

MATERIAL SAFETY DATA SHEET

PRODUCT NAME : MECHANICAL PUMP OIL - ULTRAGRADE 15,19,20,70

1. Product and Company Identification

Product name: Ultragrade 15, Ultragrade 19, Ultragrade 20, Ultragrade 70 Mechanical Pump Oils
Synonyms: Ultragrade 15: Super Vac fluid 15 Ultragrade 19: Super Vac fluid 19
 Ultragrade 20: Super Vac fluid 20 Ultragrade 70: None
Item Numbers: Ultragrade 15: H110-26-010, H110-26-011, H110-26-012, H110-26-013, H110-26-015
 Ultragrade 19: H110-25-010, H110-25-011, H110-25-012, H110-25-013, H110-25-015
 Ultragrade 20: H110-24-010, H110-24-011, H110-24-012, H110-24-013, H110-24-015
 Ultragrade 70: H110-28-013, H110-28-011, H110-28-010

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2. Composition/Information on Ingredients

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
Severely hydrotreated paraffinic oil and additives	100	-	Not applicable	Not applicable

*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive (67/548/EEC, as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

3. Hazards Identification

EMERGENCY OVERVIEW

Non hazardous in bulk liquid form at low to moderate temperatures. Prolonged/repeated skin contact may cause irritation/dermatitis. Heating to high temperature or mechanical actions may produce fumes which may cause irritation of the breathing passages.

For short and long term exposure effects see Section 11 Toxicological data.

Eye Effects: May cause irritation.

Skin Effects: Prolonged or repeated contact with skin may cause irritation and possible dermatitis.

Ingestion/Oral Effects: Low toxicity on ingestion, has laxative effect and is rapidly eliminated.

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Inhalation Effects: Negligible breathing hazard at normal temperatures (up to 38 °C/100 °F) or recommended blending temperatures. Elevated temperatures or mechanical action may form vapours, mists and fumes. Inhalation of oil mists or vapours from hot oil may cause irritation to the upper respiratory tract. Oil deposits in the lung may lead to fibrosis and reduced pulmonary functions.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	1	Health	1	0 = No Hazard
Flammability	1	Flammability	1	1 = Slight Hazard
Instability	0	Reactivity	0	2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe Hazard

4. First Aid Measures

Eyes: Flush eyes with large amounts of water until irritation subsides. If irritation persists get medical assistance. Keep eyelids open whilst flushing.

Skin: Flush with large amounts of water-use soap if available. Remove grossly contaminated clothing, including shoes, and launder before reuse.

Ingestion/Oral: If swallowed, do not induce vomiting. Keep at rest. Get prompt medical attention.

Inhalation: Using approved respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Keep at rest. Call for prompt medical attention.

Other Information: None.

5. Fire Fighting Measures

Extinguishing Media: Use water spray to cool surfaces exposed to fire. Extinguish with foam or dry chemical. Avoid spraying water directly into storage containers due to danger of boil over.

Fire and Explosion Hazard: Containers may explode if exposed to fire. Hazardous combustion products : carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NO_x), phosphorus oxides (PO_x), smoke and irritating fumes as result of incomplete combustion. Direct water stream may cause violent frothing.

Special Protective Equipment for Fire Fighters: No special protection required for small outdoor fires. Indoor fires & significant outdoor fires, wear a self-contained breathing apparatus (SCBA) which meets appropriate standards operated in positive pressure mode, and full turn out gear.

For Flammability Properties - see Section 9

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6. Accidental Release Measures

Remove/extinguish sources of ignition. Avoid inhalation and contact with skin and eyes. Stop the leak if it is safe/possible to do so. Use dykes to prevent spreading.

Use suitable inert absorbent materials to absorb spilled product. Dispose of collected product safely: see Section 13 "Disposal Considerations".

Avoid contaminating sewers, streams, rivers and other water courses with spilled product. Notify the appropriate authorities if significant contamination occurs.

7. Handling and Storage

Handling: Keep away from sources of ignition. Avoid contact with eyes and skin. Practice good hygiene. Wash hands after handling and before eating. Launder work clothes frequently. Do not reuse empty containers without commercial cleaning or reconditioning.

Storage: Combustible materials should be stored away from extreme heat and strong oxidising agents. Store in tightly closed containers in cool, dry and well ventilated areas. Electrically earth (ground) all equipment containing the material.

8. Exposure Controls/Personal Protection

Exposure Limits:

Ingredient	ACGIH - TLV -	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
Severely hydrotreated paraffinic oil	5 mg/m ³ - 8H TWA * 10 mg/m ³ - STEL (as oil mist, mineral)	5 mg/m ³ - 8 H TWA (as oil mist, mineral)	5 mg/m ³ - 8 H TWA 10 mg/m ³ - STEL (as oil mist, mineral)

* Recommendation by the manufacturer for oil mists : ACGIH TLV. TWA : 8h - 5 mg/m³.

Personal Protection:

Engineering Measures: Ensure good ventilation under all working conditions. Ensure that eyewash station and safety shower are close to working area.

Respiratory Protection: No special respiratory protection is normally required. For high airborne concentrations with inadequate ventilation, use an approved organic vapour cartridge respirator.

Hand/Skin Protection: For casual contact PVC gloves are suitable. For direct contact of more than 2 hours, Viton® or Nitrile gloves are recommended. Long sleeved clothing is recommended to minimise skin contact.

Eye/Face Protection: Wear chemical splash goggles in case of splashing.

Hygiene Measures: Practice good hygiene. Wash hands after handling and before eating

Other/General Protection: None.

