

**SAFETY DATA SHEET**  
**GLOBAL TELCUT 12**  
**10138 1.00 GB Current 16.08.1997**

SAFETY DATA SHEET Ref No. 10138

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Trade Name** TELCUT 12  
**Manufacturer/Supplier** Global Lubricants Limited  
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Smethwick, West Midlands, B66 1NN, England

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**2. COMPOSITION/INFORMATION ON THE COMPONENTS**

<b>Components</b>	<b>Classification</b>	<b>Wt</b>	<b>Exposure Limit</b>
Diethanolamine esters & reaction products	Xi, 36/38	10-25	TWA: 3ppml / 15 mg/m <sup>3</sup> (diethanolamine)
Highly refined mineral oil	-	25-60	Oil mist: TWA 5 mg/m <sup>3</sup>
Hexahydrotriazine preservative	Xn, R22-43	<1	

**3. HAZARD IDENTIFICATION**

**Health & Safety**

The concentrate is strongly irritating in the eye with a potential to cause corneal injury if treatment is not prompt. The concentrate may cause irritation to the skin which could become more intense if not promptly removed or if contact is frequent or prolonged. The product contains a preservative which may be capable of causing allergic skin reactions in sensitive individuals, or which may provoke a response in individuals who have previously been sensitised to the preservative from other sources. For further information refer to section 16- other information.

**Environmental**

This product contains mineral oil which will not readily biodegrade in anaerobic conditions and therefore can be environmentally persistent. For further information, refer to section 12 – ecological information.

### **3. HAZARD IDENTIFICATION (cont)**

#### **Special hazards after use**

During use, metalworking emulsions may become contaminated with metal particles and metal salts, other lubricants, and microbiological contaminants. These may increase the irritancy of the emulsions, and in some cases (e.g. contamination by chromium, cobalt and nickel) may be capable of inducing other additional hazards. Small amounts of nitrosamines may be formed if sodium nitrate is added.

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

#### **First Aid - Eyes**

Immediately flood the eye with plenty of water ensuring eyelids are held open. For contact with undiluted fluid, obtain prompt medical attention. For contact with diluted fluid, obtain medical attention if irritation or redness persists, or as an additional precaution.

#### **First Aid - Skin**

Following contact with the undiluted product, wash thoroughly with soap and water without delay. Remove heavily contaminated clothing. Wash / launder contaminated clothing before re-use. If irritation persists, obtain medical advice. If the use of metalworking emulsions gives rise to irritation or skin rashes, obtain medical advice.

#### **First Aid - Ingestion**

Do not induce vomiting. Wash out mouth with water and obtain medical attention. Milk or water to drink may be beneficial. Treat symptomatically. If the product is aspirated into the lungs (e.g. during vomiting) send to hospital immediately.

#### **First Aid - Inhalation**

For effects produced by over-exposure, move to fresh air. If effects persist, obtain medical advice.

## **5. FIRE FIGHTING MEASURES**

<b>Flammability</b>	High energy may induce combustion of the undiluted product. The diluted emulsions do not support combustion.
<b>Flash Point:</b>	>100 <sup>0</sup> C (closed cup)
<b>Autoignition Temp:</b>	>150 <sup>0</sup> C
<b>Flammability Limits:</b>	<b>Not established</b>
<b>Extinguishing Media</b>	
Small Fires:	Foam, dry powder, carbon dioxide, sand or earth.
Large Fires:	Foam or water fog – DO NOT USE WATER JETS
<b>Products of combustion</b>	Combustion can produce a variety of compounds including: oxides of carbon, water vapour, small amounts of chlorine compounds and oxides of nitrogen, unburnt hydrocarbons, partially oxidised organic compounds and unidentified organic and inorganic compounds, some of which may be toxic.
<b>Special fire hazards</b>	Large surface areas exposed to air / oxygen (e.g. oil-soaked rags, paper or absorbed spillages) may be easily ignited and these should be cleared up at once.
<b>Special Fire fighting procedures</b>	Fire-fighters should wear self-contained breathing apparatus. Do not spray water directly onto storage containers due to boil-over danger. Water may be used to cool nearby containers / surfaces.

## **6. ACCIDENTAL RELEASE MEASURES**

<b>Small spills</b>	Prevent entry into drains or watercourses. Spillages can be slippery. Soak in absorbent granules or sand.
<b>Large spills</b>	Bund using absorbent granules, sand or earth. Reclaim liquid directly or soak in an absorbent medium, and transfer to a suitable marked container.
<b>Disposal of Spillages</b>	By incineration or via an authorised / licensed waste disposal contractor. Disposal must be in accordance with local regulations and (in the UK) the Environmental Protection Act 1990.

