



# MATERIAL SAFETY DATA SHEET

## INDY HYDROL FR 46

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	INDY Hydrol FR 46
Description	Fire Resistant Hydraulic Fluid
Validation Date	April 2019
Manufacturer	GUD Holdings (Pty) Ltd via Indy Oil SA 3 The Avenue East Isipingo KwaZulu-Natal South Africa 4110
Emergency Contact Number	+ 27 31 910 3111 + 27 60 572 8088

### 2. COMPOSITION

Component	EINECS Number	CAS registry number	% content	Classification
1,2-ethanediol	203-473-3	107-21-1	30 - 60	H302 H373

### 3. HAZARDS IDENTIFICATION

Human Health Hazards	Causes eye irritation characterized by a burning sensation. Inhalation of vapour or mist may cause respiratory tract irritation and central nervous system effects (headaches, dizziness).
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The product is harmful if swallowed. Aspiration of the material into the lungs may cause chemical pneumonitis. Ingestion may lead to stomach distress, nausea and vomiting. Repeated contact or exposure to the skin may lead to cracking / drying due to the defatting action of the material. Skin discolouration may occur as a result of prolonged exposure.

Safety Hazards

The product is not classified as flammable, but will burn. Care should be exercised upon storage and handling.

Environmental Hazards

The product may lead to environmental contamination as applicable to those associated with oil spills.

## 4. FIRST AID MEASURES

General Information

If the product splashes into the eye it may cause irritation and conjunctivitis. Ingestion may lead to irritation of the mouth, throat and digestive tract. Aspiration into the respiratory system may occur directly or following ingestion. The product has the potential to be fatal if large amounts are swallowed. Prolonged exposure to vapour may cause headache, dizziness, nausea and irritation to the eyes, upper respiratory tract, mouth and digestive tract. Obtain medical attention if discomfort continues. Remove affected person from source of contamination.

The following recommendations apply to sources of exposure:

Inhalation

Remove to fresh air, and keep affected person at rest. Obtain medical attention if irritation to respiratory tract is severe and adversely affects breathing.

Ingestion

Rinse out mouth thoroughly. Do not induce vomiting. Obtain medical attention immediately.

Skin Contact

Remove contaminated clothing, and wash skin with soap and water. Clothing must be laundered before reuse. If irritation persists, obtain medical attention.

Eye Contact

Flush eyes with clean water for at least 15 minutes. Do not rub or agitate the affected area.

## 5. FIRE FIGHTING MEASURES

Hazardous combustion products may include carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>), as well as combustion products of sulphur and nitrogen.

Extinguishing Media:

Foam or dry chemical powder. Carbon dioxide, sand or earth can be used for small fires. Keep containers exposed to the fire cool by spraying with water. The danger zone should be cleared immediately.

Protective Equipment

Proper protective equipment including breathing apparatus must be worn when approaching a fire.

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid inhalation of vapour and aerosol spray. Avoid contact with eyes, and prolonged skin contact. Ensure adequate ventilation is provided. In the event of a spill, beware of slippery surfaces.
Environmental precautions	Do not allow environmental contamination to occur. Avoid disposal (accidental or incidental) of product into drains, sewers, rivers and other water sources, and onto the ground. Use appropriate spill containment measures to avoid environmental contamination. Inform local authorities if this cannot be prevented. Use sand, earth or other appropriate absorbent material to contain spills. The product should not be dumped, but collected and delivered according to agreement with local authorities.
Spill clean-up / containment	Stop product leak if possible to do so without risk. Extinguish all ignition sources, and ensure adequate ventilation. The product in its liquid form can be contained by creating a barrier using sand, earth or other appropriate containment material. Collect with absorbent, non-combustible material into suitable containers. Do not allow run-off into sewers and drains. Dispose of material according to agreement with local authorities. Inform authorities immediately if the liquid enters surface water sources.

