# SAFETY DATA SHEET



#### **HYPAR FG-46** Date of last issue: 10/18/2021 Print Date: Version Revision Date: 06/07/2023 06/07/2023 Date of first issue: 10/18/2021 2.0 **SECTION 1. IDENTIFICATION** Product name : HYPAR FG-46 Article-No. 340232 • Manufacturer or supplier's details 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 E-mail address of person : mcm@us.kluber.com responsible for the SDS Material Compliance Management Emergency telephone : +1-517-545-7070 NCEC number Recommended use of the chemical and restrictions on use Recommended use Lubricating oil : Restrictions on use Restricted to professional users. :

## **SECTION 2. HAZARDS IDENTIFICATION**

## GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity	: Category 2	
GHS label elements Hazard pictograms		
Signal word	: Warning	

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Haza	rd statements	: Suspected of damaging fertility.	
Preca	utionary statements	<ul> <li>Prevention:</li> <li>Obtain special instructions before</li> <li>Do not handle until all safety preca</li> <li>understood.</li> <li>Wear protective gloves/ protective</li> <li>protection.</li> </ul>	autions have been read and
		<b>Response:</b> IF exposed or concerned: Get me	dical advice/ attention.
		Storage: Store locked up.	
		<b>Disposal:</b> Dispose of contents/ container to a plant.	an approved waste disposal
04			

## Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture	
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Chemical nature : Mineral oil.

## Components

If inhaled

Chemical name	CAS-No.	Concentration (% w/w)
White mineral oil (petroleum)	8042-47-5	Trade secret (>= 10 - < 30)
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	Trade secret (>= 0.1 - < 1)

Actual concentration is withheld as a trade secret

## **SECTION 4. FIRST AID MEASURES**

 Obtain medical attention. Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. If breathing is irregular or stopped, administer artificial respiration.





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In ca	ase of skin contact		Take off all contaminated clothing immed Get medical attention immediately if irrita persists. Wash clothing before reuse. Thoroughly clean shoes before reuse. Wash off immediately with plenty of wate	tion develops and
In ca	ase of eye contact		Rinse immediately with plenty of water, a for at least 10 minutes. If eye irritation persists, consult a special	•
lf sw	rallowed		Move the victim to fresh air. If unconscious, place in recovery position advice. Keep respiratory tract clear. Do NOT induce vomiting. Obtain medical attention. Rinse mouth with water. Never give anything by mouth to an unco	
	t important symptoms effects, both acute and yed	-	No information available. None known.	
Note	es 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
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.





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•	ctive equipment and gency procedures		Use personal protective equipment. Ensure adequate ventilation. Do not breathe vapours or spray mist. Refer to protective measures listed in s	ections 7 and 8.
Envir	onmental precautions	:	Try to prevent the material from enterin courses. Prevent further leakage or spillage if sa Local authorities should be advised if s cannot be contained.	afe to do so.
	ods and materials for inment and cleaning up	:	Contain spillage, and then collect with absorbent material, (e.g. sand, earth, d vermiculite) and place in container for local / national regulations (see section	liatomaceous earth, disposal according to

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling :	Do not breathe vapours or spray mist. Avoid contact with skin and eyes. 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. Do not get on skin or clothing. Do not ingest. Do not repack. Do not re-use empty containers. These safety instructions also apply to empty packaging which may still contain product residues. Keep container closed when not in use.
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	Control	Basis
		(Form of	parameters /	





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		exposure)	Permissible concentration	
White mineral oil (petroleum)	8042-47-5	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH (2013-03-01)
		TWA (Mist)	5 mg/m3	OSHA Z-1 (2018-03-15)
		TWA (Mist)	5 mg/m3	NIOSH REL (2019-10-04)
		ST (Mist)	10 mg/m3	NIOSH REL (2019-10-04)
White mineral oil (petroleum)	8042-47-5	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH (2013-03-01)
		TWA (Mist)	5 mg/m3	OSHA Z-1 (2018-03-15)
		TWA (Mist)	5 mg/m3	NIOSH REL (2019-10-04)
		ST (Mist)	10 mg/m3	NIOSH REL (2019-10-04)

**Engineering measures** 

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

## Personal protective equipment

:

Respiratory protection	:	Not required; except in case of aerosol formation.
Filter type	:	Filter type A-P
Hand protection Material Break through time Protective index	:	Nitrile rubber > 10 min Class 1
Remarks	:	Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
Eye protection	:	Safety glasses with side-shields
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.





