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Versic 2.0	on Revision Date: 2022-12-16		e of last issue: 2021-10-29 e of first issue: 2021-10-29	Print Date: 2022-12-16
SECT	ION 1. IDENTIFICATION			
F	Product name		HYPAR FG-100	
А	Article-No.	:	340237	
C	Other means of identification	:	No data available	
N	lanufacturer or supplier's	deta	ils	
C	Company name of supplier	:	Klüber Lubrication NA LP 9010 County Road 2120 Tyler, Texas 75707 USA Phone: +1 903 534-8021 Fax: +1 903 581-4376 32 Industrial Drive Londonderry, NH 03053 USA Phone: +1 603 647-4104 Fax: +1 603 647-4106	
	-mail address of person esponsible for the SDS	:	mcm@us.kluber.com Material Compliance Management	
	Emergency telephone number	:	+1-517-545-7070 NCEC	
		chem	nical and restrictions on use	
F	Recommended use	:	Lubricating oil	
R	Restrictions on use	:	Restricted to professional users.	

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Reproductive toxicity	: Category 2	
GHS label elements		
Hazard pictograms		
Signal word	: Warning	
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Haza	rd statements	: Suspected of damaging fertility.	
Preca	autionary statements	 Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been reaunderstood. Wear protective gloves/ protective clothing/ eye protect protection. Response: 	
		IF exposed or concerned: Get me Storage: Store locked up.	edical advice/ altention.
		Disposal: Dispose of contents/ container to plant.	an approved waste disposal
•	r hazards known.		

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

: Mixture

Chemical nature : Mineral oil.

Synthetic hydrocarbon oil

Components

Substance / Mixture

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
White mineral oil (petroleum)	White mineral oil (petroleum)	8042-47-5	Trade secret** (>= 80 - <= 100 *)
Benzenamine, N- phenyl-, reaction products with 2,4,4- trimethylpentene	Benzenamine, N-phenyl-, reaction products with 2,4,4- trimethylpenten e	68411-46-1	Trade secret** (>= 0.1 - < 1 *)

^{*} Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES





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If inhaled		 Obtain medical attention. Remove person to fresh air. If signs/symptoms contine medical attention. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. 			
In case of skin contact		:	Remove contaminated clothing. If irritation develops, get medical attention. In case of contact, immediately flush skin with plenty of water.		
In ca	In case of eye contact		Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.		
If sw	If swallowed		Move the victim to fresh air. Do NOT induce vomiting. Rinse mouth with water.		
	important symptoms effects, both acute and yed	:	No information available. None known.		
Note	s to physician	:	No information available.		

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet
Hazardous combustion products	:	Carbon oxides Nitrogen oxides (NOx)
Further information	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions,	:	Evacuate personnel to safe areas.
protective equipment and		Use personal protective equipment.
emergency procedures		Refer to protective measures listed in sections 7 and 8.





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Envir	onmental precautions	c F L	Fry to prevent the material from ente courses. Prevent further leakage or spillage if ocal authorities should be advised it cannot be contained.	safe to do so.
Methods and materials for containment and cleaning up		pa V	Contain spillage, and then collect wit absorbent material, (e.g. sand, earth vermiculite) and place in container fo ocal / national regulations (see section	, diatomaceous earth, r disposal according to

SECTION 7. HANDLING AND STORAGE

Advice on safe handling :	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Wash hands and face before breaks and immediately after handling the product. Do not get in eyes or mouth or on skin. Do not get on skin or clothing.
Conditions for safe storage :	Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
White mineral oil (petroleum)	8042-47-5	TWA (Mist)	5 mg/m3	CA AB OEL (2009-04-30)
		STEL (Mist)	10 mg/m3	CA AB OEL (2009-04-30)
		TWAEV (Mist)	5 mg/m3	CA QC OEL (2012-11-28)
		STEV (Mist)	10 mg/m3	CA QC OEL (2012-11-28)
		TWA (Mist)	1 mg/m3	CA BC OEL (2012-04-20)





