

	Document Type:	<b>Material Safety Data Sheet</b> Conforms to ISO 11014-1
	Title:	<b>EMULSIFIER (E23)</b>

### 1. Identification of the product and Company Identification

<b>Product Name</b>	Emulsifier E23	<b>Manufactured/ supplied by</b>
<b>Product Type</b>	Emulsion	<b>BME</b>
<b>Synonyms</b>	None	A member of Omnia Group (Pty) Ltd
<b>Chemical Formula</b>		P.O. Box 70040
<b>Emergency telephone number</b>	<b>(+27) 011608-3300</b>	Bryanston
		South Africa 2021
		Tel: 27 11 7098791
		Fax: 27 11 4633023

### 2. Composition/information on ingredients

#### Substance/preparation:

Chemical name*	CAS No	%	EC Number	Classification
Europe Phosphoric Acid alkyl	Confidential	5-15		R36/38
*See Section 16 for the full text of the R Phrases declared above				

### 3. Hazards identification

This substance is classified as dangerous according to Directive 67/548/EEC and its amendments

<b>Classification</b>	Xi - R36/38
<b>Additional hazards</b>	No additional data
<b>Effects and symptoms</b>	In case of eye contact - can cause burning, tearing and redness.
<b>Aggravating conditions</b>	Can cause skin burns

See toxicological information (section 11)

### 4. First aid measures

#### First aid measures

<b>Inhalation</b>	: Remove to a well-ventilated area and keep at rest in a position comfortable for breathing. If breathing difficulties persist – seek medical attention / call poison centre
<b>Ingestion</b>	: DO NOT induce vomiting, immediately seek medical attention / call poison centre
<b>Skin contact</b>	: Immediately remove contaminated clothing and wash affected area with soap and rinse with water. Seek medical attention / poison centre
<b>Eye contact</b>	: Check for and remove any contact lenses if present. In case of contact immediately flush eyes with plenty of water for at least 20 minutes. Cold water may be used. Seek medical attention / or contact poison centre
<b>Note to physician</b>	: No specific treatment, treat symptomatically.
<b>Protection of first-aiders</b>	: No additional remark.

### 5. Fire-fighting measures

#### Extinguishing media

<b>Suitable</b>	: Use CO <sub>2</sub> , Dry chemical powder or suitable foam extinguishing agent. Water can be used to cool and protect exposed material
<b>Flash point</b>	: 170°C, 338°F PMCC
<b>Unusual fire/explosion hazards</b>	: Not determined.
<b>Special fire fighting procedures</b>	: Recommend wearing self-contained breathing apparatus.
<b>Protection of fire fighters</b>	: Self-contained breathing apparatus. Wear overalls, gloves, boots and eye protection as a minimum.

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## 6. Accidental release measures

<b>Personal precautions</b>	:	Overalls buttoned to the neck and wrist. Rubber boots. Gloves. Eye protection. Suggested protective clothing might not be sufficient.
<b>Environmental precautions</b>	:	Ventilate areas if spilled in confined space or other poorly ventilated areas. Prevent spillage entry into sewers, waterways, dispose of in accordance with national or local environmental regulations. If spill occurs on roadside, pick-up free liquid for recycle, and/or disposal, using a professional registered waste disposal company. Use appropriate tools to collect into suitable containers. Residual can be adsorbed on inert material.

**Note:** See section 8 for personal protective equipment and section 13 for waste disposal.

## 7. Handling and storage

<b>Handling</b>	:	Do not breathe dust or mist. Wash thoroughly after handling. : Launder contaminated clothing before re-use.
<b>Maximum Handling Temperature</b>	:	Not determined
<b>Pumping Temperature</b>	:	Not determined
<b>Storage</b>	:	Store in steel drums. Keep containers closed when not in use. DO NOT discharge into drains or the environment. Dispose to an authorised waste site. Use appropriate containment to avoid environmental contamination. Empty container contains product residue, which may exhibit hazards of product. No special storage requirements required.
<b>Maximum Storage Temperature</b>	:	Not determined
<b>Loading Temperature</b>	:	Not determined
<b>Packaging materials</b>	:	Store in steel drums.
<b>Storage procedures</b>	:	No special storage precautions required.