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Hygie	Hygiene measures		: Wash face, hands and any exposed skin thoroughly after handling.					
SECTION	9. PHYSICAL AND CH	IEMIC	CAL PROPERTIES					
Арреа	arance	:	liquid					
Colou	r	:	colourless					
Odou	r	:	characteristic					
Odour Threshold		:	No data available					
pН	рН		Not applicable					
Meltin	Melting point/range		No data available					
Boilin	Boiling point/boiling range		No data available					
Flash	point	:	410 °F / 210 °C					
			Method: open cup					
Evapo	pration rate	:	No data available					
Flamr	nability (solid, gas)	:	Not applicable					
Self-iç	gnition	:	No data available					
	Upper explosion limit / Upper flammability limit		No data available					
	Lower explosion limit / Lower		No data available					
Vapou	Vapour pressure		< 0.001 hPa (68 °F / 20 °C)					
Relati	ve vapour density	:	No data available					
Relati	Relative density		0.863 (68 °F / 20 °C) Reference substance: Water The value is calculated					





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В	Bulk density		No data available	
Solubility(ies) Water solubility		:	insoluble	
	Solubility in other solvent	s :	No data available	
	artition coefficient: n- ctanol/water	:	No data available	
A	Auto-ignition temperature		No data available	
D	Decomposition temperature		No data available	
Vi	iscosity Viscosity, dynamic	:	No data available	
	Viscosity, kinematic	:	46 mm2/s (104 °F / 40 °C)	
E	xplosive properties	:	Not explosive	
0	xidizing properties	:	No data available	
S	ublimation 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.
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Acute	inhalation toxicity	: Re	marks: This information is not a	available.	
Acute	dermal toxicity	: Re	marks: This information is not a	available.	
<u>Comp</u>	oonents:				
White	e mineral oil (petrole	um):			
	oral toxicity	: LD	50 (Rat): > 5,000 mg/kg thod: OECD Test Guideline 40	1	
Acute	inhalation toxicity	Ex Te Me As	50 (Rat): > 5 mg/l posure time: 4 h st atmosphere: dust/mist thod: OECD Test Guideline 403 sessment: The substance or mi alation toxicity		
Acute	dermal toxicity	Me As	LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute derm toxicity		
Bonz	onomino N-nhonyl-	reaction	products with 2,4,4-trimethyl	antono.	
	oral toxicity	: LD	50 (Rat): > 5,000 mg/kg thod: OECD Test Guideline 40		
Acute dermal toxicity		Me As	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute derm toxicity		
Skin	corrosion/irritation				
Produ	uct:				
Rema	ırks	: Th	s information is not available.		
Comp	oonents:				
White	e mineral oil (petrole	um):			
Speci	es ssment od	: Ra : No : OE	bbit skin irritation CD Test Guideline 404 skin irritation		
Benzo	enamine. N-phenvl-	reaction	products with 2,4,4-trimethyl	pentene:	
Speci	es ssment	: Ra : No	bbit skin irritation CD Test Guideline 404		
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Resul	t	:	No skin irritation	
Serio	us eye damage/eye	e irritat	ion	
<u>Produ</u>	<u>uct:</u>			
Rema	irks	:	This information is not available.	
Comp	oonents:			
White	mineral oil (petrol	eum):		
Speci	es	:	Rabbit	
Resul		:	No eye irritation	
Asses	sment	:	No eye irritation	
Metho	bd	:	OECD Test Guideline 405	
GLP		:	yes	
Benze	enamine, N-phenyl	-, react	ion products with 2,4,4-trimethylp	pentene:
Speci	es	:	Rabbit	
Resul	t	:	No eye irritation	
Asses	sment	:	No eye irritation	
Metho	od	:	OECD Test Guideline 405	
Respi	iratory or skin sens	sitisati	on	
<u>Produ</u>	<u>ict:</u>			
Rema	irks	:	This information is not available.	
<u>Comp</u>	oonents:			
White	mineral oil (petrol	eum):		
Test T		:	Buehler Test	
Speci		:	Guinea pig	
	sment	:	Does not cause skin sensitisation.	
Metho		:	OECD Test Guideline 406	
Resul	t	:	Does not cause skin sensitisation.	
GLP		:	yes	
	· • •	, react	ion products with 2,4,4-trimethylp	pentene:
Speci		:	Guinea pig	
	sment	:	Did not cause sensitisation on labo	pratory animals.
Metho			OECD Test Guideline 406	
Resul	t	:	Did not cause sensitisation on labo	oratory animals.
Germ	cell mutagenicity			
<u>Produ</u>				
Genot	toxicity in vitro	:	Remarks: No data available	
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Geno	toxicity in vivo	: F	Remarks: No	data available	
Comr	oonents:				
	e mineral oil (petrole	m).			
Germ	cell mutagenicity - ssment	: 1	Fests on bact nutagenic eff		n cell cultures did not show
Carci	nogenicity				
<u>Produ</u> Rema		: 1	No data avail	able	
<u>Com</u> r	oonents:				
White	e mineral oil (petrole	eum):			
	nogenicity - ssment	: 1	No evidence	of carcinogenicity i	n animal studies.
IARC					ater than or equal to 0.1% is n carcinogen by IARC.
IARC OSH <i>A</i>			nis product pr egulated carc		ater than or equal to 0.1% is
NTP				esent at levels gre ted carcinogen by	ater than or equal to 0.1% is NTP.
Repro	oductive toxicity				
Produ	uct:				
Effect	s on fertility	: F	Remarks: No	data available	
	s on foetal opment	: F	Remarks: No	data available	
<u>Com</u> r	oonents:				
White	e mineral oil (petrole	eum):			
	oductive toxicity -	: -	Fertility -		
Assessment			No toxicity to Teratogenic	reproduction ity -	
		٦	No effects on	or via lactation	