## 7. HANDLING AND STORAGE

### USAGE PRECAUTIONS

Ensure good personal hygiene when handling product. Wash hands, clothing and other contaminated areas with water and soap before leaving the work site to minimize spread of contamination. Do not eat, drink or smoke when using the product. Avoid forming sprays / aerosol mists. Ensure adequate ventilation is provided when product is being used. Ensure personal protective equipment is used where necessary.

### STORAGE CONDITIONS

Store the product in its original container, and ensure that the container is tightly closed and kept upright. Store in a cool, dry, and well-ventilated area. Ensure that the relevant spill containment apparatus is available. Exposure to excessive temperatures should be avoided. Water contamination should be avoided.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### PROTECTIVE EQUIPMENT

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The following personal protective equipment is applicable:



### ENGINEERING MEASURES

Provide adequate ventilation. Observe occupational exposure limits and minimize risk of inhalation of vapour.

### RESPIRATORY EQUIPMENT

The use of respiratory equipment under normal operating conditions is not required. Should operating conditions create airborne concentrations that are excessive, the use of an approved respirators such as toxic dust, mist and fume respirators are recommended.

### HAND PROTECTION

The use of chemical-resistant, nitrile or butyl rubber gloves is recommended.

### EYE PROTECTION

The use of tightly-fitted safety goggles / glasses is recommended when splashing is probable.

### OTHER PROTECTION

Wear appropriate clothing to prevent repeated or prolonged skin contact.

### HYGIENE MEASURES

Wash contaminated clothing promptly and before reuse. Wash skin with soap and water upon contamination.

### OCCUPATIONAL EXPOSURE

The ACGIH TLV for ethylene glycol vapour is  $52 \text{ mg.m}^{-3}$  for a time period of 8-hour exposure. A short-term exposure limit of  $104 \text{ mg.m}^{-3}$  (STEL) is recommended.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	Clear at ambient temperature
Odour	Slight
Solubility	Readily soluble
Vapour density (air = 1)	Heavier than air
Viscosity at 40°C	46 cSt (typical)
Density at 20°C	1040 kg.m <sup>-3</sup> (typical)
Auto-ignition Temperature	> 400°C
Flash Point	>280°C

## 10. STABILITY AND REACTIVITY

Stability	The product is stable.
Materials to avoid	Strong oxidising agents
Conditions to avoid	Extremes of temperatures.
Hazardous Decomposition Products	None under normal conditions known

## 11. TOXICOLOGICAL INFORMATION

### HEALTH WARNINGS

The product can be hazardous when inhaled or touched. May cause internal injury. Vapour from product is hazardous when inhaled.

### ROUTES OF ENTRY

Inhalation. Ingestion. Skin or eye contact.

### TOXICOLOGICAL DATA

Acute toxicity - Oral	LD50 expected to be > 4500 mg/kg
- Dermal	LD50 expected to be > 4500 mg/kg
Inhalation	Not considered a hazard under normal use
Eye Irritation	Can be slightly irritating
Skin Irritation	Can be slightly irritating upon prolonged exposure.
Respiratory Irritation	If mists are inhaled, slight irritation of the respiratory tract may occur.
Carcinogenicity	Not known to be carcinogenic.
Mutagenicity	Not considered to be a mutagenetic hazard.
Reproductive toxicity	Not considered to be a hazard.

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY

The product may cause physical fouling of the aquatic environment, and may present risks associated with oil spills.

### BIOACCUMULATION

The product has the ability to bioaccumulate. No available data on bioaccumulation.

### DEGRADABILITY

The product is readily biodegradable.

## 13. DISPOSAL CONSIDERATIONS

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Waste relating to the product is considered hazardous, and should be disposed off according to regulations as stipulated by local authorities.

## 14. TRANSPORTATION INFORMATION

The product is not regulated and no special transportation requirements exist.

## 15. REGULATORY INFORMATION

Risk phrases	H302, H373
Safety phrases	S2, S46

## 16. OTHER INFORMATION

Validated by	: GUD Holdings (Pty) Ltd
Validation date	: 08 April 2019
Revision number	: 01
Revision date	: First issue

### RISK PHRASES IN FULL

H302: Harmful if swallowed

H373: May cause damage to organs through prolonged or repeated exposure

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