## **7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with skin and eyes – wear protective gloves and chemical goggles when handling the undiluted product.
<b>Storage</b>	Storage in dry conditions protected from frost and elevated temperatures. Store in original containers or in other mild steel or high density polyethylene containers which are closable and clearly labelled.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>Exposure limits</b>	The product does not have an established Occupational Exposure Standard (OES), Maximum Exposure Limit (MEL), or Threshold Limit Value (TLV). However it contains mineral oil which has an individual established OEL/TLV of 5 mg/m <sup>3</sup> for oil mist.
<b>Skin</b>	Wear impervious gloves when handling the undiluted product. Prolonged or repeated contact with diluted metalworking fluid emulsions is often unavoidable – the use of appropriate skin protective and reconditioning creams may be beneficial, and gloves should be considered whenever their use is practical and safe. Change heavily contaminated clothing and overalls as soon as possible.
<b>Inhalation</b>	Respiratory protection is not normally required. However suitable respiratory equipment should be provided for those operations which generate vapour, mists or fumes and where exposure cannot be adequately controlled by local exhaust ventilation or other means. cream.
<b>Eye Protection</b>	Wear chemical goggles when handling the undiluted product or if there is a risk of splashing with the diluted product.
<b>Industrial Hygiene</b>	Adopt normal good working practises and personal hygiene standards. Wash hands after use, before eating, drinking or smoking and before and after using the toilet. Contaminated clothing should be laundered before re-use.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Amber Liquid.
<b>Odour</b>	Mild.
<b>pH</b>	9.2 @ 5%
<b>Boiling Range/Point (°C)</b>	> 100.
<b>Flash Point (°C)</b>	> 100 (closed cup)
<b>Solubility in Water</b>	Forms an opaque / semi-translucent emulsion
<b>Vapour Density</b>	No data (Air=1)
<b>Vapour pressure</b>	Low (not measured) (mmHg @ 20 <sup>0</sup> C)
<b>Viscosity (cSt @ 40<sup>0</sup>C)</b>	No data
<b>Specific Gravity (@ 20<sup>0</sup>C)</b>	0.976
<b>Alkalinity</b>	Slightly alkaline
<b>Pour / melting point</b>	<0

## **10. STABILITY AND REACTIVITY**

<b>Stability</b>	This product is stable and unlikely to react in a hazardous manner under normal conditions of use.
<b>Conditions to Avoid</b>	Extremes of temperature (preferably, store between 5 and 30 <sup>0</sup> C). Protect from frost. Do not heat above 60 <sup>0</sup> C in the presence of aluminium as, in certain circumstances, hydrogen gas could be evolved.
<b>Materials to Avoid</b>	Strong oxidising agents (e.g. chlorates, peroxides), strong acids. May soften some rubbers and other elastomeric sealing materials.
<b>Decomposition Products</b>	Thermal decomposition can produce a variety of compounds, the nature of which will largely depend on the conditions bringing about decomposition. Incomplete combustion or thermal decomposition may be expected to generate such materials as; particulate matter and unburnt hydrocarbons; oxides of carbon; oxides of nitrogen; water; small amounts of hydrogen chloride; partially oxidised organic compounds; and other unidentified organic and inorganic compounds.

## **11. TOXICOLOGICAL INFORMATION**

<b>Eyes</b>	Eye contact with the undiluted product may cause strong irritation and stinging. There may be a potential to cause corneal injury if treatment is not prompt. Dilute emulsions are expected to cause only slight transient irritation or redness.
<b>Skin</b>	<b>Dermal LD50 &gt; 2500 (rabbits, expected LD50)</b> Contact with the concentrate may cause moderate irritation. Prepared emulsions are surface active and slightly alkaline, and prolonged or repeated contact with them, especially if the emulsions are over-strength, may cause defatting of the skin, slight irritation and dermatitis. The product contains a preservative which may be capable of causing allergic skin reactions in sensitive individual.
<b>Inhalation</b>	<b>Inhalation LC50 Not established</b> The product is unlikely to present any significant inhalation hazard at ambient temperatures. High temperatures or atomising systems may lead to generation of vapours, mists or fumes which could cause irritation to eyes and respiratory tract. Repeated excessive exposures to oil mists may cause respiratory damage and a condition resembling pneumonia.

## **11. TOXICOLOGICAL INFORMATION(cont)**

<b>Ingestion</b>	<b>Oral LD50 &gt; 2500 (rats, expected LD 50)</b> The product has a low order of acute oral toxicity – ingestion is not regarded as a significant health hazard likely to arise in normal use/. Swallowing significant quantities may cause discomfort, nausea, irritation of digestive tract and diarrhoea. Aspiration into the lungs caused by vomiting or regurgitation following ingestion can be hazardous with possible resultant chemically induced pneumonia.
<b>Chronic Toxicity</b>	There are no reports of long-term adverse toxic effects in man attributable to the use of this type of product.
<b>Carcinogenicity</b>	No carcinogenic effects are normally anticipated with this type of product. All mineral oils incorporated in the product have been highly refined.
<b>NOTE:</b>	Contamination of emulsions during use may introduce additional hazards.

