



# Material Safety Data Sheet

## Semi Synthetic Two Stroke

Product Code: M222

### SECTION 1 IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF COMPANY/UNDERTAKING

1.1	<b>Product Identifier</b> Product Code	Super Two Stroke M222
1.2	<b>Relevant identified uses of the substance or mixture and uses advised against</b>	Lubricant for two-stroke engines. Do not use in any other application.
1.3	<b>Company</b>	Caldo Oils Limited Worsley Brow Sutton, St. Helens Merseyside, WA9 3EZ
1.4	<b>Emergency Telephone Number</b>	+44 (0) 1744 813535 (Monday – Friday 08.00 – 17.00 hrs GMT)
1.5	<b>Other Information</b>	Preparation Date: 20/11/2013

### SECTION 2 HAZARD IDENTIFICATION

2.1	<b>Classification of the substance or mixture</b>	Not classified as hazardous in accordance with CLP (EC 1272/2008) and DPD (1999/45/EC)
2.2	<b>Label Elements</b>	No labelling required
2.3	<b>Other Hazards</b>	Not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 DMSO test.

### SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.2 Mixtures	Component	EC No.	REACH Reg. No.	GHS Classification	DSD Classification	Conc. %
	Kerosine	265-184-9	Not Available	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315	F; R10 Xn; R65 Xi; R38	10%
<b>Other Information</b>						
None						

### SECTION 4 FIRST AID MEASURES

4.1	<b>Description of first aid measures</b>	
	<b>Inhalation</b>	If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.
	<b>Eyes</b>	Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.
	<b>Skin</b>	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.
	<b>Ingestion</b>	If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.
4.2	<b>Most important symptoms and effects, both acute and delayed</b>	No ill effects known
4.3	<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Eye contact: immediately wash out with plenty of water

### SECTION 5 FIRE-FIGHTING MEASURES

5.1	<b>Extinguishing media</b>	Foam, dry powder or water fog. Water can be used to cool and protect exposed material.
5.2	<b>Specific hazards arising from the substance or mixture</b>	Toxic fumes may be evolved on burning or exposure to heat. See Stability and Reactivity, Section 10 of this Safety Data Sheet.
5.3	<b>Advice for fire-fighters</b>	Wear self-contained breathing apparatus. Water may cause splattering.



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## SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Immediately evacuate all personnel from danger area. Wear Personal Protective Equipment. Eliminate all sources of heat, sparks, pilot lights, static electricity and open flames. Spilled material may make surfaces slippery.
6.2 Environmental precautions	Protect drains from potential spills to minimise contamination. Do not wash product into drainage system. In the case of large spills contact the appropriate authorities. In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies.
6.3 Methods and material for containment and cleaning up	Absorb into dry earth or sand. Protect drains using drain covers. Dispose of as hazardous waste.
6.4 Reference to other sections	Personal protective equipment: See section 8

## SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling	Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Avoid frequent or prolonged skin contact with fresh or used product. Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times. Wash hands thoroughly after contact. Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets. Use a suitable barrier cream at regular intervals.
7.2 Conditions for safe storage, including any incompatibilities	Keep out of the reach of children.
7.3 Specific end use(s)	Store under cover away from heat and sources of ignition. Intended for use as a lubricant for marine two-stroke engines requiring TC-W3 quality.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters				
	Country	Substance	Long Term (8 Hours TWA)	Short Term (15 Mins)
	None			
8.2 Exposure controls		Use local exhaust ventilation to control mists or vapours. <b>Hand Protection:</b> Nitrile or neoprene protective gloves <b>Eye Protection:</b> Safety glasses <b>Skin Protection:</b> Protective clothing <b>Hygiene Measures:</b> Wash thoroughly after handling this product		

