

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

NAME: Water Glycol FR46 Hydraulic Fluid

Supplied by:

Aztec Oils

31-33 Intake Rd.

Bolsover Business Park,

Bolsover,

Chesterfield,

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## **2.Chemical composition**

Synthetic base material.

Proprietary performance additives

## **3.Hazardous components**

Ethylene Glycol (ethane- 1.2 diol)- CAS No. 107-21-1, EINECS No. 203-473-3, Xn, R22  
Harmful if swallowed (20-50%)

Morpholine, Xn, C, R10 Flammable, R20/21/22 Harmful by inhalation, in contact with  
skin and if swallowed, R34 causes burns (<5%)

Harmful if swallowed.

Note: High pressure applications

Injections through the skin resulting from contact with the product at high pressure  
constitute a major medical emergency (See “medical advice” under first aid measures, on  
this data sheet.

## **4.First Aid Measures**

### **Eyes**

Wash eyes thoroughly with copious amounts of water, ensuring the eyelids are held open.  
Obtain medical advice if any pain or redness develops or persists.

### **Skin**

Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove  
heavily contaminated clothing and wash underlying skin.

Medical advice must be obtained urgently if product under high pressure has been  
injected through the skin.

### **Ingestion**

The action to be taken is dependent on the availability of hospital facilities or medical assistance and confirmation that the product has actually been swallowed.

- If hospital facilities or medical assistance are immediately available:

If contamination of the mouth occurs, wash out thoroughly with water. If larger amounts are swallowed do not induce vomiting; transport casualty together with the product container, its label or the safety data sheet urgently to the hospital. Inform the doctor that a product containing ethylene glycol has been ingested.

- If hospital facilities or medical assistance are NOT immediately available:

If contamination of the mouth occurs, wash out thoroughly with water. If larger amounts are swallowed and hospital facilities or medical assistance are not immediately available, induce vomiting if the casualty is fully conscious. Never attempt to induce vomiting in an unconscious or semi-conscious patient. Transport the casualty along with the product container, its label or the safety data sheet urgently to hospital. Inform the doctor that a product containing ethylene glycol has been ingested.

### **Inhalation**

If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing occurs, remove to fresh air. If symptoms persist, obtain medical advice.

### **Medical Advice**

In the case of ethylene glycol, total absorption from the gastro-intestinal tract occurs very rapidly and its effects are potentially lethal.

Gastric lavage is indicated if significant quantities have been very recently ingested.

Significant intake can give rise to systematic effects with, initially, symptoms of CNS depression such as muscular uncoordination, visual impairment, slurring of speech and stupor. This soon progresses to vomiting, headache, kidney damage and unconsciousness with convulsions.

If there is respiratory distress, give oxygen. If respiration stops or shows signs of failing, apply assisted respiration.

Ethylene glycol is metabolised to oxalic acid. Toxic effects may be delayed by the administration of ethanol (give as a 5% solution in physiological saline to maintain a blood level of 1-2 mg/ml). This treatment is only effective if started within about six hours of exposure.

Oxalic acid will cause acidosis and will bind circulating calcium, leading to hypocalcaemia with tetany and renal failure from oxalate precipitation. The patient should be bio-chemically monitored and appropriate corrective (sodium bicarbonate, calcium gluconate) and supportive measures taken. Ethylene glycol may be removed by dialysis but oxalates are not readily dialysed.

Aspiration of the product is unlikely to occur except as the result of ingestion, followed by vomiting or regurgitation in a partially or totally unconscious individual, when immediate effects are most likely to result from the aspiration of acidic stomach contents. If it should occur, transport casualty immediately to hospital.

### Note: High pressure applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful.

Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and

prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

#### **5. Fire fighting measures:**

Under normal conditions the product will not support combustion. However if the product is subjected to high temperatures sufficient for decomposition to occur, this may not apply.

Use alcohol resistant foam, dry powder or water fog. **DO NOT USE WATER JETS.**

Avoid spraying directly into storage containers because of the danger of boil over.

**FIRES IN CONFINED SPACES SHOULD BE DEALT WITH TRAINED PERSONNEL WEARING APPROVED BREATHING APPARATUS.**

Water may be used to cool nearby heat exposed areas/objects/packages.

