according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Versi 3.0	ion	Revision Date: 01/22/2025		OS Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023				
SECT	TION 1	DENTIFICATION							
I	Produc	t name	:	: CHAIN AND WIRE ROPE LUBRICANT, 454 g					
I	Produc	t code	:	893.105800					
(Other n	neans of identification	:	No data available					
I	Manufa	acturer or supplier's o	deta	ails					
(Compa	ny name of supplier	:	Würth Canada Limited/Limitée					
,	Address		:	345 Hanlon Creek Blvd GUELPH, ON N1C 0A1					
-	Telepho	one	:	1-800-263-5002					
-	Telefax		:	1-905-564-3671					
I	Emerge	ency telephone	:		olving a spill, fire, explosion or exposure: 7): 1-800-424-9300				
					ant un déversement, incendie, explosion ou ITREC (24/7): 1-800-424-9300				
I	E-mail a	address	:	prodsafe@wurth.	ca				
I	Recom	mended use of the cl	hen	nical and restriction	ons on use				
I	Recom	mended use	:	Lubricant					
I	Restric	ions on use	:	Not applicable					

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accord Aerosols	an :	ce with the Hazardous Products Regulations Category 1
Reproductive toxicity	:	Category 2
GHS label elements		
Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025	SDS Number: 11182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023
II		H361 Suspected	of damaging fertility or the unborn child.
Preca	utionary Statements	P202 Do not han and understood. P210 Keep away and other ignitior P211 Do not spra P251 Do not pier	cial instructions before use. Idle until all safety precautions have been read of from heat, hot surfaces, sparks, open flames in sources. No smoking. ay on an open flame or other ignition source. The or burn, even after use. Active gloves, protective clothing, eye protection on.
		Response: P308 + P313 IF (exposed or concerned: Get medical attention.
		Storage: P405 Store locke P410 + P412 Pro tures exceeding	otect from sunlight. Do not expose to tempera-
		Disposal: P501 Dispose of disposal plant.	contents and container to an approved waste
Other	hazards		

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	No data availa- ble	64742-65-0	>= 80 - <= 100 *
Petroleum gases, liq- uefied, sweetened	No data availa- ble	68476-86-8	>= 10 - < 30 *
,,,	No data availa- ble	68153-57-1	>= 1 - < 5 *
2,2'-Iminodiethanol	Ethanol, 2,2'- iminobis-	111-42-2	>= 0.1 - < 1 *

* Actual concentration or concentration range is withheld as a trade secret

:

SECTION 4. FIRST AID MEASURES

General advice

In the case of accident or if you feel unwell, seek medical advice immediately.



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		DS Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023				
lf inh	If inhaled		 When symptoms persist or in all cases of doubt seek med advice. If inhaled, remove to fresh air. Get medical attention. 					
In ca	In case of skin contact		In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.					
In ca	In case of eye contact		Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.					
lf sw	If swallowed		If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.					
and	Most important symptoms and effects, both acute and delayed		Suspected of damaging fertility or the unborn child.					
Prote	Protection of first-aiders		First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).					
Note	Notes to physician		Treat symptomati	cally and supportively.				

SECTION 5. FIRE-FIGHTING MEASURES

	Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
	Unsuitable extinguishing media	:	None known.
	Specific hazards during fire fighting	:	Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
I	Hazardous combustion prod- ucts	:	Carbon oxides Nitrogen oxides (NOx)
	Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		9S Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023
			so. Evacuate area.	
	cial protective equipment ire-fighters	:		e, wear self-contained breathing apparatus. tective equipment.
SECTIO	N 6. ACCIDENTAL RELE	ASI	EMEASURES	
tive	sonal precautions, protec- equipment and emer- cy procedures	:	Follow safe handl	es of ignition. tective equipment. ing advice (see section 7) and personal pro- recommendations (see section 8).
Env	ironmental precautions	:	Prevent spreading oil barriers). Retain and dispos	akage or spillage if safe to do so. g over a wide area (e.g., by containment or se of contaminated wash water. should be advised if significant spillages
	Methods and materials for containment and cleaning up		Soak up with inerd Suppress (knock jet. For large spills, pr ment to keep mat pumped, store red Clean up remainin bent. Local or national r sal of this materia ployed in the clea which regulations Sections 13 and 1	s should be used. t absorbent material. down) gases/vapors/mists with a water spray rovide diking or other appropriate contain- erial from spreading. If diked material can be covered material in appropriate container. ng materials from spill with suitable absor- regulations may apply to releases and dispo- I, as well as those materials and items em- nup of releases. You will need to determine are applicable. 15 of this SDS provide information regarding tional requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	Use only with adequate ventilation. If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventila- tion.
Advice on safe handling	:	Do not get on skin or clothing. Avoid inhalation of vapor or mist.