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:





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Reproductive toxicity - Assessment		:	- Fertility -	
			Some evidence of adverse effects fertility, based on animal experim	
стот	- single exposure			
Produ	uct:			
Rema	arks	:	No data available	
<u>Com</u>	oonents:			
White	e mineral oil (petrole	um):		
Asses	ssment	:	The substance or mixture is not c organ toxicant, single exposure.	lassified as specific target
STOT	- repeated exposure	e		
Produ	uct:			
Rema	arks	:	No data available	
<u>Com</u>	<u>oonents:</u>			
White	e mineral oil (petrole	um):		
Asses	ssment	:	The substance or mixture is not c organ toxicant, repeated exposur	
Repe	ated dose toxicity			
<u>Prod</u> u	uct:			
Rema	arks	:	This information is not available.	
Aspir	ation toxicity			
<u>Produ</u> This i	<b>uct:</b> nformation is not avail	able.		
Com	oonents:			
	e mineral oil (petrole be fatal if swallowed ar	-	ers airways.	
Furth	er information			
<u>Produ</u>	uct:			
Rema	arks	:	Information given is based on dat the toxicology of similar products.	
				a brand of





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## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity
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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: semi-static test Method: OECD Test Guideline 203		
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202		
Toxicity to algae/aquatic plants	:	NOEC (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201		
Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 28 d Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.		
Toxicity to daphnia and other aquatic invertebrates	:	NOEC (Daphnia magna (Water flea)): >= 1,000 mg/l Exposure time: 21 d		





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(Chro	onic toxicity)	Remarks: The value is given based on a using OECD Toolbox, DEREK, VEGA Q (CAESAR models), etc.	
Toxic	ity to microorganisms	: LC50 (Bacteria): > 1,000 mg/l Exposure time: 40 h Test Type: Growth inhibition	
Benz	enamine, N-phenyl-,	ction products with 2,4,4-trimethylpenter	ne:
	ity to fish	: LC50 (Danio rerio (zebra fish)): > 100 m Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203	
	ity to daphnia and othe tic invertebrates	: EC50 (Daphnia magna (Water flea)): 51 Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202	mg/l
Toxic plants	ity to algae/aquatic s	: EC50 (Desmodesmus subspicatus (gree Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201	en algae)): > 100 mg/l
Persi	stence and degradat	у	
Prod			
Biode	egradability	: Remarks: No data available	
	ico-chemical vability	: Remarks: No data available	
Com	ponents:		
White	e mineral oil (petrole	):	
Biode	egradability	: Biodegradation: 31 % Exposure time: 28 d	
Benz	enamine, N-phenyl-,	ction products with 2,4,4-trimethylpenter	ne:
Biode	egradability	: aerobic Inoculum: activated sludge Result: Not rapidly biodegradable	





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			Biodegradation: 1 % Exposure time: 28 d Method: OECD Test Guideline 301 GLP: yes	В
Bioad	ccumulative potential			
Produ	uct:			
	cumulation	:	Remarks: This mixture contains no be persistent, bioaccumulating and This mixture contains no substance persistent and very bioaccumulating	toxic (PBT). considered to be very
<u>Com</u> r	oonents:			
White	e mineral oil (petroleur	n):		
	ion coefficient: n- ol/water	:	log Pow: > 6	
Benz	enamine. N-phenyl-, re	acti	on products with 2,4,4-trimethylp	entene:
Partiti	ion coefficient: n- ol/water	:	log Pow: > 5	
Mobil	lity in soil			
<u>Produ</u>	uct:			
Mobil	ity	:	Remarks: No data available	
	bution among onmental compartments	:	Remarks: No data available	
Other	r adverse effects			
Produ				
Ozon	<u>uct:</u> e-Depletion Potential	:	Regulation: 40 CFR Protection of E Protection of Stratospheric Ozone - Substances Remarks: This product neither cont manufactured with a Class I or Clas U.S. Clean Air Act Section 602 (40 B).	- CAA Section 602 Class I tains, nor was ss II ODS as defined by the





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	ponents:		

#### White mineral oil (petroleum):

Results of PBT and vPvB	: This substance is not considered to be persistent,
assessment	bioaccumulating and toxic (PBT).

## SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods		
Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not dispose of with domestic refuse. Dispose of as hazardous waste in compliance with local and national regulations.
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**

**49 CFR** Not regulated as a dangerous good

## Special precautions for user

Not applicable





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## **SECTION 15. REGULATORY INFORMATION**

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Reproductive toxicity
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

#### California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## **SECTION 16. OTHER INFORMATION**

#### Further information

#### Full text of other abbreviations

ACGIH NIOSH REL		USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA		8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -





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Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate: 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

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