#### **Combustion products**

Toxic fumes may be evolved on burning or exposure to heat.

See "Stability and Reactivity" section of this safety data sheet.

#### **6. Accidental Release Measures:**

Contain and recover spilled material using sand or suitable inert absorbent material.

It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may reasonably be anticipated.

Spilled material may make surfaces slippery.

Protect drains from potential spills to minimise contamination. Do not wash product into drainage system.

In the case of large spills contact the appropriate authorities.

#### **7. Handling and Storage**

##### **Handling precautions**

Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.

Avoid frequent or prolonged skin contact with fresh or used product.

Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.

Wash hands thoroughly after contact.

Barrier creams are not a suitable substitute for good hygiene practices and do not necessarily prevent absorption of product through the skin. Always consult the manufacturer's advice/instructions before use. After washing, the application of a suitable conditioning cream may help to prevent cracking, fissuring or dryness of the skin.

Use disposable cloths and discard when soiled/. Do not put soiled cloths in pockets.

##### **Fire Prevention**

If product is heated above 50°C, evaporation of water will adversely affect fire resistance.

Product in service should be regularly monitored and the concentration adjusted with distilled or deionised water.

##### **Storage Conditions**

Store under cover away from sources of heat and sources of ignition.

Keep containers closed when not in use.

Empty packages may contain some empty product. Retain hazard warning labels on empty packages as a guide to the safe handling, storage and disposal of empty packaging.

### **8.Exposure control / personal protection:**

#### **Exposure limits**

Ensure good ventilation.

Avoid as far as reasonably practicable, inhalation of vapour, mists or fumes generated during use.

If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonable practical level.

#### **Protective clothing**

If the operation is such that prolonged or repeated contact may be reasonably anticipated, suitable protective clothing, including gloves of an appropriate standard, and a BSI approved full face visor or chemical goggles as appropriate should be worn.

Change heavily contaminated clothing as soon as possible. Wash any contaminated underlying skin with soap and water.

### **9.Stability and reactivity**

#### **Materials to avoid**

Avoid contact with strong oxidising agents.

Avoid contact with strong mineral or organic acids.

Not miscible with mineral oil.

On contact these fluids will soften and may lift industrial coatings and paints.

Should not be used in systems magnesium or zinc.

### **10.Hazardous decomposition products**

Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions.

Incomplete combustion/thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.

### **11.Toxicological Information:**

#### **Eyes**

Likely to cause eye irritation

#### **Skin**

Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.

#### **Ingestion**

Harmful if swallowed

#### **Inhalation**

At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility.

### **12.Ecological Information:**

#### **Mobility**

Spillages may penetrate the soil causing ground water contamination.

**Persistence and degradability**

This product is inherently biodegradable.

**Bioaccumulative potential**

There is no evidence to suggest bioaccumulation will occur.

**Aquatic toxicity**

Unlikely to be harmful to aquatic organisms.

**13. Disposal Considerations:**

Where possible, arrange for product to be recycled.

Dispose of via an authorised person / licensed waste disposal contractor in accordance with local regulations.

Incineration may be carried out under controlled conditions provided that local regulations are met.

Dispose of product and container carefully and responsibly. Do not dispose of near ponds, ditches, down drains or on to soil.

**14. Transport Information:**

Not classified as hazardous for transport (ADR, RID, IATA/ICAO, IMO)

**15. Regulatory Information:**

**EC Labelling**

Contains Ethylene Glycol.

(Xn) HARMFUL

R22 Harmful if swallowed

S24/25 Avoid contact with skin and eyes

S46 If swallowed seek medical advice immediately and show this container or label.

**16. Other Information**

**PRODUCT USE**

For industrial use only. Lubricant.

**EC LEGISLATION**

EC Directive 91/155/EEC defining the laying down and detailed arrangements for the system of specific information relating to Dangerous Preparations Directive – 2001/58/EC.

EC Directive 88/379/EEC relating to the classification, packaging and labelling of dangerous preparations.

To the best of our knowledge, the information contained herein is accurate. Although certain hazards may be described we cannot predict that these are the only hazards, or combination of hazards, that may exist in a workplace. This MSDS, therefore, forms a component only of a risk assessment carried out by, or on behalf of, the user.