SAFETY DATA SHEET

Chain Oil FG 320



SECTION 1: Identific undertaking	ation of the substance/mixture and of the company/
1.1 Product identifier	
Product name	: Chain Oil FG 320
Viscosity or Type	: ISO VG 320
Material uses	: Lubricating oil for chainsaws
1.2 Relevant identified uses Not applicable.	of the substance or mixture and uses advised against
1.3 Details of the supplier of	the safety data sheet
Manufacturer / Distributor	: Kuwait Petroleum Companies in the Benelux Company Office: Brusselstraat 59, B-2018, Antwerp Contactaddress: Petroleumkaai 7, B-2020, Antwerp Tel. +32 3 247 38 11, Fax +32 3 216 03 42
e-mail address of person responsible for this SDS	: SDSinfo@Q8.com, communication preferably in English only.
1.4 Emergency telephone nu	mber
Europe	: +44 (0) 1235 239 670 CARECHEM24
Global (English only)	: +44 (0) 1865 407 333
SECTION 2: Hazards	identification
2.1 Classification of the subs	stance or mixture
Product definition	: Mixture
Classification according to	Regulation (EC) No. 1272/2008 [CLP/GHS]
The product is not classified Not classified.	as hazardous according to Regulation (EC) 1272/2008 as amended.
Ingredients of unknown toxicity	: None.
Ingredients of unknown ecotoxicity	: None.
Classification according to The product is not classified Classification	Directive 1999/45/EC [DPD] as dangerous according to Directive 1999/45/EC and its amendments. : Not classified.
	t of the R phrases or H statements declared above. iled information on health effects and symptoms.

2.2 Label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
General	: Not applicable.
Prevention	: Not applicable.
Response	: Not applicable.

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: 14-02-2015 Date of previous issue

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SECTION 2: Hazards identification			
Storage	: Not applicable.		
Disposal	: Not applicable.		
Supplemental label elements	: Contains Calcium sulphonate. May produce an allergic reaction. Safety data shee available on request.		
Special packaging requirem	nents		
Containers to be fitted with child-resistant fastenings	: Not applicable.		
Tactile warning of danger	: Not applicable.		
2.3 Other hazards			
Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	: Not applicable.		
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: Not applicable.		
Other hazards which do not result in classification	: Defatting to the skin.		

SECTION 3: Composition/information on ingredients

3.2	Mi	xtι	ires

: Mixture

5.2 MIXtures	. WIXture				
			Clas	Classification	
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Extracts (petroleum), residual oil solvent	REACH #: 01-2119488175-30 EC: 265-110-5 CAS: 64742-10-5	≥90	Not classified.	Not classified.	[2]
Mineral oil	-	≥90	Not classified.	Not classified.	[2]

The mineral oils in the product contain < 3% DMSO extract (IP 346).

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first	t aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

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SECTION 4: First aid	measures	
Skin contact	: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms of	ccur
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposition person is conscious, give small quantities of water to drink. Do not induce vomition unless directed to do so by medical personnel. Get medical attention if symptom occur.	ting
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.	
4.2 Most important symptom	s and effects, both acute and delayed	
Potential acute health effect	<u>s</u>	
Eye contact	: No known significant effects or critical hazards.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symp	-	
Eye contact	: No specific data.	
Inhalation	No specific data.	
	•	
Skin contact	 Adverse symptoms may include the following: irritation dryness cracking 	
Ingestion	: No specific data.	
	te medical attention and special treatment needed	
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	: No specific treatment.	
SECTION 5: Firefigh	ing measures	
5.1 Extinguishing media		
Suitable extinguishing media	: Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).	
Unsuitable extinguishing media	: Do not use water jet.	
5.2 Special hazards arising f	om the substance or mixture	
Hazards from the substance or mixture	: In a fire or if heated, a pressure increase will occur and the container may burst.	
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incider there is a fire. No action shall be taken involving any personal risk or without suitable training.	nt if
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection chemical incidents.	for
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SECTION 6: Accidental release measures

6.1 Personal precautions, pro	tective equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and materials for	containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	 See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)	
Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

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SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Extracts (petroleum), residual oil solvent Mineral oil	EU OEL (Europe). twa: 5 mg/m³, (oil Mist) EU OEL (Europe). TWA: 5 mg/m³, (oil Mist)
procedures atmosphere or of the ventilatio protective equip the following: E the assessmen limit values and atmospheres - of exposure to o (Workplace atm for the measure	ontains ingredients with exposure limits, personal, workplace biological monitoring may be required to determine the effectiveness in or other control measures and/or the necessity to use respiratory oment. Reference should be made to monitoring standards, such as European Standard EN 689 (Workplace atmospheres - Guidance for t of exposure by inhalation to chemical agents for comparison with measurement strategy) European Standard EN 14042 (Workplace Guide for the application and use of procedures for the assessment chemical and biological agents) European Standard EN 482 nospheres - General requirements for the performance of procedures ement of chemical agents) Reference to national guidance methods for the determination of hazardous substances will also be

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls	
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection meas	<u>ures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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SECTION 8: Exposure controls/personal protection

Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical	a	nd chemical properties
<u>Appearance</u>		
Physical state	:	Liquid. [Oily liquid.]
Appearance	;	Clear.
Color	:	Brown. [Dark]
Odor	:	Characteristic.
Odor threshold	;	Not available.
рН	;	7
Melting point/freezing point	:	<0°C
Initial boiling point and boiling range	:	>200°C
Flash point	:	Open cup: >180°C [ASTM D92.]
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not applicable.
Upper/lower flammability or explosive limits	:	Not available.
Vapor pressure	:	<0.01 kPa [room temperature]
Vapor density	:	Not available.
Relative density	:	0.92
Solubility(ies)	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	:	>200°C
Decomposition temperature	:	>200°C
Viscosity (40°C)	:	320 cSt
Explosive properties	:	Not applicable.
Oxidizing properties	:	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

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10.4 Conditions to avoid	: No specific data.			
10.3 Possibility of hazardous reactions	: Under normal conditions of storage a	and use, hazardous react	ions will not occur	
10.2 Chemical stability	: The product is stable.			
10.1 Reactivity	: No specific test data related to react	ivity available for this proc	luct or its ingredie	nts.

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SECTION 10: Stability and reactivity

10.5 Incompatible materials	eactive or incompatible with the following materials: trong oxidizing materials
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10.6 Hazardous: Under normal conditions of storage and use, hazardous decomposition products
should not be produced.

SECTION 11: Toxicological information

: Not available.

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Extracts (petroleum), residual oil solvent	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Female Rat - Male,	>5 mg/l >3000 mg/kg >5000 mg/kg	4 hours - -
		Female		

Conclusion/Summary

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Extracts (petroleum), residual oil solvent	Skin - Edema	Rabbit	2.5	24 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.44	-	7 days

Conclusion/Summary : Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Extracts (petroleum), residual oil solvent	skin	Guinea pig	Not sensitizing

Conclusion/Summary : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Extracts (petroleum), residual oil solvent	ASTM E1687-95	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Extracts (petroleum), residual oil solvent	-	-	Negative	Rat	Dermal: 2000 mg/ kg	19 days

Conclusion/Summary : Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure			
Extracts (petroleum), residual oil solvent	Negative - Inhalation	Rat - Male, Female	300 mg/m³	7 days; 6 hours per day			
Conclusion/Summary	: Not available.						
Specific target organ toxicit Not available.	<u>y (single exposure)</u>						
Specific target organ toxicit	v (repeated exposure)						
Not available.							
Aspiration hazard Not available.							
Not available.							
nformation on the likely outes of exposure	: Not available.						
Potential acute health effects							
Eye contact	: No known significant effects	s or critical hazard	ls.				
Inhalation	: No known significant effects	s or critical hazard	ls.				
Skin contact	: Defatting to the skin. May o	ause skin drynes	s and irritation.				
Ingestion	: No known significant effects	s or critical hazard	ls.				
	and a standard standard standard		• • •				
	sical, chemical and toxicolog	ical characterist	ICS				
Eye contact	•	: No specific data.					
Inhalation Skin contact	: No specific data.	lude the following					
Skin contact	: Adverse symptoms may inc irritation dryness cracking						
Ingestion	: No specific data.						
	ts and also chronic effects fr	om short and lor	<u>ng term exposure</u>				
Short term exposure	N I I I I						
Potential immediate effects	: Not available.						
Potential delayed effects	: Not available.						
Long term exposure							
Potential immediate effects	: Not available.						
Potential delayed effects	: Not available.						
Potential chronic health effe	ects						
Product/ingredient name	Result	Species	Dose	Exposure			
Extracts (petroleum), residual oil solvent	Sub-chronic NOAEL Dermal	Rat - Male, Female	<2000 mg/kg	-			
		1		I			

Conclusion/Summary	: Not available.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

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SECTION 11: Toxicological information

Other information

: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Extracts (petroleum), residual oil solvent	Acute EC50 >1000 mg/l Fresh water	Algae	72 hours
	Acute EC50 >1000 mg/l Fresh water Acute LC50 >1000 mg/l Fresh water	Daphnia Fish	48 hours 96 hours
Conclusion/Summary	: Not available.		

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Extracts (petroleum), residual oil solvent	4 to 6	-	high

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment			
PBT	: Not applicable.		
vPvB	: Not applicable.		

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

<u>Product</u>	
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Packaging

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SECTION 13: Disposal considerations

Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

: Not available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

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Annex XIV
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None of the components are listed.

Substances of very high concern

None of the components are listed.

Other EU regulations Europe inventory

: Not determined.

Seveso II Directive

This product is not controlled under the Seveso II Directive.

Hazard class for water : 1 Appendix No. 4 (WGK)

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

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SECTION 1	5: Regulatory	information
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Not listed.

Montreal	Protocol	(Annexes	<u>A, B</u>	<u>, C,</u>	<u>E)</u>
		•			

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

International lists

National inventory	
Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Japan	: Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
United States	: Not determined.

15.2 Chemical Safety Assessment

: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number VD:0 = Very Derivident and Very Discourgevents
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification		Justification	
Not classified.			
Full text of abbreviated H statements	: Not applicable.		
Full text of classifications [CLP/GHS]	: Not applicable.		
Full text of abbreviated R phrases	: Not applicable.		
Full text of classifications [DSD/DPD]	: Not applicable.		
Date of printing	: 14-02-2015		
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SECTION 16: Other information	
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Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.