



MATERIAL SAFETY DATA SHEET

1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: **Acidity Testing Solution** Code: 2841-UK

Application: Determination of Acidity in Transformer and Insulating Oils.

Company: Electrical Oil Services Limited

Address: PO Box 79
Bridges Road
Ellesmere Port
CH65 4WD

Telephone: 0845 6021003 Fax: 0845 6021004

2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Solvents mixture

Hazardous Ingredient(s)	Symbol	Risk Phrases	Other Information	%
Propan-2-ol; Isopropyl alcohol	F	R 11-20	CAS No 67-63-048 EC (EINECS) 200-661-7	90
Potassium Hydroxide Solution	C	R 35	CAS No 1310-58-3 EC (EINECS) 215-181-3	10

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances or ELINCS (European List of Notified Chemical Substances) or are exempt. Refer to Section 8 for Occupational Exposure Limits.

3: HAZARDS IDENTIFICATION

Eyes: Liquid will irritate the eyes and may cause chemical burns.

Skin: Liquid is alkaline and may cause chemical burns. De-fatting action, may cause dermatitis.

Inhalation: Vapour irritating to respiratory tract. May cause narcosis.



ELECTRICAL OIL SERVICES LTD
The Complete Solution

Ingestion: Liquid if ingested will cause irritation.

4: FIRST AID MEASURES

Eyes: Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention if irritation persists

Skin: Wash immediately with soap and water or suitable skin cleanser.

Inhalation: Remove from exposure.

Ingestion: Obtain medical attention urgently. DO NOT induce vomiting. Wash out mouth with water. Beware of aspiration if vomiting occurs.

5: FIRE FIGHTING MEASURES

Small Fires: Use carbon dioxide, dry chemical, alcohol resistant foam, sand, earth or water fog.

Large Fires: Use water, alcohol resistant foam or water fog. Keep containers cool by spraying water.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Immediately issue NO SMOKING and NO NAKED FLAMES warnings. Isolate all electrical ignition sources.

Decontamination Procedures: Soak up with inert absorbent or contain and remove by best available means. Dispose of as waste. If any liquid enters drainage system inform Authorities Fire Brigade and the Environment Agency.

7: HANDLING AND STORAGE

Handling: Use only in well ventilated areas. Do not smoke. Do not use near sources of ignition. Avoid breathing vapours. To avoid the possibility of skin disorders, repeated or prolonged contact with products of this type must be avoided. It is essential to maintain a high standard of personal hygiene.

Storage: Keep in tightly closed, clearly labelled containers. Store in conformity with local fire regulations (for further information see Section 15).

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure limits:-

Substance	8 Hr.TWA	STEL	Source/Other Information
Iso Propanol	980		

Protection: Wear impervious gloves and suitable eye protection.

9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	Purple
Odour:	Alcoholic
Boiling Point/Range (°C):	83
Flash Point (closed °C):	10
Auto-ignition (°C)	Above 200
Explosive Properties (%):	Explosive limit range (%): 2 - 12
Vapour Pressure (kPa at 20°C)	4.4
Relative Density (at 20°C)	Below 1.0
Water Solubility:	Soluble
Fat Solubility:	Not determined

10: STABILITY AND REACTIVITY

Stability:	Stable at normal temperatures and pressure, will not polymerise. Volatile.
Conditions to Avoid:	Any source of ignition.
Materials to Avoid:	Strong oxidising agents.
Hazardous Decomposition Products:	None.

11: TOXICOLOGICAL INFORMATION

The following toxicological assessment is based on a knowledge of the toxicity of the product's components.

Oral LD₅₀rat >4.7 - 5.8g/kg.

Dermal LD₅₀rat/rabbit 12g/kg

Estimated human lethal oral dose: 250ml.

Not classified as an eye or skin irritant.

