure to diethyl ether may cause all or any of the following : dizziness; faintness; loss of appetite; thirst; nausea; headache; weakness; lassitude; tremor; numbness of the fingers; burning of the toes; effects to the eyesight, continual taste of ether or constipation.

There is also some evidence to suggest that a person may become more susceptible to the effects after continued exposure to diethyl ether. Furthermore as diethyl ether produces similar symptoms to alcoholic intoxication, persons may become addicted to inhaling the vapour in high concentrations.

Ecological Information

The ecological effect of this preparation will not be worse than the stated data. Diethyl ether does not persist in water or land due to rapid evaporation and dispersion in air where it degrades. It does not bioaccumulate..

Toxicity LC50 Pimephales promelas (fathead minnow) 96 hour - 2560mg/Lt

If the preparation enters ponds the oil content will float on the surface and may temporarily cut off the oxygen supply to aquatic life. Large quantities will have a similar effect on streams and rivers.

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

Disposal considerations

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. .Contaminated packaging Dispose of as unused product.

Transport information

Classification	Flammable liquid
UN No.	1993
UN Packing Group	II
ADR/RID Class	3
ADR/RID Item No.	3 ⁰ (b)
ADR SIN	1993
ADR Hazard Identification No.	33
ADR Label	3
IMDG Class	3
IMDG EmS	3 - 07
IMDG Stowage	B

Other information

Additional safety phrases required if sold to the general public.

Keep out of reach of children.

Do not use to light or relight fires or barbeques under any conditions.

Do not decant into another container other than the tank on the model.

Always store in the original container supplied.

In case of accident or if you feel unwell seek medical advice immediately (show label where possible).

This product is intended only as a fuel for diesel engines used to power models of all descriptions. No responsibility can be accepted for any other use.

Note

The information contained in this data sheet is accurate to the best of the company's knowledge and experience. It is passed on without any warranty and no responsibility is accepted for any loss of expense arising out of its use.

The information contained in this safety data sheet is continually under review and is liable to be modified from time to time.
