

# Material Safety Data Sheet

HYDRAULIC OIL  
TYPE 22

Date prepared: 15 April 1999

Date revised: NA (first issue)

0CON-223

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## 1. Identification of the Substance/Preparation and the Company/ Undertaking

Substance or preparation trade name: **HYDRAULIC OIL TYPE 22**

Unique reference number(s): **0CON-223**

Company/undertaking name & address: **Logitech Ltd.,  
Erskine Ferry Road, Old Kilpatrick, Glasgow  
G605EU, Scotland, UK**

Telephone: **(+44) 1389 875444**

Emergency telephone number: **As above**

## 2. Composition

***Hydraulic Oil Type 22 is a preparation manufactured from highly refined mineral oils derived from crude petroleum, and additives, none of which impart any additional hazard to the finished product to that posed by the base component(s).***

Exposure limits exist for the following components: **Mineral Oil.**

## 3. Hazards Identification

***Not classified as dangerous for supply or conveyance, Hydraulic Oil Type 22 contains mineral oil, to which an exposure limit does apply. Prolonged and repeated skin contact may give rise to dermatitis. Mineral base oil will not biodegrade in anaerobic conditions and, hence, can be persistent. It contains components which have a high potential to bioaccumulate.***

## 4. First Aid Measures

Inhalation: ***Under normal conditions of use inhalation of vapours is not feasible or likely to present an acute hazard.***

Skin contact: ***Skin contact does not normally require first aid, but oil soaked clothing should be removed, and contaminated skin washed with soap and water. If persistent irritation occurs, medical advice should be sought without delay.***

Eye contact: ***Flush the eye with copious quantities of water. If irritation persists refer for medical attention.***

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Ingestion: ***DO NOT induce vomiting. If ingestion is suspected, wash out the mouth with water and send to hospital immediately. Show this Data Sheet to the physician, drawing attention to "Notes for Doctors" in Section 11 below.***

## **5. Fire-Fighting Measures**

Suitable extinguishing media: ***Foam, Water Fog, Dry Powder, CO<sub>2</sub>, AFFF, Earth.***

Unsuitable extinguishing media: ***Water Jet.***

Special exposure hazards in fire: ***NA***

Required special protective equipment for fire-fighters: ***NA***

## **6. Accidental Release Measures**

Personal precautions: ***NA***

Environmental precautions: ***Prevent entry to drains or watercourses.***

Methods for cleaning: ***Spills should be dammed by a suitable medium such as sand or earth. The liquid should be reclaimed directly or placed in an absorbent medium and then transferred to a suitable, clearly marked container. The container should be disposed of in accordance with local bylaws and the requirements of the Environmental Protection Act 1990.***

## **7. Handling and Storage**

Handling: ***Hydraulic Oil Type 22 does not require any special handling techniques but it should be handled in suitable containers and spillage should be avoided.***

Storage: ***Not subject to any special controls or restrictions. It should be stored in properly designed, closable, labelled containers, e.g. mild steel or high density polyethylene (HDPE).***

## **8. Exposure Controls**

Occupational exposure limits (Oil Mist, Mineral): ***5 mg/cubic metre 3 hour TWA value  
15 mg/cubic metre 15 min. TWA value***

Respiratory protection: ***NA***

Hand protection: ***Impervious gloves.***

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Skin protection: ***Wear overalls.***  
Eye protection: ***Wear protective goggles if there is a risk of splashing.***

## **9. Physical and Chemical Properties**

Appearance: ***Pale / dark amber liquid, at ambient temperature.***  
Odour: ***Characteristic, mineral oil.***  
pH: ***NA.***  
Boiling point: ***>320°C***  
Melting point: ***-30°C***  
Flashpoint (°C): ***179°C***  
Closed cup / open cup: ***NA.***  
Flammability (gas/solid): ***NA.***  
Autoflammability: ***Expected to be >320°C.***  
Explosive properties: ***NA.***  
Oxidising properties: ***NA.***  
Vapour pressure: ***@20°C: <0.1g.Pa***  
Relative density: ***@15°C: 0.860mg/cm<sup>3</sup>***  
Solubility (water and fat): ***Very low.***  
Other: ***Vapour Density (Air=1): >5  
Viscosity @ 40°C: 22Cst***

## **10. Stability and Reactivity**

Conditions to avoid: ***Extremes of temperature. Store between 0 and 50°C.***  
Materials to avoid: ***Strong oxidising agents, eg chlorates which may be used in agriculture.***  
Hazardous decomposition products: ***The substances arising from the thermal decomposition of these products will largely depend upon the conditions bringing about decomposition. The following substances may be expected from normal combustion:  
Carbon Dioxide, Carbon Monoxide, Water, Particulate Matter, Zinc Oxide, Phosphorous Oxides, Polycyclic Aromatic Hydrocarbons, Unburnt Hydrocarbons, Unidentified Organic and Inorganic Compounds, Nitrogen Oxides, Calcium Oxide, Methacrylate Monomers.***

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## 11. Toxicological Information

Concise description of toxicological properties follows, including any special effects of constituents:

Inhalation: ***Under normal conditions of use inhalation of vapours is not feasible or likely to present an acute hazard.***

