



1. 1. PRODUCT IDENTIFICATION AND COMPANY

Issue Date	01 Feb, 2021
Product Name	ENERGEO HYDRAULIC OIL CRATOS AW 46
Company	Filtec Pte. Ltd. 14 Ang Mo Kio St 63, Singapore 569116 Tel: (65) 6483 7530 Fax: (65) 6483 7520
Emergency Contact No.	65---6383 7524 (Singapore), or Local Supplier

2. COMPOSITION

Base Oil	90 – 95 %
Additives	5 – 10 %

3. HAZARDS IDENTIFICATION

Human Health	Product is not hazardous
Eye Contact	Slightly irritant
Inhalation	Repeated and prolonged over---exposure to oil mists may cause irritation
Ingestion	Minimal toxicity
Safety Hazards	Not classified as flammable but will burn
Environmental Hazards	Not readily biodegradable

4. FIRST AID

Eye Contact	Flush eyes with large amount of water until irritation subsides. If irritation persists, get medical attention
Skin Contact	Flush with large amount of water; use soap if available. Remove contaminated clothing. If irritation persists, get medical attention
Inhalation Ingestion	Remove to fresh air. If rapid recovery does not occur, get medical attention
Ingestion	Do not induce vomiting. If rapid recovery does not occur, get medical attention

5. FIRE SAFETY

Flash Point	> 210 C
Flammable Limit	Not classified as flammable but will burn. Hazardous combustion products may include carbon monoxide, oxides of sulfur, and unidentified organic and inorganic compounds.
Autoignition Temp	> 305 C
Specific Hazards	Not classified as flammable but will burn. Hazardous combustion products may include carbon monoxide, oxides of sulfur, and unidentified organic and inorganic compounds.
Fire Fighting	Use dry chemical, foam or carbon dioxide to extinguish fire. Water may cause splattering or frothing. Use water to cool and protect fire exposed material. Wear protective equipment during fire fighting.

6. ACCIDENTAL RELEASE MEASURES

Clean--up Procedure	Stop the source of leak or release and contain spill if possible. Cover spill with generous amount of inert absorbent material such as sand or earth. Sweep up and remove to suitable, clearly marked containers for disposal in accordance with local regulation.
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7. HANDLING AND STORAGE

Handling	Handling temperatures should not exceed 70°C. Wear proper safety protective equipment. Wash hands thoroughly after handling. Water contamination and spillage should be avoided.
Storage	Storage temperatures should be maintained between 0°C to 50°C. Odorous and toxic fumes may be evolved from decomposition of product if stored above the safe temperature

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits	Threshold Limit Values for oil mist is recommended to be controlled at 5 mg/m ³ or lower for exposure of 8 hours daily.
Ventilation	Exhaust ventilation to keep below exposure limits.
Eye Protection	Wear safety glasses or face shields if splashing is likely to occur
Skin Protection	Avoid repeated and prolonged contact with product. Use oil resistant gloves
Respiratory Protection	Not normally required unless in confined space
Body Protection	Use proper protective equipment to avoid contact. Wear PVC apron if splashes are likely to occur

9. PHYSICAL AND CHEMICAL PROPERTIES

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

TEST DESCRIPTION	UNIT	METHOD	TYPICAL RESULTS
Appearance	-	Visual	B & C
Density @ 15 °C	g/ml	D 4052	0.876
KV @ 40 C	cSt	D 445	46.2
KV @ 100 C	cSt	D 445	6.78
Viscosity Index		D 2270	101
Color		D 1500	<1.0

10. STABILITY AND REACTIVITY

Stability	Product is stable under normal use conditions
Thermal Decomposition	Carbon monoxide, carbon dioxide, oxides of sulfur and nitrogen and organic and inorganic compound may evolve when subject to heat or combustion
Hazardous Polymerization	Will not occur under normal conditions
Incompatible Materials	Strong oxidizing agents. Strong acids

11. TOXICOLOGICAL INFORMATION

Basis	No toxicological data is available for this product. Information is provided based on the additives, other components and base stock used
Acute Exposure Oral	LD 50 expected to be above 2000 mg/kg
Acute Exposure Skin	LD 50 expected to be above 2000 mg/kg
Inhalation	Repeated or prolonged exposure to oil mists may cause irritation
Eye Irritation	Slightly irritant
Skin Irritation	Not a skin irritant unless repeated or prolonged contact
Respiratory Irritation	Slight irritant
Carcinogenicity	No data to suggest that product is carcinogenic
Mutagenicity	No data to suggest that product is mutagenic



Other Information

Brief contact with used oil is not expected to have serious effect in humans if the oil is removed thoroughly by washing with soap and water. Used engine oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they present risks to health and the environment on disposal. All used oils should be handled with caution and skin contact should be avoided.

12. ECOLOGICAL INFORMATION

Basis	No ecological data is available for this product. Information is provided based on the additives, other components and base stock used.
Mobility	Liquid under most environmental conditions. Floats on water. It is absorbed by soil and will not be mobile
Persistence/ Degradability	Not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment
Bioaccumulation	Has the potential to bioaccumulate
Ecotoxicity	Poor soluble mixture. Practically non-toxic to aquatic organisms. May cause physical fouling of aquatic organisms

13. DISPOSAL CONSIDERATION

Product Disposal	Used or waste oil should be recycled or disposed off in conformity to local disposal regulations. Contact local authorities for approved disposal contractor.
Container Disposal	Empty drums should be completely drained and sent to a drum reconditioner or properly disposed of. Non-reusable small containers should be recycled or disposed of. Ensure conformity to local disposal regulations.

14. TRANSPORT INFORMATION

General Information Not dangerous for conveyance under UN, IMO, ADR/RID and IATA/ICAO codes.

15. REGULATORY INFORMATION

Not Applicable.

16. OTHER INFORMATION

The above information is based on data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. Therefore, no warranty either express or implied of merchantability or fitness for particular purpose is made with respect to the product or the information contained herein