

**MATERIAL SAFETY DATA SHEET**  
**ARDROX HF-P**

(Please ensure that this MSDS is received by appropriate person)

Ref.No: MS138	DATE: January 2018	Version:02	Protective Clothing	Be sure to use an approved / certified respirator or equivalent.
<b>1 PRODUCT AND COMPANY IDENTIFICATION</b>			<b>Special Fire-Fighting Procedures</b>	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
PRODUCT IDENTIFICATION			<b>Specific Hazards</b>	AEROSOLS: In a fire, beware of exploding aerosols cans. Container explosion may occur under fire conditions or when heated. Vigorously supports combustion. The vapour is heavier than air and may spread over a wide area leading to the risk of remote ignition and flashback. The aerosol package comprises the product and a non-flammable propellant in a pressurised container.
Product Name	ARDROX HF-P			
Chemical Formula	Formulated chemical			
Company Identification	AFROX Malawi limited Johnstone Road Ginnery Corner Blantyre Tel. No: +265(1)871 611 Fax No: +265(1) 871 260			
<b>EMERGENCY NO.:</b>	<b>+265 871 611 (24 Hours)</b>			
<b>2 HAZARDS IDENTIFICATION</b>			<b>Hazardous Thermal De-Composition Products.</b>	Carbon oxides (CO, CO2) nitrogen oxides (NO, NO2).
Chemical Hazards	N/A			
Skin Contact	Irritant			
Ingestion				
<b>3 COMPOSITION / INFORMATION ON INGREDIENTS</b>			<b>6 ACCIDENTAL RELEASE MEASURES</b>	
Chemical Name (1)	Hydrocarbon		<b>Personal precautions</b>	Splash goggles. Overalls. Boots. Gloves.
Chemical Family			<b>Environmental precautions</b>	Eliminate all ignition sources. Contain the spillage to prevent entry into drains or waterways.
CAS No.	8032-32-4		<b>Spillages</b>	Absorb with DRY earth, sand or other non-combustible material. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Notify the local authority if a spillage of large quantity into drains or waterways occurs.
Concentration (%)	45-60			
EC No.	232-453-7			
Classification	Carc. Cat. 1; R45 Xn; R65			
Chemical Name (2)	Dearomatized hydrocarbon			
Chemical Family				
CAS No.	8008-20-6			
Concentration (%)	25-35			
EC No.	232-366-4			
Classification	R10 Xn; R20 Xi; R36/R38			
UN No.				
ERG No.	126			
Hazchem Warning				
<b>4 FIRST AID MEASURES</b>			<b>7 HANDLING AND STORAGE</b>	
<b>Eye Contact</b>	Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention. Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.		<b>Handling</b>	Keep locked up Keep away from heat. Keep away from source of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas / fumes /vapour / spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.
<b>Skin Contact</b>	Wash with soap and water. Get medical attention if irritation develops.		<b>Storage</b>	Keep in a cool, well-ventilated place. This product should be stored away from oxidizing agents and foodstuffs. Keep in the original container in an upright position. Use original container.
<b>Ingestion</b>	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention. Have conscious person drink several glasses of water.			
<b>Inhalation</b>	Allow the victim to rest in a well-ventilated area. Seek immediate medical attention. If the victim is not breathing, perform mouth-to-mouth resuscitation.			
<b>Effects and Symptoms:</b>			<b>8 EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
<b>Inhalation</b>	Hazardous in case of inhalation.		<b>Occupational Exposure</b>	Ingredient name: Ardrox HF-P: ACGIH TLV (United States 2003). Notes: Weight averaged theoretically calculated. TWA: 200mg/m <sup>3</sup> 8 hour(s).
<b>Ingestion</b>	Hazardous in case of ingestion.		<b>Personal Protection</b>	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using toilet, and at end of the day. Good general ventilation should be sufficient.
<b>Skin Contact</b>	Hazardous in case of skin contact (irritant, permeator). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.		<b>Engineering Control measures Hazards Respiratory</b>	Vapour respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
<b>Aggravating conditions</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.		<b>Skin &amp; Body Hands</b>	Overalls Gloves
<b>5 FIRE FIGHTING MEASURES</b>			<b>Eyes</b>	Safety glasses
<b>Extinguishing media</b>	COMBUSTIBLE SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Do not use water jet. Use DRY chemical powder, CO2, water spray or foam.		<b>9 PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Emergency Actions</b>			<b>PHYSICAL DATA</b>	