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			TWA (Mist)	1 mg/m3	CA BC OEI		
			TWA (Inhalable particulate matter)	5 mg/m3	ACGIH (2013-03-0		
Engineering measures :		:	Handle only in a place equipped with local exhaust (or other appropriate exhaust).				
Perso	onal protective equip	oment					
Respi	iratory protection	:	Not required; except in case of aerosol formation.				
Fil	ter type	:	Filter type A-P				
Ma Br	protection aterial eak through time otective index	:	Nitrile rubber > 10 min Class 1				
Re	emarks	:	Wear protective gloves. The amongst other things on the type of glove and therefore h case.	material, the thicknes	s and the		
Eye p	protection	:	Safety glasses with side-shie	lds			
Skin a	and body protection	:	Choose body protection in re concentration and amount of the specific work-place.				
Prote	ctive measures	:	The type of protective equipn to the concentration and amo at the specific workplace.				
Hygie	ene measures	:	Wash face, hands and any ex handling.	xposed skin thorough	ly after		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid	
Colour	: yellow	
Odour	: hydrocarbon-like	
Odour Threshold	: No data available	
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рН		:	Not applicable	
Melti	ng point/range	:	No data available	
Boilir	ng point/boiling range	:	No data available	
Flash	n point	:	>= 204 °C	
Evap	poration rate	:	No data available	
Flam	mability (solid, gas)	:	Not applicable	
Self-	ignition	:	No data available	
	er explosion limit / Upper mability limit	· :	No data available	
	er explosion limit / Lower mability limit	· :	No data available	
Vapo	our pressure	:	< 0.001 hPa (20 °C)	
Rela	tive vapour density	:	No data available	
Rela	tive density	:	0.864 (20 °C) Reference substance: Water The value is calculated	
Bulk	density	:	No data available	
	bility(ies) /ater solubility	:	insoluble	
S	olubility in other solvents	3 :	No data available	
	tion coefficient: n- nol/water	:	No data available	
Auto	-ignition temperature	:	No data available	
Deco	omposition temperature	:	No data available	
Visco V	osity iscosity, dynamic	:	No data available	
V	iscosity, kinematic	:	97.2 mm2/s (40 °C)	





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Explo	sive properties	: Not explosive	
Oxidizing properties		: No data available	
Subli	mation point	: No data available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No hazards to be specially mentioned.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	No conditions to be specially mentioned.
Incompatible materials	:	No materials to be especially mentioned.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:	
Acute oral toxicity :	Remarks: This information is not available.
Acute inhalation toxicity :	Remarks: This information is not available.
Acute dermal toxicity :	Remarks: This information is not available.
<u>Components:</u>	
White mineral oil (petroleum):	
Acute oral toxicity :	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity :	LC50 (Rat): > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Assessment: The substance or mixture has no acute





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		inhalation toxicity		
Acute	edermal toxicity	: LD50 (Rabbit): > 2, Method: OECD Tes		
		GLP: yes Assessment: The s toxicity	ubstance or mixture h	as no acute dermal
Benz	enamine, N-pheny	, reaction products with 2	,4,4-trimethylpenten	e:
Acute	oral toxicity	: LD50 (Rat): > 5,000 Method: OECD Tes		
Acute	dermal toxicity	: LD50 (Rat): > 2,000 Method: OECD Tes Assessment: The s toxicity		as no acute dermal
Skin	corrosion/irritation			
Produ	uct:			
Rema	arks	: This information is	not available.	
<u>Comp</u>	oonents:			
White	e mineral oil (petro	eum):		
Speci		: Rabbit		
Asses	ssment	: No skin irritation : OECD Test Guideli	no 101	
Resul		: No skin irritation	ne 404	
GLP		: yes		
Benz	enamine, N-pheny	, reaction products with 2	,4,4-trimethylpenten	e:
Speci	es	: Rabbit		
Asses	ssment	: No skin irritation		
Metho		: OECD Test Guideli	ne 404	
Resul	It	: No skin irritation		
Serio	us eye damage/ey	irritation		
<u>Produ</u>				
Rema	arks	: This information is	not available.	
<u>Com</u>	oonents:			
White	e mineral oil (petro	eum):		
Speci		: Rabbit		
Resul		: No eye irritation		
Asses	ssment	: No eye irritation		
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Meth GLP	od	:	OECD Test Guideline 405 yes	
Benz	enamine, N-phenyl-	, reacti	on products with 2,4,4-trimethy	Ipentene:
Spec		:	Rabbit	
Resu		:	No eye irritation	
	Assessment : Method :		No eye irritation OECD Test Guideline 405	
Resp	biratory or skin sens	sitisatio	n	
Prod	uct:			
Rema	arks	:	This information is not available.	
Com	ponents:			
White	e mineral oil (petrol	eum):		
Test		:	Maximisation Test	
Spec		:	Guinea pig	
Assessment : Method : Result :		Does not cause skin sensitisation	٦.	
			OECD Test Guideline 406 Does not cause skin sensitisation.	
GLP	in t	:	yes	
Benz	enamine, N-phenyl	, reacti	on products with 2,4,4-trimethy	Ipentene:
Spec		:	Guinea pig	
	ssment	:	Did not cause sensitisation on lal	boratory animals.
Meth		:	OECD Test Guideline 406	La carta da carta da
Resu	lit	:	Did not cause sensitisation on lal	boratory animals.
Gern	n cell mutagenicity			
<u>Prod</u>				
Geno	otoxicity in vitro	:	Remarks: No data available	
Geno	otoxicity in vivo	:	Remarks: No data available	
Com	ponents:			
White	e mineral oil (petrol	eum):		
Genc	otoxicity in vitro	:	Test Type: Ames test Method: Mutagenicity (Salmonell mutation assay) Result: negative GLP: yes	a typhimurium - reverse
	n cell mutagenicity - ssment	:	Tests on bacterial or mammalian mutagenic effects.	cell cultures did not show
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Carci	inogenicity			
<u>Prod</u>				
Rema	arks	:	No data available	
Com	ponents:			
White	e mineral oil (petrol	eum):		
	nogenicity - ssment	:	No evidence of carcinogenicity in a	animal studies.
Repr	oductive toxicity			
<u>Prod</u>	uct:			
Effec	ts on fertility	:	Remarks: No data available	
	ts on foetal opment	:	Remarks: No data available	
Com	ponents:			
White	e mineral oil (petrol	eum):		
	oductive toxicity -	:	- Fertility -	
Assessment		No toxicity to reproduction - Teratogenicity -		
			No effects on or via lactation	
Benz	enamine, N-phenyl-	, reaction	on products with 2,4,4-trimethylp	pentene:
•	oductive toxicity - ssment	:	- Fertility -	
A330.	Sinent		Some evidence of adverse effects fertility, based on animal experime	
STO	۲ - single exposure			
Com	ponents:			
White	e mineral oil (petrol	eum):		
Asse	ssment	:	The substance or mixture is not cla organ toxicant, single exposure.	assified as specific target
STO	Г - repeated exposu	re		
<u>Com</u>	ponents:			
White	e mineral oil (petrol	eum):		
Asse	ssment	:	The substance or mixture is not cla	assified as specific target
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			organ toxicant, repeated exposure.	
Repe	ated dose toxicity			
Prod	uct:			
Rema	arks	:	This information is not available.	
<u>Com</u>	oonents:			
White	e mineral oil (petrol	eum):		
NOAE	EL	:	1,800 mg/kg	
Expos	sure time	:	90 d	
Aspir	ation toxicity			
Prod	uct:			
This i	nformation is not ava	ailable.		
Com	oonents:			
White	e mineral oil (petrol	eum):		
	piration toxicity clas		n	
Furth	er information			
Prod	uct:			
Rema	arks	:	Information given is based on data or the toxicology of similar products.	n the components and

