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#### **ULTRASONIC COUPLANT GEL**

APPEARANCE: Bright Yellow Gel

DENSITY @ 20°C: 1.06 grams/cc

FLASH POINT (PM): Non-flammable\*

 PH VALUE:
 7.5 – 8.5

 SOLUBILITY:
 Water Soluble

 SULPHUR:
 <50 P.P.M.</td>

 HALOGENS:
 <50 P.P.M</td>

**CORROSION:** Non-corrosive to most metals

**TEMPERATURE RANGE:** -10°C to 60°C

**REMOVABILITY:** Water, alcohol or similar solvent

\*NB: This product will have a flash point of 160°C (PM) when used for long periods at elevated temperatures.

This ultrasonic couplant is a stable clear yellow gel specifically designed for ultrasonic inspection and it is non-toxic and safe for the environment.

This product is designed for use on all types of metallic surface and is especially suited to solving the problems of rough, pitted, uneven surfaces allowing smooth probe movement during testing. The thixotropic properties of this couplant give excellent wetting and acoustic transmission and do not allow the product to flow all over the test area. This makes it very economical to use as you only cover the working area not the whole piece.

The ultrasonic couplant incorporates chemicals, which allow very slow drying even at elevated temperatures, whilst being free of VOC's and other hazardous materials. However, it does contain a special tracer dye to enable areas to be checked for coverage but the couplant is still easily removed with water or solvent wipes.

The ultrasonic couplant is available in easy to use 125 mls applicator bottles.



#### 1. HEALTH & SAFETY DATA SHEET

Product Name: Ultrasonic Couplant

**Application:** Ultrasonic inspection of components and structures.

### 2. COMPOSITION/INFORMATION OF INGREDIENTS

An aqueous gel containing polyols and corrosion inhibitor, none of the component materials are listed in Chemicals (Hazard Information and Packaging for supply) Amendment Regulations 1996.

#### 3. HAZARDS IDENTIFICATION

Possible eye irritation

#### **4. FIRST AID MEASURES**

**Skin:** Remove contaminated clothing, Launder before re-use. Remove adhering matter and wash skin thoroughly with mild soap and water. Flush skin with lukewarm water.

**Eyes:** Immediately flush eyes with water for 15 minutes while holding eyes open. If irritation persists seek medical attention.

**Ingestion:** Obtain medical attention immediately if significant quantity ingested. Give lukewarm water if completely conscious but DO NOT INDUCE VOMITING.

### **5. FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Water fog, Alcohol resistant foam, Sand, Carbon Dioxide or dry powder.

**Special Exposure Hazards:** When heated the product will froth as the water component is driven off. The residual liquid may then ignite producing oxides of carbon.

**Special Protective Equipment:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.



# **6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Wear PVC or rubber gloves and chemical goggles or facial mask.

Environmental Precautions: Gelled nature of product will minimise any flow.

Prevent entry to drains or sewers.

**Methods for cleaning:** Scrape up any spilled material. Apply absorbent material (sand, sawdust or granules) to residue, wash spillage area with water.

CAUTION: Spilt gel may cause floors to become slippery.

#### 7. HANDLING AND STORAGE

Handling: Avoid contact with eyes. Minimise skin contact by use of PVC or rubber gloves.

Storage: Store in sealed containers in covered storage areas at temperatures below 35°C.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Take measures to prevent: Contact with eyes and skin

**Respiratory:** Not required under normal conditions of use.

Hands: Plastic surgical-type gloves recommended

**Skin:** Normal work-wear long-sleeved overalls are recommended.

Eyes: Wear safety glasses or chemical goggles where there is any risk of product splashing in the

eyes.

**Occupational Exposure Limits:** One component material is subject to an occupational Exposure Standard of 10mg/cu.m mist (8 hour time weighted average).

The gelled nature of product makes such a level extremely unlikely to occur.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Transparent yellow gel.