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Density	0.85 to 0.87g/cm <sup>3</sup>
Vapour Density	>1.0
Colour	Clear dark red
Odour	Characteristic solvent odour
Odour Threshold	>1 ppm
Physical state	Dark red liquid
Boiling Point	100°C
Melting Point	<-10°C
Solubility	Miscible with hydrocarbons and halogenated hydrocarbons. Insoluble in cold water, hot water.
Octanol / water partition coefficient	The product is more soluble in oil.
pH	Not applicable
Flash point	>55°C
Fire Hazards in Presence of various Substances	Highly flammable in presence of open flames and sparks. Flammable in presence of heat, of oxidizing materials, of combustible materials. Slightly flammable to flammable in presence of reducing materials.
Auto-ignition temperature	The lowest known value is 229°C (444.2°F) (Kerosene).
Explosive properties	Not applicable.
Lower explosion Limit	LEL = 0.6%. UEL = 7.0%.

**10 STABILITY AND REACTIVITY**

<b>Stability</b>	The product is stable.
<b>Conditions to avoid</b>	No additional remark.
<b>Incompatible Materials</b>	Reactive with oxidizing agents, acids, alkalis.
<b>Hazardous Decomposition Products</b>	Carbon oxides (CO, CO <sub>2</sub> ) nitrogen oxides (NO, NO <sub>2</sub> ).

**11 TOXICOLOGICAL INFORMATION**

Acute Toxicity	Acute oral toxicity (LD50): >2400mg/kg (Rat – Weighted average theoretically calculated). Acute dermal toxicity (LD50): >2000mg/kg (Rat). (KEROSENE, dearomatized). Acute toxicity of the vapour (LC50): 5000mg/m <sup>3</sup> 4 hours (Rat). (KEROSENE, dearomatized).
Skin	Hazardous in case of skin contact (irritant).
Chronic Toxicity	Repeated skin exposure can produce local skin destruction, or dermatitis.
Carcinogenicity	Classified 2A (Probable for human) by IARC (Kerosene).
Mutagenicity	
Reproductive Hazards	
Teratogenic	

**12 ECOLOGICAL INFORMATION**

<b>Persistence / Degradability</b>	Expected to be slowly bio-degradable. Possibly hazardous short-term degradation products are not likely. Products of bio-degradation: Oxidises rapidly by photochemical reactions in air.
<b>Ecotoxicity</b>	Harmful to aquatic life in high concentrations.

**13 DISPOSAL CONSIDERATIONS**

<b>Disposal Methods</b>	Prevent entry into waterways, sewers and confined areas: dike if necessary. Product must be removed by a reputable waste disposal company. Aerosol cans (used or unused) should be disposed of, without puncturing, via a licensed waste disposal contractor.
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<b>Disposal of packaging</b>	DO NOT RE-USE CONTAINERS. Puncture all plastic containers. Flatten all metal containers. Shred all polywoven bags.
<b>Hazardous Waste</b>	The classification of the product may meet the criteria for a hazardous waste.

**14 TRANSPORT INFORMATION**

**ROAD TRANSPORTATION**

UN No.	1993 – Liquid. 1950 – Aerosols.
ERG No	
Hazchem warning	
ADR/RID Class	Flammable liquid with a flash point between 21°C (70°F) and 100°C (212°F).

Packaging Group	11
Label	Flammable
Proper Shipping Name	FLAMMABLE LIQUIDS, N.O.S. (Petroleum ether, KEROSENE, dearomatized)

**SEA TRANSPORTATION**

UN No.	1993 – Liquid. 1950 – Aerosols.
IMDG Class	3
Packaging group	11
Label	Flammable
Proper Shipping Name	FLAMMABLE LIQUIDS, N.O.S. (Petroleum ether, KEROSENE, dearomatized)

**AIR TRANSPORTATION**

UN No.	1993 – Liquid. 1950 – Aerosols.
ICAO/IATA Code	
Class	3 : Flammable Liquid
Packaging group	11
Label	Flammable
Proper shipping Name	FLAMMABLE LIQUIDS, N.O.S. (Petroleum ether, KEROSENE, dearomatized)

**15 REGULATORY INFORMATION**

EEC Hazard class	Irritant.
National legislation	OHSact and Regulations 85 of 1993.
Reference	SANS 10234 and its supplement.

**16 OTHER INFORMATION**

Other Special Considerations: No known data.

**EXCLUSION OF LIABILITY**

Information contained in this publication is accurate at the date of publication. The company does not accept liability arising from the use of this information, or the use, application, adaptation or process of any products described herein.