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Vers 3.0	sion	Revision Date: 01/22/2025		DS Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023
	Conditio	ons for safe storage	:	practice, based or sessment Keep away from H other ignition sour Take precautiona Take care to prev environment. Do not spray on a Keep in a cool, we Store in accordan	ance with good industrial hygiene and safety in the results of the workplace exposure as- meat, hot surfaces, sparks, open flames and rces. No smoking. ry measures against static discharges. ent spills, waste and minimize release to the in open flame or other ignition source. ell-ventilated place. ce with the particular national regulations.
				Do not pierce or b Keep cool. Protec	ourn, even after use. t from sunlight.
1	Materia	ls to avoid	:	Self-reactive subs Organic peroxides Oxidizing agents Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating subs	
	Recom peratur	mended storage tem- e	:	< 48 °C	
	Further age sta	information on stor- bility	:	Keep container tig ce.	phtly closed in a dry and well-ventilated pla-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Distillates (petroleum), solvent- dewaxed heavy paraffinic	64742-65-0	TWA (Mist)	5 mg/m³	CA AB OEL
		STEL (Mist)	10 mg/m ³	CA AB OEL
		TWAEV (Mist - Inhalable dust)	5 mg/m³	CA QC OEL
		TWA (Mist)	1 mg/m ³	CA BC OEL
		TWA (Inha- lable particu- late matter)	5 mg/m³	ACGIH



according to the Hazardous Products Regulations

CHAIN AND WIRE ROPE LUBRICANT, 454 g

/ersion 8.0	Revision Date: 01/22/2025		OS Number: 182657-00003		t issue: 12/14/2023 t issue: 03/20/2023	
	leum gases, liquefied, tened		68476-86-8	TWAEV	800 ppm 1,900 mg/m³	CA QC OEL
				TWA	1,000 ppm	CA AB OEL
				STEL	1,000 ppm	CA BC OEL
				STEL	1,000 ppm	ACGIH
2,2'-l	minodiethanol		111-42-2	TWA	2 mg/m ³	CA AB OEL
				TWA	2 mg/m ³	CA BC OEL
				TWAEV (in-	1 mg/m³	CA QC OEL
				halable frac-		
				tion and va-		
				pour)		
				TWA (Inha-	1 mg/m³	ACGIH
				lable fraction		
				and vapor)		
Engi	neering measures	:	Minimize work If advised by a	place exposure assessment of th	especially in confined concentrations. ne local exposure po explosion-proof exha	tential, use
Pers	onal protective equipm	nent				
Resp	iratory protection	: If adequate local exhaust ventilation is not available or expo sure assessment demonstrates exposures outside the re- commended guidelines, use respiratory protection.			the re-	
Fi	lter type	:	Self-contained	d breathing appa	aratus	
	l protection aterial	:	Nitrile rubber			
Μ	aterial	:	Neoprene			
R	emarks	:	on the concer applications, we micals of the a manufacturer.	atration specific t we recommend of aforementioned Wash hands be akthrough time is	ds against chemicals to place of work. For clarifying the resistan protective gloves wit fore breaks and at the s not determined for	special nee to che- h the glove he end of
Eye p	protection	:	Wear the follo Safety glasse	• • •	rotective equipment:	
Skin :	and body protection	:	resistance dat potential. Wear the follo If assessment	a and an assess wing personal p demonstrates to or flash fires, us	clothing based on ch sment of the local ex rotective equipment: hat there is a risk of e flame retardant and	posure explosive