## 8. Exposure controls/personal protection

<b>Exposure Limits</b>	:	None established
<b>Engineering measures</b>	:	Use with adequate ventilation
<b>Gloves</b>	:	Use Nitrile or neoprene gloves
<b>Eye Protection</b>	:	Chemical goggles or face shield
<b>Respiratory Protection</b>	:	Use NIOSH/MSHA approved respirator with an organic vapour and dust/mist cartridge if the recommended exposure limit is exceeded. Use NIOSH/MSHA approved disposable dust/mist mask.

### Occupational exposure limits:

<b>Ingredient name</b> Contains mineral oil	<b>Occupational exposure limits</b> Under conditions which may generate mists, observe the OSHA PEL of 5mg per cubic meter, ACGIH STEL of 10mg per cubic meter.
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<b>Recommended monitoring procedures</b>	:	No additional information
<b>Personal protective equipment</b>	:	
<b>Respiratory system</b>	:	No
<b>Skin and body</b>	:	Protective clothing to minimise skin contact
<b>Hands</b>	:	Chemically resistant gloves
<b>Eyes</b>	:	Eye protection (safety goggles / glasses)

## 9. Physical and chemical properties

<b>Flash point</b>	:	170°C, 338°F PMCC (Typical)
<b>Flammability Level Upper/Lower</b>	:	Not determined
<b>Auto-ignition temperature</b>	:	Not determined
<b>Explosive properties</b>	:	Non-explosive (Material does not have explosive properties)
<b>Vapour pressure</b>	:	Not determined
<b>pH</b>	:	Not determined
<b>Specific Gravity</b>	:	0.94 (20°C)
<b>Density (Bulk)</b>	:	Not determined
<b>Solubility - Water</b>	:	Insoluble
<b>Percent Solid</b>	:	Not determined
<b>Percent Volatile</b>	:	Not determined
<b>Volatile Organic Compound</b>	:	Not determined
<b>Vapour Density</b>	:	Not determined
<b>Evaporation rate</b>	:	Not determined
<b>Odour</b>	:	Mild
<b>Physical state</b>	:	Brown liquid
<b>Colour</b>	:	Brown
<b>Viscosity</b>	:	750 Centistokes (20°C) 48 Centistokes (100°C)

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<b>Odour threshold</b>	:	Not determined
<b>Boiling point</b>	:	Not determined
<b>Pour Point Temperature</b>	:	-27°C, -17°F
<b>Melting / Freezing point</b>	:	Not determined
<b>Fire hazards in presence of various substances</b>	:	
<b>Neuro toxicity</b>	:	Not available

<b>10. Stability and reactivity</b>		
<b>Stability</b>	:	Material is normally stable at moderately elevated temperature and pressures.
<b>Decomposition Temperature</b>	:	Not determined
<b>Incompatibility</b>	:	Oxidising agents
<b>Hazardous Polymerisation</b>	:	Will not occur
<b>Thermal Decomposition</b>	:	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following elements will be formed: Phosphorous
<b>Conditions to avoid</b>	:	Not determined
<b>Incompatible materials</b>	:	

<b>11. Toxicological information</b>		
<b>Acute Exposure:</b>		
<b>Eyes</b>	:	Corrosive to eyes, Based on data from components or similar materials
<b>Skin</b>	:	Corrosive to the skin. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying and cracking of the skin.
<b>Dermal Toxicity</b>	:	The LD50 in rabbits is >2000mg/Kg. Based on data from components or similar materials.
<b>Inhalation Toxicity</b>	:	No data available to indicate product or components may be a toxic inhalation hazard
<b>Oral Toxicity</b>	:	The LD50 in rats is Based on data from components or similar materials. Swallowing this material can cause burns to the mouth and esophagus. Asphyxiation can occur from swelling of the throat. Perforation of the esophagus and stomach can occur.
<b>Dermal Sensitisation</b>	:	No data available to indicate product or components may be a skin sensitiser.
<b>Inhalation Sensitisation</b>	:	No data available to indicate product or components may be respiratory sensitiser
<b>Chronic Exposure:</b>		
<b>Chronic toxicity</b>	:	No data available to indicate product or components present at greater than 1% are health hazards
<b>Carcinogenicity</b>	:	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IRAC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.
<b>Mutagenicity</b>	:	No data available to indicate product or components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive Toxicity</b>	:	No data available to indicate product or components present at greater than 0.1% that may cause reproductive toxicity
<b>Teratogenicity</b>	:	No data available to indicate product or components present at greater than 0.1% may cause birth defects

