Material Safety Data Sheet

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

Material Name	Lubrication Vanguard AW 68
Uses	Hydraulic Oil
Product Code	LUBE-VANGUARDAW68
Manufacturer/Supplier	**Lubrication Limited** Lubricant Distribution Centre Unit 3, Snibston Drive Coalville Leicestershire LE67 3NQ United Kingdom
Telephone	+44 (0) 1530 833899
Fax	+44 (0) 1530 813460
Emergency Telephone	+44 (0) 1530 833899
Email	technical@lubrication.net

2. COMPOSITION/INFORMATION ON INGREDIENTS

Base oil – highly refined (95% - 100%)

This product does not contain any hazardous ingredients at or above regulated thresholds.

3. HAZARDS INDENTIFICATION

This preparation is not classified as dangerous according to Directive 1999/45/EC as amended and adapted

Eye Contact	May cause mild eye irritation.
Skin Contact	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	Inhalation of oil mist or vapours at elevated temperatures may cause respiration irritation.
Ingestion	Ingestion may cause gastrointestinal irritation and diarrhoea.

4. FIRST AND MEASURES

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin Contact	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get

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	medical attention.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Advice to Physician	No action shall be taken involving any personal risk or without suitable training.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Suitable Extinguishing Media	Use dry chemical, CO_2, alcohol-resistant foam or water spray (fog).
Unsuitable Extinguishing Media	Do not use water jet.
Protective Equipment for Firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Hazards from the Substance or Mixture	In a fire or if heated, a pressure increase will occur and the container may burst
Hazardous Thermal Decomposition Products	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

Protective Measures – For Non-Emergency Personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Protective Measures – For Emergency Responders	If specialised clothing is required to deal with the spillage, take note of any information in Chapter 8 on suitable and unsuitable materials. See also Chapter 8 for additional information on hygiene measures.
Clean Up Method – Small Spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Clean Up Method – Large Spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
Additional Advice	

7. HANDLING AND STORAGE

General Precautions	Put on appropriate personal protective equipment (see Chapter 8).
Handling	Wash thoroughly after handling.
Storage	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Chapter 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Product Transfer	
Recommended Materials	
Unsuitable Materials	
Additional Information	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Occupational Exposure Limits

Material	Source	Type	ppm	mg / m^3	Notation
Base oil - highly refined	EH40-OES (United Kingdom)	TWA		5 (8 hours)	Oil mist, mineral
		STEL		10 (15 minutes)	Oil mist, mineral

Biological Exposure Index (BEI) – See reference for full details

No biological limit allocated.

Exposure Controls	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory

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	limits.
Hygiene Measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory Protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand Protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: Nitrile gloves.
Eye Protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.
Body Protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental Exposure Controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless to light yellow liquid
Odour	Mild
pH	Not available.
Initial Boiling Point and Boiling Range	Not available.
Pour Point	Not available.
Flash Point	210°C (Open Cup)
Upper/Lower Flammability or Explosion Limits	Not available.

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Auto-Ignition Temperature	Not Available.
Vapour Pressure	Not available.
Specific Gravity	0.88 @ 15.6°C
Density	880 kg / m^3 @ 15.6°C
Water Solubility	Insoluble in cold water.
N-Octanol/Water Partition Coefficient (log Pow)	Not applicable.
Kinematic Viscosity	68 mm^2 / s (cSt) @ 40°C
Vapour Density (air = 1)	Not available.
Evaporation Rate (nBuAc = 1)	Not available.

10. STABILITY AND REACTIVITY

Stability	The product is stable.
Conditions to Avoid	No specific data.
Materials to Avoid	Strong oxidizing materials.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Potential Acute Health Effects

Eye Contact	No known significant effects or critical hazards.
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin Contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	No known significant effects or critical hazards.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact	No specific data.
Inhalation	No specific data.
Skin Contact	Adverse symptoms may include the following: irritation, dryness, cracking
Ingestion	No specific data.

Potential Chronic Health Effects

Conclusion/Summary	Not available.
General	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental Effects	No known significant effects or critical hazards.
Fertility Effects	No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on knowledge of the components and the ecotoxicology of similar products. Unless indicated

otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Acute Toxicity	Not available.
Mobility	Not available.
Persistence/Degradability	Not available.
Bioaccumulation	Not available.
Other Adverse Effects	No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Material Disposal	The generation of waste should be avoided or minimized wherever possible. Waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Container Disposal	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Local Legislation	

14. TRANSPORT INFORMATION

Land (as per ADR classification): Not Regulated	Not available.
IMDG	Not available.
IATA (Country variations may apply)	Not available.
Additional Information	Not available.

Transport within user's premises:

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15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EC Classification	This product contains di-isononyl phthalate. These Phthalates shall not be used as substances or as constituents of preparations, at concentrations higher than 0.1% by mass of the plasticised material, in toys and childcare articles which can be placed in the mouth by children. Toys and childcare articles containing these phthalates in a concentration higher than 0,1 % by mass of the plasticised material shall not be placed on the market. The Commission shall re-evaluate, by 16 January 2010, the measures provided for in relation to this point in the light of new scientific information on such substances and their substitutes, and if justified, these measures shall be modified accordingly. For the purposes of this point 'childcare article' shall mean any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.
EINECS	Not determined.
TSCA	Not determined.

16. OTHER INFORMATION

Label Requirements	CAUTION! MAY CAUSE RESPIRATORY TRACT, EYE, AND SKIN IRRITATION.
HMIS® Rating	Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: B
SDS Version Number	1.0.1
SDS Effective Date	2013-12-01
SDS Revisions	1.0.1
SDS Distribution	Lubrication Limited
Disclaimer	To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.