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	Does not constitute a specification		
Typical Values			
Grades:			Semi synthetic Two Stroke
		Units	
Appearance			Amber Liquid
Odour			Mild
Odour Threshold			No data available
pH			Not applicable
Pour point/range		°C	No data available
Initial boiling point and range		°C	No data available
Flash point (COC)		°C	140
Flammability			Not flammable
Upper/lower flammability or explosive limits			Not applicable
Vapour pressure		kPa (0.1 mm Hg)	No data available
Relative density			0.875 @ 20°C
Solubility - water		kg/m <sup>3</sup>	Insoluble



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Partition coefficient n-octanol/water	Log Pow	Not applicable
Autoignition temperature		No data available
Decomposition temperature		No data available
Viscosity	mm <sup>2</sup> /s	6.95 @ 100°C
Evaporation rate		Not applicable
Vapour density		Not applicable
Explosive properties		Not applicable
Oxidising properties		None

9.2 Other Information          None

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY</b>
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10.1 Reactivity	No dangerous reactions known
10.2 Chemical stability	Stable under normal conditions of use
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	Avoid overheating.
10.5 Incompatible materials	Avoid contact with strong oxidising agents
10.6 Hazardous decomposition products	Thermal decomposition products will vary with conditions. Incomplete combustion will generate smoke, carbon dioxide and hazardous gases, including carbon monoxide.

<b>SECTION 11</b>	<b>TOXICOLOGICAL INFORMATION</b>
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<b>11.1 Information on toxicological effects</b>	
<b>Acute Toxicity</b>	
-Oral	No toxic components present at levels to cause classification.
-Inhalation	No toxic components present at levels to cause classification.
-Dermal	No toxic components present at levels to cause classification.
<b>Corrosivity/Irritation</b>	
-Eye	No components present that are classified as eye irritants.
-Skin	No components present that are classified as skin irritants but may cause skin irritation due to de-fatting effect on skin.
-Respiratory Tract	No components present that are classified as respiratory irritants.
<b>Sensitisation</b>	
-Skin	No evidence of sensitisation effects.
-Respiratory	No evidence of sensitisation effects.
Repeated-dose Toxicity	No data available.
Mutagenicity	No evidence of mutagenicity.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive Toxicity	No evidence of reproductive toxicity.

<b>SECTION 12</b>	<b>ECOLOGICAL INFORMATION</b>
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12.1 Toxicity	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired
12.2 Persistence and Degradability	Not biodegradable.
12.3 Bioaccumulative Potential	There is no evidence to suggest bioaccumulation will occur.
12.4 Mobility in Soil	Spillages may penetrate the soil causing ground water contamination. Non-volatile.
12.5 Results of PBT and vPvB Assessment	No PBT or vPvB chemicals present.
12.6 Other Adverse Effects	None known.

<b>SECTION 13</b>	<b>DISPOSAL CONSIDERATIONS</b>
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**13.1 Waste Treatment Methods**  
 Where possible, arrange for product to be recycled.  
 Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.  
 Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.



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<b>SECTION 14</b>	<b>TRANSPORT INFORMATION</b>
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Not classified as hazardous for transport (ADR, RID, UN , IMO, IATA/ICAO).

<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
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**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Supply regulations: DPD: Dangerous Preparations Directive; GHS: Globally Harmonised System of classification and labelling of chemicals; CLP: Classification, Labelling and Packaging regulations. Transport regulations: CDG: Carriage of Dangerous Goods regulations; ADR/RID/IMDG/ICAO/IATA regulations.

**15.2 Chemical Safety Assessment**

No formal chemical safety assessment has been carried out.

<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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Third Issue  
Second Issue November 2002: Revised to Reach version 2 format.

**Full text of classification data in sections 2 and 3**

Flam. Liq. 3; H226	Flammable liquids, Hazard Category 3; Flammable liquid and vapour
Asp. Tox. 1; H304	Aspiration hazard, Hazard Category 1; May be fatal if swallowed and enters airways
Skin Irrit. 2; H315	Skin corrosion/irritation, Hazard Category 2; Causes skin irritation

F; R10	Flammable
Xn; R65	Harmful: may cause lung damage if swallowed
Xi; R38	Irritating to skin