Health Effects:

On Eyes:	Irritating and may injure eye tissue if not removed promptly. Vapour may cause irritation.
On Skin:	De-fats the skin.
By Inhalation:	Mist and vapours may cause irritation to nose and respiratory tract Vapours may cause headaches, dizziness and central nervous system depression.
By Ingestion:	ingestion of significant amounts may result in severe systemic effects. Symptoms may include apparent drunkenness, vomiting and loss of consciousness.
Chronic:	None known
Other:	None known

12: ECOLOGICAL INFORMATION

Environmental Assessment:	Contains volatile organic compounds. When used and disposed of as intended, no adverse environmental effects are foreseen.
Mobility:	Volatile. Mobile liquid. Water-soluble.
Persistence and Degradability:	Expected to be readily biodegradable, based on knowledge of the components.
Bio-accumulative Potential:	Not expected to be bio-accumulative.
Eco-toxicity:	Not expected to be toxic to aquatic organisms. Not expected to be inhibitory to sewage bacteria.

13: DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local and national legislation.	
Unused product:	Classified as a special waste. May be incinerated. Dispose of through an authorised waste contractor to a licensed site.
Used/Contaminated Product:	As for Unused Product.
Packaging:	Must be disposed of through an authorised waste contractor. Contains flammable residues, do not crush or incinerate.

14: TRANSPORT INFORMATION

This product is NOT classified as dangerous for transport.	
UN/SI Number:	1993
IMO:	Class: 3.2
Packing Group:	II
Marine Pollutant:	No
IATA/ICAO:	Class 3



ELECTRICAL OIL SERVICES LTD
The Complete Solution

ADR/GGVS: Class 3
Transport Name: Iso-propanol mixture
Hazchem/Kemler Code: 2[S]E/33

15: REGULATORY INFORMATION

Hazard label: Highly Flammable, Irritant

Named ingredients: Propan-2-ol

UN number: 1993

Packing Group: II

Symbol(s): F, C

Risk Phrases: R11: Highly Flammable
R36/38: Irritating to eyes and skin.
R20: Harmful by inhalation.

Safety Phrases: S7: Keep container tightly closed
S16: Keep away from sources of ignition - no smoking
S43: in case of fire use CO₂/dry powder/foam/water
S51: use only in well ventilated areas

EC Directives: Dangerous Preparations Directive, 88/379/EEC
Safety Data Sheets Directive, 91/155/EEC
Framework Waste Directive, 91/156/EEC
Hazardous Waste Directive, 91/689/EEC

Statutory Instruments: Highly Flammable liquids & Liquefied Petroleum Gases Regs. 1972 (SI 917)
Health & Safety at Work, etc. Act 1974
Special Waste Regs. 1996 (SI 972)
Chemicals (Hazard Information and Packaging for Supply) Regs. 1994 (SI 3247)
Consumer Protection Act 1987
Control of Substances Hazardous to health Regs. 1994 (SI 3246)
Consumer Protection Act 1987
Environmental Protection Act 1990
Carriage of Dangerous Goods by Road Regs. 1996 (SI 2095)

Codes of Practice: Control of substances hazardous to health & control of carcinogenic substances (L5)
Waste management. The Duty of Care
Control of Lead at Work Revised 1985

Guidance Notes: Storage of packaged dangerous substances [HS(G)71]
Occupational exposure limits (EH40)
Approved guide to the classification and labelling of substances and preparations dangerous for supply (L100)
Save your skin! - Occupational Contact Dermatitis [MS9B]6].
Dermatitis - cautionary notice [SHW 367].



ELECTRICAL OIL SERVICES LTD
The Complete Solution

Effects of mineral oil on the skin [SHW 397].

The above publications are available from HMSO or HSE.

16: OTHER INFORMATION

Approved Supply list - Information approved for the classification and labelling of substances and preparations dangerous for supply (L76)

European Agreement concerning the international Carriage of Dangerous Goods by Road (ADR)

International Maritime Dangerous Goods Code 9IMDG Code)

Dangerous Goods Regulations, IATA

Technical Instructions for the safe Transport of Dangerous Goods by Air, ICAO

The data and advice given apply when the product is sold for the stated application or applications.

The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. You should not use the product other than for the stated application or applications without seeking advice from us.

If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.

Further copies of this Safety Data Sheet may be obtained from Electrical Oil Services Limited.