ENOC LUBRICANTS

Material Safety Data Sheet

Product Code: 248002	Issue : 2	Date: 18/05/2012
PRODUCT LABELS		
LABELLING (standard or EU)	Not applicable	
TRANSPORT LABELLING :	Not applicable	

1. Product and company identification

Commercial name:	ENOC CIRCULA 32
Product application:	Lubricant for circulating systems
Company name:	ENOC International Sales LLC
Address:	Sheikh Rashid Road
	P.O. Box 6442
	DUBAI, U A E
Emergency Telephone number:	+ 971 4 3374400
Fax:	+ 971 4 3134616

2. Composition / information on ingredients	
PREPARATION	Blended with mineral base oil SN 150 CAS 64742-65-0 at 99.42% with additive concentrate at 0.58%
Chemical nature:	Petroleum-derived severely refined mineral-base product
	in which the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is
	above 3%
Subtances contributing to hazards :	None to our knowledge, in normal use
Impurities contributing to hazards:	None to our knowledge
3. Hazard identification	
- Adverse human health effects :	Under normal conditions of use, the product holds no danger of intoxication
- Environmental effects :	Don't dispose of this product into the environment
- physical and chemical hazards :	No specific risk of fire or explosion under normal contitions of use

4. First-aid measures

IN CASE OF SERIOUS MANIFESTATIONS, CALL IN A DOCTOR OR EMERGENCY MEDICAL CARE

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Route of exposure :		
- Inhalation :	Inhalation of heavy concentrations of vapour, fumes	s or spray, may cause mild irritation of the throa
	Transport the person into fresh air, keep warm and a	allow to rest
- Contact with the skin :	Immediately remove all soiled or stained clothing	
	Wash the affected area immediately and repeatedly	with soap and water.
	If the skin is exposed to high-pressure spray, the pro-	oduct may enter the human organism. In all such
	cases the affected person must be taken to hospital,	even if no sign of injury can be detected
- Contact with the eyes :	Keep eyes open and rinse immediately and repeated	ly with water for at least 15 minutes
- Ingestion :	Possible risk of vomiting and diarrhoea	
	Do not induce vomiting to avoid the risk of aspiration	on into the respiratory tract
	Give nothing to drink	
- Aspiration :	If the product is believed to have entered the lungs (in case of vomiting, for example), take the
	person to hospital for immediate care	

Flash point:	See heading 9
Fire extinguishers:	
- suitable :	Foam, carbon dioxide (CO2), powder
- not suitable :	do not use water jets (stick jets) for extinguishing fire since they could help to spread the flames.
Specific hazards:	Incomplete combustion and thermolysis produce toxic gases such as CO, CO2, various
	hydrocarbons, aldehydes and soot. These are highly dangerous if inhaled
Firefighter protection:	An insulated breathing apparatus must be worn in confined premises with heavy concentrations of
	fumes and gases

6. Accidental release measures

See also heading 8 and 13	
After spillage / leakage	
- on soil	Surfaces on which the product has been spilled may become slippery
	Avoid discharge of the material in a stream or a sewer or cause ground contamination.
	recovery by physical means
	In the event of a major spill, inform the competent authorities if the situation cannot be brought
	under control rapidly and efficiently
- on water	Use floating absorbent material to be removed mechanically
	If the material has been discharged into a stream or a sewer, inform the authorities of the possible
	presence of floating materials

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7. Handling and storage		
HANDLING		
- Technical measures :		
. prevention of user exposure	Provide adequate ventilation in case of the potential for	mation of vapour, fumes, mist or spray
	Take all measures to reduce the risk of exposure, in par	rticular to used or waste product
	Keep away from flammable material; keep away from	food and beverages
. Prevention of fire and explosion	Empty containers may contain flammable or explosive	vapours
	There is a fire hazard associated with rags, paper or any	other material used to remove spills which
	become soaked with product	
	Avoid accumulate of these: they are to be disposed off s	safely after use
- Precautions :	Avoid static electricity build up with connection to eart	h.
	Set up machinery and equipment so as to avoid the risk	of accidental spills or splashes onto hot
	machine parts and electrical contacts (on joint failure, f	for example)
- Safe handling advice :	Avoid contact with strong oxidizers.	
	Use only hydrocarbon-resistant containers, joints, pipes	etc
STORAGE		
- Technical measures :	Make the necessary arrangements and take all measure	s to prevent water and ground pollution
- Storage conditions :		
. Suitable	Store at room temperature, protected against contact wi	th water and moisture, and away from any
	source of ignition	
	Keep containers closed when not in use	
. To be avoided	Do not store exposed to the elements	
- Incompatible products :	Dangerous reaction with strong oxidizing agents	
- Packaging materials :		
. Recommended	Use only hydrocarbon-resistant containers, joints, pipes	, etc.
	Keep in original container if possible	