**Odour:** Mild odour **PH:** 7.5 – 8.5

**Boiling Point/Range:** Initial boiling point 100°C

Melting Point/Range:Not determinedFlash Point (°C) (PMCC):Above 100°CAuto-flammability\*:Not determinedExplosive Properties\*:Not determinedOxidising Properties\*:Not determinedVapour Pressure\*:Not determinedRelative Density\*:1.03 – 1.05g/ml.



### **10. STABILITY AND REACTIVITY**

**Conditions to avoid:** Temperatures above 35°C when some evaporation of the water component will occur with time.

Materials to avoid: Strong acids and strong oxidising agents.

**Hazardous Decomposition Products:** After the water component has been driven off, oxides of carbon.

#### 11. TOXICOLOGICAL INFORMATION

**Eye Contact:** Possible eye irritant.

**Skin Contact:** Frequent of prolonged contact may irritate.

**Ingestion:** Suppliers data (Rat Oral LD50) for constituent raw materials indicates no significant hazard by this route.

**Inhalation:** Product is low volatility and hence of low inhalation risk under normal operating conditions.

### 12. ECOLOGICAL INFORMATION

**Behaviour:** Product is miscible with water.

**Environmental Fate:** Suppliers data indicates most components are biodegradable.

Eco-toxicity: Unlikely to Bio-accumulate

### 13. DISPOSAL CONSIDERATIONS

**Likely residues/Waste products:** Chemically unchanged product, possibly contaminated with surface scale, paint etc.

**Safe handling of any residues/waste product:** Best disposed of by incineration at a suitable licensed waste disposal facility.



### **14. TRANSPORT INFORMATION**

**Hazard classification:** Not regulated for transport ADR/VLG: RID/VSG: RID ADR Hazard I.D No:

IMO: CAS No: Mixture ICAO/IATA:

#### **15. REGULATORY INFORMATION**

Supply label information:

Label symbol:NoneRisk phrase:None

Safety phrase: S24 Avoid contact with eyes

**Note:** Actual label may not be as above if product was supplied some time previously or labelling is in transition period.

This data sheet does not constitute a users assessment of workplace risk as required by HSW ACT, COSHH, Management of health and safety at work regulations, or other health and safety legislation.

### **16. OTHER INFORMATION**

### **Recommended uses and restrictions:**

This is an aqueous gel for use as an Ultrasonic Coupling agent for probe/structure acoustic transmission enhancement.

### Sources of key data used to compile safety data sheet:

Raw Material Suppliers - Material Safety Data Sheets HSE EH40/96 Occupational Exposure Limits (HSE)

The information in this Safety Data sheet is based on the present state of knowledge and on current EEC and National Laws, as users' working conditions are beyond suppliers knowledge and control.

This product is not to be used for other purposes other than those specified under SECTION 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps in order to fulfil the demands laid down in local rules and legislation.



The information in this Safety Data Sheet is meant as a description of the safety requirements of the product; it is not to be considered as a guarantee of the products properties.

# The information in this Safety Data Sheet is pursuant of:

- **A)** The chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations 1997
- **B)** Council Directive 92/32/EEC (03 No L154, 5-6-92.p1) amending the 7th time Council Directive 67/457/EEC (03 No 196. 16-8-67.p1.) (03/SE 1967,p234) in so far as these provisions relate to the classification, packaging and labelling of dangerous substances.
- **C)** Council Directive 88/379/EEC (03 No L1187, 16-7-88.p14) as amended by Commission Directive 90/492 EEC (03 No L275 5-10-90 p35) on the classification, packaging and labelling of dangerous preparations.
- **D)** Council Directive 78/631/EEC (03 No L204, 29-7-78 p13) on the classification, packaging and labelling of dangerous substances (pesticides); and
- **E)** Commission Directive 91/115/EEC (03 No L76 22-3-91 p35) on system of specific information relating to dangerous preparations (Safety Data sheets) except in so far as those directives relate to the provision of child resistant fastenings for certain packages containing dangerous substances and preparations.

Please ensure that it is passed to the appropriate person(s) in your company, who is/are capable of acting on the information.