Ecotoxicity		
Product: Toxicity to fish :	Remarks: No data available	
Toxicity to daphnia and other : aquatic invertebrates	Remarks: No data available	
Toxicity to algae/aquatic : plants	Remarks: No data available	
Toxicity to microorganisms :	Remarks: No data available	
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Components:

White mineral oil (petroleum): Toxicity to fish :	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other : aquatic invertebrates	EC50 (Daphnia (water flea)): > 100 mg/l Exposure time: 48 h Test Type: Immobilization Method: OECD Test Guideline 202
Toxicity to daphnia and other : aquatic invertebrates (Chronic toxicity)	NOEC (Daphnia magna (Water flea)): >= 1,000 mg/l Exposure time: 21 d
Benzenamine, N-phenyl-, reacti	on products with 2,4,4-trimethylpentene:
Toxicity to fish :	LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other : aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 51 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic : plants	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201
Persistence and degradability	
<u>Product:</u> Biodegradability :	Remarks: No data available

Physico-chemical	:	Remarks: No data available
removability		





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<u>Comp</u>	oonents:			
White	e mineral oil (petroleur	n):		
Biode	gradability	:	Primary biodegradation Inoculum: activated sludge Result: Not rapidly biodegradable Biodegradation: 31 % Exposure time: 28 d Method: OECD Test Guideline 301B	5
Benz	enamine, N-phenyl-, re	eact	ion products with 2,4,4-trimethylpe	ntene:
Biode	gradability	:	aerobic Inoculum: activated sludge Result: Not rapidly biodegradable Biodegradation: 1 % Exposure time: 28 d Method: OECD Test Guideline 301B GLP: yes	1
Bioad	cumulative potential			
<u>Produ</u>	uct:			
Bioac	cumulation	:	Remarks: This mixture contains no s be persistent, bioaccumulating and t This mixture contains no substance persistent and very bioaccumulating	oxic (PBT). considered to be very
<u>Com</u>	oonents:			
White	e mineral oil (petroleur	n):		
	on coefficient: n- ol/water	:	Pow: > 6	
Benz	enamine, N-phenyl-, re	eact	ion products with 2,4,4-trimethylpe	ntene:
Partiti	on coefficient: n- ol/water		log Pow: > 5	
Mobi	lity in soil			
<u>Produ</u>	uct:			
Mobili		:	Remarks: No data available	
	oution among onmental compartments	:	Remarks: No data available	





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Othe	r adverse effects			
Prod	uct:			
Additional ecological information		:	No information on ecology is availa	able.
<u>Com</u>	ponents:			
White	e mineral oil (petrole	um):		
Resu	Its of PBT and vPvB	:	Non-classified PBT substance Nor	n-classified vPvB substance

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods		
Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil.
Contaminated packaging	:	Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

National Regulations

TDG

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION





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NPRI Components : 4-nonylphenol, branched

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table
		2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA QC OEL	:	Québec. Regulation respecting occupational health and
		safety, Schedule 1, Part 1: Permissible exposure values for
		airborne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / STEL	:	15-minute occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA QC OEL / TWAEV	:	Time-weighted average exposure value
CA QC OEL / STEV	:	Short-term exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada): ECx - Concentration associated with x% response: ELx - Loading rate associated with x% response: EmS - Emergency Schedule: ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan





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Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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