8. Exposure controls / personal protection

Engineering measures:	Use the product in well-ventilated premises
	When working on enclosed place (tanks, reservoirs), make sure that atmosphere is not sufocating
	and/or wear recommend eqipment
- Control parameters:	
. Occupational exposure limit	. oil mist : 10mg/m3, for 15 minutes
	. oil mist : 5mg/m3, for 8 hours
Personal protective equipment	
- Hand protection:	Impermeable hydrocarbon-proof gloves
	recommended material: nitrile, neoprene
- Eye protection:	Goggles, in case of splashing

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- Skin and body different hand protection:	As required, wear a face mask, hydrocarbon-proof cloth	ing, and safety boots (when handling drums)
	Don't wear ring, watch or similar thing which will be at some skin diseases	
Industrial hygiene	Avoid prolonged and repeated contact with the skin, esp	pecially with used or waste product
	Immediately remove all soiled or stained clothing.	
	If the product comes into contact with the skin, wash th	e affected area immediately and repeatedly
	with soap and water	
	Use no abrasives, solvents or petroleum spirit	
	Do not use cloths stained with the product to dry hands	
	Dont put the product-soaked rags in the pockets of world	king clothes
	Do not eat, drink or smoke while handling the product	

9. Physical and chemical properties

Appearance:	
- Physical state:	Liquid
- Colour:	Yellow.
Odour:	Characteristic
pH:	Not applicable
Specific temperatures	
of change in state	
- Flow point:	< - 9 °C (ASTM D 97).
Flash point:	> 210 °C (ASTM D 93)
Auto-ignition temperature:	> 250°C (ASTM E 659)
	This temperature may be significantly lower under particular conditions (oxidation on high surface
	areas)
Explosion limits:	The lower flammable limit of oil mist is reached at concentrations in the range of 45 g/m ³ .
Density:	About 872kg/m3 at 15°C
Solubility:	
- in water:	Insoluble and immiscible.
- in organic solvents:	Soluble in many common solvents
- Viscosity:	Kinematic viscosity at 40 °C : approx 32 mm ² /s.
Log P n-octanol / water at 20°C	mineral oil > 6

10. Stability and reactivity

Stability:	The product is stable under normal temperatures of storage, handling and use
Dangerous reactions:	Not dangerous reaction known under normal conditions of use, to refer to the technical notice
- Conditions to avoid:	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity
- Materials to avoid:	Avoid contact with strong oxidizing

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Dangerous decomposition products:	Incomplete combustion and thermolysis produce more or less toxic gase hydrocarbons, aldehydes and soot	s such as CO, CO2, various
11. Toxicological information		
ACUTE TOXICITY/LOCAL EFFECTS		
- Inhalation:	Risk is improbable under normal conditions of use	
	Inhalation of important concentration of vapour or aerosols may cause in	rritation of the upper
	respiratory tract.	
- Contact with the skin:	Risk is improbable under normal conditions of use	
- Ingestion:	In case of ingestion of small quantities, no important effect observed. in	case of ingestion of larger
	amounts: abdominal pain, diarrhoea,	
SENSITIZATION	To our knowledge, the product dont induce sensitization	
CHRONIC TOXICITY OR LONG-TERM TOXICITY		
- Contact with the skin:	Characteristic skin affections (oil blisters) may develop following prolo	nged and repeated exposure
	through contact with stained clothing	
- Carcinogenecity :	this product is not regarded as carcinogenic.	
12. Ecological information		
Mobility:		
- Air:	there is a slow loss by evaporation.	
- Ground:	Given its physical and chemical characteristics, the product generally sh	ows little mobility in the
Ground.	ground	ows nuce mobility in the
- Water:	The product is insoluble; it spreads on the surface of the water	
Persistence and degradability:	Experimental data on the finished product are not available	
reisistence and degradability.	However, the "mineral oil" portion of the virgin product is intrinsically l	niodogradablo
	Particular ingredients may not be biodegradable	Jouegradable
Fastavisity	6 , 6	
Ecotoxicity:	The virgin product is considered to present no danger for land-growing of It is considered to present a little danger for aquatic life.	organisms.
	no information available for used product	
13. Disposal considerations		
Waste disposal :	Dispose in a safe manner in accordance with local/national regulations	
	If need be, collection by an authorized waste contractor and regeneration	n or incineration in an
	approved installation	
Used packaging disposal :	Conform to the regulation in effect	
14. Transport information		
UN Number :	unregulated	
Road (ADR) / Rail (RID)/ River (ADNR)	Not restricted for transport.	
Nuau $(ADR) / Raii (RID) / Rivel (ADNR)$	not restricted for transport.	

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Marine (IMO-IMDG)	Not restricted for transport.	
Airline (ICAO / IATA)	Not restricted for transport	
5. Regulatory information		
EUROPEAN REGULATIONS		
EUROPEAN REGULATIONS * EC labeling :		
	None	
* EC labeling :	None None	

16. Other information

This data sheet conforms to standards defined by directive 93/112/EEC

"This Safety Data Sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of ou knowledge at the date indicated hereabove.

It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.

The information given herein in no way dispenses the user from knowing and applying all provisions regulating his or her activity. The user bears sole liability for the precautions required when using the product.

The regulatory texts indicated herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive.

It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned."

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