<b>12. Ecological information</b>		
<b>Mobility</b>	:	
<b>Soil/water partition coefficient</b>	:	Not determined
<b>Biodegradation</b>	:	At least 25% of the components in this product show moderate biodegradation based on OECD 301-type test data. At least 25% of the components in this product show moderate biodegradation based on OECD 302-type test data.
<b>Bio accumulation potential</b>	:	25% or greater of the components potentially bioconcentrate, based on octanol/water coefficients.
<b>Remarks</b>	:	None

<b>Aquatic toxicity:</b>		
<b>Freshwater Fish</b>	:	Not determined
<b>Freshwater Invertebrates</b>	:	Not determined
<b>Algae Inhibition</b>	:	The acute EC50 is 10 – 100mg/L based on component data
<b>Saltwater Fish</b>	:	Not determined
<b>Saltwater Invertebrates</b>	:	Not determined

<b>13. Disposal considerations</b>		
<b>Methods of disposal</b>	:	Waste must be disposed of in accordance with federal, state and local environmental control regulations. Treatment, storage, transportation, and disposal must be in accordance with applicable National and Provincial regulations.

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## 14. Transport information

### Transport Regulations

Regulatory information	UN Number	Name and description	Class	Packaging Group	Additional information
ICAO/IATA I & II	1760	CORROSIVE LIQUID N.O.S.	8	III	
ADN Class	1760	CORROSIVE LIQUID N.O.S.	8	III	
IMDG Class	1760	CORROSIVE LIQUID N.O.S.	8	III	<b>Phosphoric acid alkyl</b>
U.S. DOT Bulk	1760	CORROSIVE LIQUID N.O.S.	8	III	<b>Phosphoric acid alkyl</b>

## 15. Regulatory Information

### EU Regulation

<b>Hazard symbols</b>	:	
<b>Indicator of Danger:</b>	:	
<b>Risk phrases</b>	:	Xi – Irritant (Phosphoric acid alkyl) R8 - Contact with combustible material may cause fire R36/38 - Irritating to eyes and skin
<b>Safety phrases</b>	:	S15 – Keep away from heat S17 – Keep away from combustibles R20/22 – Harmful by inhalation and if swallowed S25/25 – Avoid contact with skin and eyes
<b>Product use</b>	:	Classification and labeling have been performed according to EU directives 67/548/EEC. 1999/45/EC including amendments and the intended use.

## 16. Other information

<b>Full text of R-Phrases with no:</b>	R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition
	R5	Heating may cause an explosion
	R8	Contact with combustible material may cause fire
	R9	Explosive when mixed with combustible material
	R10	Flammable
	R61	May cause harm to the unborn child
	R62	Possible risk of impaired fertility
	R20/22	Harmful by inhalation and if swallowed
	R22	Harmful if swallowed
	R36/38	Irritating to eyes and skin
	R33	Danger of cumulative effects
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### Text of classifications:

<b>Appearing in Section 2</b>	E - Explosives O - Oxidising F - Highly flammable Repr. Cat. 1 – Toxic for reproduction Category 1 Repr. Cat. 3 – Toxic for reproduction Category 3 Xn – Harmful Xi – Irritant N – Dangerous for the environment
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### History

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<b>Recommended by</b>	:	R Pathak – Research and Development Manager
<b>Authorised by</b>	:	D Mynhardt – Production and Technical Director

### Remarks

This MSDS summarizes, at the date of issue, our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle the product in the workplace. As **BME** cannot control the use and handling of the product, each user must review the MSDS in the context of how the user intends to handle and use the product in the workplace.

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