



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

HEALTH & SAFETY DATA SHEET

Identifications Of The Substance And Supplier

Product Name: **Hexol NC 535**

Name Of Supplier: Oak Industrial Supplies
Hamilton Road
Sutton in Ashfield
Nottinghamshire
NG17 5LN

Business Tel No: 01623 442222

Emergency Tel No: 01484 713201

Type: Typical Conventional non-phenolic soluble cutting oil. (Classified as 'Irritant' under 'CHIP')

Application: Emulsifiable metalworking fluid concentrate which is normally to be diluted with water prior to use (typical dilutions 3 – 10%). For additional advice regarding specific applications refer to product Technical Data Sheet or Contact your local representative.

Composition/Information On Ingredients.

General: This product is based on mineral base oil, emulsifiers and corrosion inhibitors, with non-phenolic coupling agents and additional performance additives.

Risk & Safety Phrases: Xi, R34

Exposure Limits: Oral LD50: >3000mg/kg OEL: 5mg/m³ (Oil Mists)

Hazards Identification.

Health & Safety Hazards: May cause sensitization by skin contact. Eye contact with the undiluted product may cause irritation. Prolonged or repeated contact with over strength emulsions may lead to for further information, refer to Section 11 – Toxicological Information



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

Environmental Hazards: The product contains minerals oil, which will not readily biodegrade in anaerobic conditions and therefore can be environmentally persistent. For further information, refer to Section 12 – Ecological Information.

Hazards 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 emulsion, and in some cases (e.g. contamination by chromium, cobalt and nickel) may be capable of inducing allergic skin reactions or introducing other additional hazards.

Pressure Injection: Pressure injection of all products will cause severe internal damage if not promptly treated.

First Aid Measures.

Eyes: Immediately wash eyes thoroughly with plenty of clean 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.

Skin: Following contact with the undiluted product, wash thoroughly with soap and water without delay. Remove heavily contaminated clothing. Wash/laundry contaminated clothing before reuse. If irritation persists obtain medical advice. If the use of metalworking emulsion gives rise to irritation or skin rashes, possible contamination and/or usage conditions may need to be investigated.

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 (eg. During vomiting), send to hospital immediately.

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

Pressure Injection: Always obtain immediate medical attention even though the injury may appear minor.

Fire Fighting Measures:

Flammability: High energy sources may induce combustion of the undiluted product. The diluted emulsion do not support combustion.

Flash Point: >100 (deg C) (Closed Cup)

Extinguishing Media:

Small fires: Foam, Dry powder, Carbon Dioxide, Sand or Earth.

Large Fires: Foam or Water fog DO NOT USE WATER JETS.



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

Products Of Combustion: Combustion can produce a variety of compounds including; oxides of carbon; oxides of nitrogen; water vapour; partially oxidized organic compounds and unidentified organic and inorganic compounds, some of which may be toxic.

Accidental Release Measures:

Prevent entry to drains or watercourses. Spillages can be slippery.

Small Spills: Soak in absorbent granules or sand.

Large Spills: Bund using absorbent granules, sand or earth. Reclaim liquid directly or soak in an absorbent medium, and transfer to a suitable, marked container.

Disposal of Spillage: By Incineration or via an authorized/licensed waste disposal contractor. Disposal must be in accordance with local regulations and the Environment Protection Act 1990.

Handling And Storage.

Handling: Avoid contact with Eyes – wear chemical goggles when handling the undiluted product. Avoid skin contact with the undiluted product. The use of appropriate barrier and after-work creams may be beneficial

Storage: Store in dry conditions protected from frost and elevated temperature. Avoid heat and sources of ignition. Store in original containers or in other mild steel or high-density polyethylene containers, which are sealable and clearly labelled.

Exposure Controls/Personal Protection.

Exposure Limits: The product does not have an established Occupational Exposure Standard (OES) or Maximum Exposure Limit (MEL). However, individual OES's may be established for some components (see section 2)

Eyes: Wear chemical goggles when handling the undiluted product or if there is a risk of splashing with the diluted product.

Skin: Wear impervious gloves when handling the undiluted product. Prolonged or repeated contact with diluted metalworking fluid solutions is often unavoidable in such circumstances, the use of appropriate barrier and after work creams maybe beneficial, and gloves should be considered whenever their use is practical and safe. Change heavily contaminated clothing and overalls as soon as possible

Inhalation: Respiratory protection is not normally required, however, suitable respiratory equipment should be provided for those operations, which generate vapour, mists or fumes and where exposures cannot be adequately controlled by local exhaust ventilation or by other means.



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

Industrial Hygiene: Adopt normal good working practices 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 reuse.

Physical And Chemical Properties.

Appearance:	Liquid
Odour:	Mild characteristic
Specific Gravity @ 20 (deg C):	0.95
Solubility In Water:	Miscible to form a solution
Flash Point:	>100 (deg C) (closed cup)
Flammability Limits In Air:	Not Established
Vapour Pressure @ 20 (deg c):	Not Determined
Boiling Point:	>100 (deg C)
Kinematic Viscosity @40 (deg c):	-
	Mm ² /s
PH:	9.2 @ 5%
Autoignition Temp:	>150 (deg C)
Vapour Density, air1:	Not Applicable
Melting Point:	<0

Stability And Reactivity.

Stability: This Product is stable and unlikely to react in a hazardous manner under normal conditions of use.