Skin contact: ***Presents no acute health hazard, other than in the case of high pressure injection injuries. These can lead to the loss of the affected limbs if not treated immediately and properly. Seek hospital treatment and show the physician this document, drawing attention to the "Notes for Doctors".***

Eye contact: ***Eye contact may cause discomfort. Immediately flush the eye with copious quantities of water. If irritation persists seek medical attention.***

Ingestion: ***DO NOT INDUCE VOMITING. The main hazard following ingestion is from aspiration into the lungs during any subsequent vomiting. Wash out mouth with water. Seek immediate hospital treatment and show the physician this document.***

Chronic effects: ***Prolonged and repeated contact with oil products can be detrimental to health. The main hazards arise from skin contact and in the inhalation of mists. Skin contact under conditions of poor hygiene and over prolonged periods can lead to defatting of the skin, dermatitis, erythema, oil acne and oil folliculitis. Excessive and prolonged inhalation of oil mists may cause a chronic inflammatory reaction of the lungs and a form of pulmonary fibrosis.***

Notes for Doctors: ***High Pressure Injection Injuries: These require surgical intervention and possibly steroid therapy to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided, as they can contribute to swelling, vasospasms and ischaemia. PROMPT surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetic, and wide exploration is essential.***

***Ingestion and aspiration of petroleum products: There may be a risk to health where low viscosity products are aspirated into the lungs following vomiting, although this is uncommon in adults. Such aspiration would cause intense local irritation and chemical pneumonitis. Children, and those in whom consciousness is impaired, will be more at risk. Emesis of lubricants is not usually necessary, unless a large amount has been ingested, or some other compound has been dissolved in the product. If this is indicated - for example, when there is rapid onset of CNS depression from a large ingested volume - gastric lavage under controlled hospital conditions, with full protection of the airway is required. Supportive care may include oxygen, arterial blood gas monitoring, respiratory support and if aspiration has occurred, treatment with corticosteroids and antibiotics. Seizures should be controlled with Diazepam or appropriate equivalent drug.***

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## 12. Ecological Information

The information given below refers to the mineral oil component, which accounts for roughly 99%, of Hydraulic Oil Type 22. No ecological information is available on the other constituents.

- Air: **Hydraulic Oil Type 22 is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities.**
- Water: **If released to water, Hydraulic Oil Type 22 will form a floating layer on the surface and its components will not evaporate or dissolve to any great extent. Dissolved components will be absorbed in sediments. In aerobic water and sediments they will biodegrade slowly, but in anaerobic conditions they will persist. Hydraulic Oil Type 22 is practically non-toxic to aquatic organisms but contains components which have a high potential to bioaccumulate.**
- Soil: **Small volumes released on land will be absorbed in the upper soil layers and be biodegraded slowly. Larger volumes may penetrate into anaerobic soil layers in which the product will persist and may reach the water table on which it will form a floating layer. The more soluble components may dissolve but their high soil absorption coefficient and the low solubility will prevent significant contamination of ground water.**

## 13. Disposal Considerations

- Likely residues/waste product (if any): **NA.**
- Safe handling of any residues/waste product: **Any disposal route should comply with local byelaws and the requirements of the Environmental Protection Act 1990.**

## 14. Transport Information

- Special carriage precautions in carriage (on-site or externally): **Not classified as dangerous for conveyance.**
- Classification data: **Not classified as dangerous for conveyance.**

## 15. Regulatory Information

Hydraulic Oil Type 22 has been classified according to the requirements of the Dangerous Substances Directive 67/548/EEC, as last amended by the 7th Amendment 92/32/EEC, the 21st Adaptation to Technical Progress 94/69/EC and the Preparations Directive 88/379. Classified as not being dangerous for supply

NOTE: THIS DATA SHEET DOES NOT CONSTITUTE A USER'S ASSESSMENT OF WORKPLACE RISK AS REQUIRED BY HSW ACT, COSHH, MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS, OR OTHER HEALTH AND SAFETY LEGISLATION.

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**16. Other Information**

Use:	<b>Lubricant</b>
Sources of key data used to compile Safety Data Sheet:	<b>Consumer Protection Act 1987, Control of Pollution Act 1974, Environmental Protection Act 1990, Factories Act 1961, Health and Safety at Work Act 1974, Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations, Control of Substances Hazardous to Health Regulations, Dangerous Substances in Harbour Areas Regulations, Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations, Road Traffic (Carriage of Dangerous Substances in Packages etc.) Regulations, Road Traffic (Carriage of Dangerous Substances in Road Tankers and Tank Containers) Regulations, Road Traffic (Training of Drivers of Vehicles Carrying Dangerous Goods) Regulations, Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, Special Waste Regulations.</b>
Guidance Notes:	<b>HS(G)71 The storage of packaged dangerous substances. EH/40 Occupational Exposure Limits. EH/58 The Carcinogenicity of Mineral Oils. MS24 Health surveillance of occupational skin disease.</b>
Other Literature:	<b>Concawe Report: Health Aspects of Workers Exposure to Oil Mists. Department of the Environment: Waste Management - The Duty of Care - A Code of Practice.</b>
Abbreviations:	<b>NA: Not Applicable NE: Not Established</b>

The data contained in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1993, as amended, for the purpose of protecting the health and safety of industrial and commercial users who are deemed capable of understanding and acting on the information provided.

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