## **12. ECOLOGICAL INFORMATION**

<b>Biodegradability</b>	See below
<b>Chemical oxygen demand (mg/L)</b>	No data
<b>Water</b>	The individual components range from readily to poorly biodegradable. Mineral oil has limited biodegradability when treated by method CEC L-33-T-82. The components are not expected to be highly toxic to aquatic life. If released to water, the product may deplete the oxygen supply to bottom dwelling organisms. Nitrosamines may be formed with the nitrogen content in the water or in the presence of nitrites. The product contains a small amount of boron: water-soluble borates are widely distributed naturally in the soil and sea.
<b>Soil</b>	Small quantities will be absorbed in the upper soil layers where biodegradation may take place. Larger quantities may penetrate into anaerobic soil layers in which some of the organic compounds (e.g. mineral oil) may persist. Whilst many of the components have a high soil absorption coefficient, some will be capable of penetrating the soil to cause ground water contamination. Mineral can have a potential to bioaccumulate. Boron is an essential micronutrient for plants – but it is phytotoxic in higher concentrations.

### **13. DISPOSAL CONSIDERATIONS**

#### **NOTE**

All means of disposal should comply with local regulations and (in the UK) the Environmental Protection Act 1990. Dispose of product and containers carefully and responsibly. Do not allow product to contaminate ponds, water courses, soils or drains. Do not dispose of undiluted product or untreated emulsions down the drains.

#### **Undiluted product**

The product may be incinerated in suitable equipment and under controlled conditions. Alternatively, the product can be disposed of via an authorised / licensed waste disposal contractor.

#### **Diluted fluid**

Dispose of via an authorised person / licensed waste disposal contractor. Alternatively, emulsions can be treated in an appropriate effluent treatment facility (e.g. chemical splitting or ultrafiltration) to separate mineral oil and other compounds from the water phase. The clarified water phase may contain dissolved salts, surfactants, trace hydrocarbons, and other dissolved materials. It should not be discharged into sewage systems without the approval of the appropriate local authority and without checking for compliance with issued consent conditions. Further treatment may be required. The non-aqueous phase can be disposed of as for the undiluted product.

### **14. TRANSPORT INFORMATION**

#### **UK/EEC ROAD/RAIL ADR Classification**

N/A  
Not classified as dangerous goods

#### **UN Classification**

N/A

#### **Marine Pollutant**

No

#### **UN Shipping Name**

Not classified as dangerous goods

#### **UN Number**

N/A

#### **Diamond labels**

N/A

#### **IMO/IMDG Class**

Not classified as dangerous goods

#### **IATA / CAO**

Not classified as dangerous goods

## **15. REGULATORY INFORMATION**

<b>EEC Classification</b>	Xi: Skin and eye irritant, Skin sensitiser (Contains hexahydrotriazine)
<b>EEC No:</b>	N/A
<b>Risk Phrases</b>	R36/38: Irritating to eyes and skin. R43: May cause sensitisation by skin contact.
<b>Safety Phrases</b>	S24/25: Avoid contact with skin and eyes. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical attention. S37: Wear suitable gloves.
<b>Note:</b>	The above classification applies to the undiluted product as supplied. Not all of the above health risks may apply when the product is diluted for use at the correct operating strength. Refer to the safety data sheet for additional information.

## **16. OTHER INFORMATION**

- (1) The Product contains a preservative which may be capable of causing an allergic skin reaction in sensitive individuals. Experience over many years indicates that the incidence of such sensitisation from exposure to this preservative in metalworking fluid emulsions, when used at the correct concentrations, is very low. However the nature of allergic reactions is such that individuals who have already been sensitised (and this could have been from previous exposures to other products in other applications) may react to the preservative in metalworking emulsions, even when it is present at very low levels.**
- (2) Good coolant control can help to minimise health hazards: 1) do not add materials to the emulsion unless recommended to do so; 2) maintain emulsions at the recommended concentrations (refractometer checks); 3) Minimise tramp oil and other contamination; 4) remove swarf and debris from machine at regular intervals – these may abrade the skin and increase the perceptibility to irritation effects; 5) impliment proper procedures for regular draining and cleaning of machine tool coolant systems.**
- (3) During machining, emulsions may become contaminated with certain metals which are present in the workpieces or tools. These may solubilise in the emulsions. Some of these contaminants (e.g. chromium, nickel and cobalt) are capable of inducing allergic skin reactions. Some may also introduce an increased risk to health if excessive exposure to mists occur.**