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		S Number: 82657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023				
				be avoided by using impervious protective aprons, boots, etc).				
Hygie	ne measures	:	 If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the wor- king place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. 					
SECTION	9. PHYSICAL AND CHE	ЕМІС		3				
Appea	arance	:	Aerosol containing a compressed gas					
Prope	llant	:	Petroleum gases	, liquefied, sweetened				
Color	olor : gray, green, opaque							
Odor		:	: hydrocarbon-like					
Odor ⁻	Threshold	:	No data available					
рН		:	Solvent mixture; aqueous solution	pH value determination not possible, no				
Meltin	g point/freezing point	:	No data available	9				
Initial range	boiling point and boiling	:	> 177.78 °C					
Flash	point	:	55.56 °C					
				Martens closed cup y valid for liquid portion in the aerosol can.				
Evapo	pration rate	:	< 1 (Butyl Acetate=1	0)				
Flamn	nability (solid, gas)	:	: Extremely flammable aerosol.					
	r explosion limit / Upper nability limit	:	: 18 %(V)					
	r explosion limit / Lower nability limit	:	3.4 %(V)					
Vapor	r pressure	:	> 2,068.43 hPa (20 °C)				

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Versio 3.0	n Revision Date: 01/22/2025	SDS Number: 11182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023				
R	elative vapor density	: > 1 Heavier than a	r.				
D	ensity	: 0.785 - 0.795 g	: 0.785 - 0.795 g/cm³ (25 °C)				
"s ∥	olubility(ies) Water solubility	: insoluble	: insoluble				
-	artition coefficient: n- ctanol/water	: Not applicable	Not applicable				
А	utoignition temperature	: No data available					
D	ecomposition temperature	: No data availal	No data available				
V	iscosity Viscosity, kinematic	: Not applicable					
E	xplosive properties	: Not explosive					
С	oxidizing properties	: The substance	or mixture is not classified as oxidizing.				
-	article characteristics article size	: Not applicable					

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.	
Chemical stability	:	Stable under normal conditions.	
Possibility of hazardous reac- tions		Extremely flammable aerosol. Vapors may form explosive mixture with air. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure. Can react with strong oxidizing agents.	
Conditions to avoid	:	Heat, flames and sparks.	
Incompatible materials	:	Oxidizing agents	
Hazardous decomposition products		No hazardous decomposition products are known.	

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version	Revision Date:	SDS Number:	Date of last issue: 12/14/2023
3.0	01/22/2025	11182657-00003	Date of first issue: 03/20/2023

Acute toxicity

Not classified based on available information.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 Remarks: Based on data from similar materials
Acute inhalation toxicity	:	LC50 (Rat): > 5.53 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhala- tion toxicity Remarks: Based on data from similar materials
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg Method: OECD Test Guideline 402 Remarks: Based on data from similar materials

Petroleum gases, liquefied, sweetened:

Acute inhalation toxicity	: LC50 (Rat): > 800000 ppm
	Exposure time: 15 min
	Test atmosphere: gas
	Remarks: Based on data from similar materials

Fatty acids, tall-oil, reaction products with diethanolamine:

Acute oral toxicity	 LD50 (Rat): > 3,000 mg/kg Method: OECD Test Guideline 401 Remarks: The test was conducted according to guid Based on data from similar materials 	deline
Acute dermal toxicity	LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402 Remarks: The test was conducted according to guidelin Based on data from similar materials	
2,2'-Iminodiethanol:		
Acute oral toxicity	: LD50 (Rat): 1,600 mg/kg	
Acute inhalation toxicity	 LC50 (Rat, male): > 3.35 mg/l Exposure time: 4 h Test atmosphere: dust/mist 	

Skin corrosion/irritation

Not classified based on available information.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		S Number: 82657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023		
Resu	Species Result Remarks		Rabbit No skin irritation Based on data from similar materials			
Fatty	acids, tall-oil, reactio	n pro	ducts with dietha	anolamine:		
Spec	ies	:	Rabbit			
Metho		:	OECD Test Guid	eline 404		
Resu Rema		:	 Skin irritation The test was conducted according to guideline 			
		•	Based on data from similar materials			
2,2'-li	minodiethanol:					
Spec	ies	:	Rabbit			
Resu	lt	:	Skin irritation			
Serio	ous eye damage/eye ir	ritatio	on			
Not c	lassified based on avail	able i	nformation.			
Com	ponents:					
Distil	lates (petroleum), sol	vent-	dewaxed heavy p	paraffinic:		
Spec		:	Rabbit			
Resu			No eye irritation OECD Test Guid	alian 405		
Metho Rema				om similar materials		
Fatty	acids, tall-oil, reactio	n nro	ducts with diath	analamina		
Speci			Rabbit			
Resu		÷		reversing within 21 days		
Metho		:	OECD Test Guid			
Rema	arks	:		ducted according to guideline		
	minodiethanol:					
Speci Resu		:	Rabbit Irreversible effect	ts on the eve		
I Kesu	it.	•				
Resp	iratory or skin sensiti	zatio	ı			
	sensitization					
Not c	lassified based on avail	able i	nformation.			
Resp	iratory sensitization					
	lassified based on avail	able i	nformation.			
Com	ponents:					
Distil	lates (petroleum), sol	vent-	dewaxed heavy p	paraffinic:		
Test		:	Buehler Test			
	es of exposure	:	Skin contact			
Spec	ies	÷	Guinea pig			