Conditions to Avoid: Extremes of temperature (preferably store between 5 and 30 (deg C), Protect from frost.

Materials to Avoid: Strong oxidizing agents (e.g. Chlorates, peroxides)

Decomposition Product: Thermal decomposition can produce a variety of compounds, the nature of which will largely depend of the conditions bringing about decomposition. Incomplete combustion or thermal decomposition may be expected to generate such material as: oxides of carbon: oxides of nitrogen; water; partially oxidized organic compounds; and other unidentified organic and inorganic compounds.

Toxicological Information.

Eyes: Eye contact with the undiluted product may cause strong irritation and stinging. May cause corneal injury if treatment is not prompt. Dilute solutions are expected to cause only slight transient irritation or redness.

Skin: The undiluted product in brief or occasional skin contact may cause slight irritation, which could become more intense if not removed promptly. Prolonged or repeated exposure with overstrength solutions may cause defatting of the skin, and/or slight irritation and dermatitis.



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

Inhalation: The product is unlikely to present any significant inhalation hazard at ambient temperatures. High temperatures or atomizing system may lead to generation of vapours, mists or fumes which could cause irritation to eyes and respiratory tract. Repeated excessive exposure to mists may cause damage.

Ingestion: The product has a low order of 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 digestion can be hazardous with possible resulatnt chemically induce pneumonia.

Note: Contamination of emulsions during use may introduce additional hazards: See section 16 (Other Information).

Ecological Information.

Water: the individual components range from readily to poorly biodegradable. Mineral oil itself has limited biodegradability when tested by method CEC L-33-T-82. The components are not expected to be highly toxic to aquatic life. If it released to water, the product may deplete the oxygen supply to bottom dwelling organisms.

Soil: 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. Some components may be capable of penetrating the soil to cause ground water contamination.

Disposal Considerations

All means of disposal should comply with local regulations and the environmental Protection Act 1990.

Dispose of protect and containers carefully and responsibly. Do not allow product to contaminate pounds, watercourses, soil or drains. Do not dispose of undiluted product or untreated solutions 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 authorized person/licensed waste disposal contractor.

Diluted Fluid: Dispose of via an authorized person/licensed waste disposal contractor. Alternatively, it may be possible to treat solutions in an appropriate effluent treatment facility (e.g. Chemical splitting or ultrafiltration). The water phase from such a system may contain dissolved salts, surfactants, traces hydrocarbons and other dissolved material. 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 incinerated or collected by waste disposal contractor.



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

Transport Information.

Classification: Not classified as dangerous for conveyance.

UN Number: N/A **Packaging** N/A

Shipping Name: N/A **Marine Pollutant:** No

IMO Class: N/A **ICAO/IATA:** N/A

ADR/RID: N/A

Regulatory Information.

EEC Classification: Xi - Irritant

Risk & Safety Phrases: R43 – May cause sensitiation by skin contact. R36/38 – Irritating to eyes and skin. S28 – After contact with skin, wash immediately with plenty of soap and water. S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

EC Directives: Framework Waste Directive, 91/156/EEC.

Statutory Instruments: The Health & Safety at Work, etc Act 1974, Consumer Protection Act 1987, Environmental Protection Act 1990, Control of Substance Hazardous to Health Regulations 1993.

Note: The above classification applies to the undiluted product as supplied. It does not apply when the product is diluted for use at the correct operating strength

Other Information.

(1) Other materials should not be added to the product or solutions unless recommended. (2) Solutions should be maintained at the recommended concentration in order to minimize any health hazards. In particular, water evaporation can lead to an increase in concentration, which may result in an increased likelihood of skin defatting and irritation. A refractometer can be used to give convenient check of solution strength. (3) Minimise tramp oil and other contamination; remove metallic swarf or other debris from machines at frequent intervals. (4) During machining, metallic particles from workpieces or tools can contaminate solutions. These may be abraded the skin with resultant increase in perceptibility to the inherent irritancy effect of the fluid. (5) During machining solutions may become contaminated with certain metals, which are present in the workpieces or tools. These may solubilise in the solutions. Some may also introduce increased risk to health if excessive exposure to mists occurs. (6) To help obtain optimum fluid performance and to reduce bacterial spoilage, a proper procedure should be implemented for regular draining and cleaning of machine tool coolant system.



OAK INDUSTRIAL SUPPLIES

"THE INDUSTRIAL SUPPLIES PEOPLE"

HAMILTON ROAD SUTTON IN ASHFIELD

NOTTINGHAMSHIRE NG17 5LN

TELEPHONE 01623 442222 FAX 01623 441234

Additional Information: the following references provided further information on specific aspects.

Legislation: Chemical (hazards, Information and Packaging) Regulations 1993

Environmental Protection Act 1990

Control Of Pollution Act 1974

The Environmental Protection (duty of care) Regulations 1991

Guidance:

Occupational Skin Diseases: Health and Safety Precautions (EH26)

Occupational Exposure Limits (EH40)

The Carcinogenicity of Mineral Oils (EH58)

Metalworking fluids Health Precautions (EH62)

Approved codes of practice (1) Control of substance hazardous to Health and (2)

Control of Carcinogenic Substances (L5)

Effects of mineral Oil on the skin (cautionary notice) (SHW 397)

Institute of Petroleum Code of practice for Metalworking Fluids (John Wiley & Sons)