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9. Physical and Chemical Properties

Appearance and Odour	Pale yellow, odourless liquid	Boiling point	Grades 15, 19 & 20: 380 / 716 Grade 70: 400 / 752	°C/°F
pH (as supplied)	No data available	Freezing Point	No data available	°C/°F
Solubility in Water	Insoluble in cold water	Auto Ignition	Grades 15, 19 & 20: 355 / 671 Grade 70: 365 / 689	°C/°F
Volatile Content by Volume	Non volatile	Flash Point	Grades 15, 19: >200 / 362 Grade 20: >230 / 448 Grade 70: >200 / 392	°C/°F
Specific Gravity	0.86 @ 20 °C (68 °F)			
Vapour Pressure (mbar)	Grade 15: 7.99×10^{-6} @ 25 °C Grade 19: 1.33×10^{-7} @ 25 °C Grade 20: 2.66×10^{-7} @ 25 °C Grade 70: 7.99×10^{-7} @ 25 °C	Vapour Pressure (Torr)	Grade 15: 6.0×10^{-6} @ 77 °F Grade 19: 1.0×10^{-7} @ 77 °F Grade 20: 2.0×10^{-7} @ 77 °F Grade 70: 6.0×10^{-7} @ 68 °F	

10. Stability and Reactivity

Stability:	Stable.
Material/Conditions to Avoid:	Strong oxidising agents. Excessive heat and formation of oil mist.
Hazardous Decomposition:	Carbon dioxide (CO ₂), carbon monoxide (CO), nitrous oxides (NO _x), phosphorus oxides (PO _x), and smoke on combustion.
Hazardous Polymerisation:	Will not occur.

11. Toxicological Information

For a comprehensive description for the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation refer to Section 3 Hazards Identification.

Animal data:

LD50 value:	Oral : 5000 mg/kg (rat)	Dermal : >2000 mg/kg (rabbit),
LC50 value:	Inhalation : >5200 mg/m ³ /4h (rat)	Dermal/eye irritation : non irritant to rabbit

Carcinogenicity:

No known carcinogenic, teratogenic or mutagenic effects.

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12. Ecological Information

This product has the potential for degradation by bacteria over an extended period of time. Based on toxicity of similar products, base oils have none to low acute toxicity towards aquatic organisms. 57-88% of base oils are biodegradable in 28 days.

Potential for food chain concentration or accumulation is low.

13. Disposal Considerations

Used material and empty containers should be disposed of through a suitably qualified or licensed waste contractor. Care should be taken to ensure compliance with national and local regulations. This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers.

14. Transport Information

This product is not classified as dangerous under transport regulations.

PARAMETER	EUROPEAN	CANADIAN TDG	UNITED STATES DOT
Proper Shipping Name	Not applicable	Not applicable	Not applicable
Hazard Class	Not applicable	Not applicable	Not applicable
Identification Number	Not applicable	Not applicable	Not applicable
Shipping Label	Not applicable	Not applicable	Not applicable

15. Regulatory Information

European Regulatory Information

This product has been classified in accordance with the Dangerous Substances Directive (67/548/EEC, as amended) and the Preparations Directive (88/379/EEC, as amended), implemented in the UK as the Chemical (Hazard Information and Packing) Regulations 1994 (CHIP, as amended).

Classified as dangerous to supply : No

Risk Phrases : Not applicable

Safety Phrases : Not applicable

Symbols : None

United States Regulatory Information

This material is on the Toxic Substances Act Inventory (TSCA-USA).

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

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Canadian Regulatory Information

WHMIS Classification: Not Classified

This material is on the Domestic Substances List (DSL-Canada)

16. Other Information

This MSDS is compiled in accordance with ANSI Z400.1 and the EU Safety Data Sheet Directive 91/155/EEC.

Sources of information for this data sheet:

- Multisol Limited "ULTRAGRADE 15" Material Safety Data Sheet. Revision 02. Date: 12th September 2001.
- Multisol Limited "ULTRAGRADE 19" Material Safety Data Sheet. Revision 02. Date: 12th September 2001.
- Multisol Limited "ULTRAGRADE 20" Material Safety Data Sheet. Revision 02. Date: 12th September 2001.
- Multisol Limited "ULTRAGRADE 70" Material Safety Data Sheet. Revision 02. Date: 12th September 2001.

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists; **ANSI** - American National Standards Institute; **Canadian TDG** - Canadian Transportation of Dangerous Goods; **CAS** - Chemical Abstracts Service; **Chemtrec** - Chemical Transportation Emergency Center (US); **CHIP** - Chemical (Hazard Information and Packing); **DSL** - Domestic Substances List; **EH40 (UK)** - HSE Guidance Note EH40 Occupational exposure limits; **EPCRA** - Emergency Planning and Community Right-to-Know Act; **HMIS** - Hazardous Material Information Service; **LC** - Lethal Concentration; **LD** - Lethal Dose; **NFPA** - National Fire Protection Association; **OSHA** - Occupational Safety and Health Administration, US department of Labour; **PEL** - Permissible exposure limit; **SARA (Title III)** - Superfund Amendments and Reauthorization Act; **SARA 313** - Superfund Amendments and Reauthorization Act, Section 313; **SCBA** - Self-Contained Breathing Apparatus; **STEL** - Short Term Exposure Limit; **TLV** - threshold limit value; **TSCA** - Toxic Substances Control Act Public Law 94-469; **TWA** - Time-Weighted Average; **US DOT** - US Department of Transportation; **WHMIS** - Workplace Hazardous Materials Information System.

Revisions:

Nov 2007 - Data Sheet updated to reflect the latest supplier safety information.

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