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025	SDS Number: 11182657-00003			
Metho Resu Rema	lt arks	: negative : Based on data	 : OECD Test Guideline 406 : negative : Based on data from similar materials 		
Test	Type es of exposure ies od It	: Maximization : Skin contact : Guinea pig : OECD Test G : negative : The test was	Maximization Test Skin contact Guinea pig OECD Test Guideline 406		
2,2'-lı	minodiethanol:				
Test Route Speci Metho Resu	es of exposure ies od	: Maximization : Skin contact : Guinea pig : OECD Test G : negative			
	n cell mutagenicity lassified based on ava	ailable information.			
_	ponents:				

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo :		Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Method: OECD Test Guideline 474 Result: negative Remarks: Based on data from similar materials

Petroleum gases, liquefied, sweetened:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative Remarks: Based on data from similar materials
		Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

ersion 0	Revision Date: 01/22/2025	SDS Number:Date of last issue: 12/14/202311182657-00003Date of first issue: 03/20/2023
		Species: Rat Application Route: inhalation (gas) Method: OECD Test Guideline 474 Result: negative Remarks: Based on data from similar materials
Fatty	v acids, tall-oil, react	on products with diethanolamine:
Genotoxicity in vitro		 Test Type: Bacterial reverse mutation assay (AMES) Result: negative Remarks: No test guideline followed Based on data from similar materials
		Test Type: In vitro mammalian cell gene mutation test Result: negative Remarks: No test guideline followed Based on data from similar materials
		Test Type: Chromosome aberration test in vitro Result: negative Remarks: No test guideline followed Based on data from similar materials
Geno	otoxicity in vivo	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Skin contact Result: negative Remarks: Based on data from similar materials
2.2'-1	minodiethanol:	
	otoxicity in vitro	: Test Type: Bacterial reverse mutation assay (AMES) Result: negative
		Test Type: In vitro mammalian cell gene mutation test Result: negative
		Test Type: Chromosome aberration test in vitro Result: negative
		Test Type: In vitro sister chromatid exchange assay in mam- malian cells Result: negative
Geno	otoxicity in vivo	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Skin contact Result: negative

Carcinogenicity

Not classified based on available information.

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025	SDS Number: 11182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023					
Comp	<u>Components:</u>							
Distil	lates (petroleum), sol	vent-dewaxed heavy	y paraffinic:					
Species Application Route Exposure time Method Result		: Mouse : Skin contact : 78 weeks : OECD Test Gu : negative	 Skin contact 78 weeks OECD Test Guideline 451 					
2,2'-Ir	ninodiethanol:							
	cation Route sure time t	 Mouse Skin contact 103 weeks positive The mechanisr mans. 	n or mode of action may not be relevant in hu-					
	cation Route sure time	: Rat : Skin contact : 103 weeks : negative						
Carcir ment	nogenicity - Assess-	: Weight of evide cinogen	ence does not support classification as a car-					

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components:

Petroleum gases, liquefied, sweetened:

Effects on fertility	:	Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: inhalation (gas) Method: OECD Test Guideline 422 Result: negative Remarks: Based on data from similar materials
Effects on fetal development	:	Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: inhalation (gas) Method: OECD Test Guideline 422 Result: negative Remarks: Based on data from similar materials

Fatty acids, tall-oil, reaction products with diethanolamine:

Effects on fetal development	:	Test Type: Embryo-fetal development
		Species: Rat
		Application Route: Ingestion
		Method: OECD Test Guideline 414

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		DS Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023	
				t was conducted according to guideline om similar materials	
2,2'-lı	minodiethanol:				
'	s on fertility	:	Test Type: One-g Species: Rat Application Route Method: OECD To Result: positive		
Effect	s on fetal development	:	Test Type: One-g Species: Rat Application Route Method: OECD To Result: positive		
Repro sessn	oductive toxicity - As- nent	:		f adverse effects on sexual function and development, based on animal experiments.	
Not cl	-single exposure assified based on availa conents: leum gases, liquefied,				
	ssment	:	May cause drows	iness or dizziness. om similar materials	
	STOT-repeated exposure Not classified based on available information.				
Com	oonents:				
2,2'-lı	ninodiethanol:				
Targe	es of exposure et Organs ssment	:	Shown to produce	ver, Nervous system e significant health effects in animals at con-) to 100 mg/kg bw.	
Targe	es of exposure et Organs ssment	:		ist/fume) e significant health effects in animals at con- 02 to 0.2 mg/l/6h/d.	
Targe	es of exposure et Organs ssment	:		ey e significant health effects in animals at con-) to 200 mg/kg bw.	

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version	Revision Date:	SDS Number:	Date of last issue: 12/14/2023
3.0	01/22/2025	11182657-00003	Date of first issue: 03/20/2023

Repeated dose toxicity

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

Species NOAEL Application Route Exposure time Method Remarks	 Rabbit 1,000 mg/kg Skin contact 4 Weeks OECD Test Guideline 410 Based on data from similar materials
Species NOAEL Application Route Exposure time Remarks	 Rat > 980 mg/m³ inhalation (dust/mist/fume) 4 Weeks Based on data from similar materials

Petroleum gases, liquefied, sweetened:

2 2'-Iminodiethanol

Species :	Rat
NOAEL :	>=10000 ppm
Application Route :	inhalation (gas)
Exposure time :	13 Weeks
Method :	OECD Test Guideline 413
Species:NOAEL:Application Route:Exposure time:Method:Remarks:	Based on data from similar materials

Fatty acids, tall-oil, reaction products with diethanolamine:

Species NOAEL Application Route Exposure time Remarks	: Rat : > 100 mg/kg : Ingestion : 90 Days
Exposure time	: 90 Days
Remarks	: Based on data from similar materials

Species LOAEL Application Route Exposure time	:	Rat, female 14 mg/kg Ingestion 13 Weeks
Species NOAEL Application Route Exposure time Method		Rat 0.015 mg/l inhalation (dust/mist/fume) 90 Days OECD Test Guideline 413
Species LOAEL Application Route Exposure time		Rat 32 mg/kg Skin contact 13 Weeks

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version	Revision Date:
3.0	01/22/2025

SDS Number: 11182657-00003

Date of last issue: 12/14/2023 Date of first issue: 03/20/2023

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC (Daphnia magna (Water flea)): 10 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 Remarks: Based on data from similar materials
Toxicity to microorganisms	:	NOEC: > 1.93 mg/l Exposure time: 10 min Method: DIN 38 412 Part 8 Remarks: Based on data from similar materials

Fatty acids, tall-oil, reaction products with diethanolamine:

Toxicity to fish	 LC50 (Oncorhynchus mykiss (rainbow trout)): > 1 - 10 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: The test was conducted according to guideline Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	 EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: The test was conducted according to guideline Based on data from similar materials
2,2'-Iminodiethanol:	

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 460 mg/l Exposure time: 96 h

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		9S Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023
	ty to daphnia and other c invertebrates	:	EC50 (Ceriodaphi Exposure time: 48	nia dubia (water flea)): 30.1 mg/l 8 h
Toxici plants	ty to algae/aquatic	:	ErC50 (Pseudokir mg/l Exposure time: 72	chneriella subcapitata (green algae)): 9.5 ? h
			EC10 (Pseudokiro mg/l Exposure time: 72	chneriella subcapitata (green algae)): 1.1 ? h
	ty to daphnia and other c invertebrates (Chron- city)	:	EC10 (Daphnia m Exposure time: 21	agna (Water flea)): 1.05 mg/l d
Toxici	ty to microorganisms	:	EC10 (activated s Exposure time: 30 Method: OECD Te	
II Persis	stence and degradabili	ity		
Comp	onents:			
Distill	ates (petroleum), solve	ent	dewaxed heavy p	araffinic:
Biode	gradability	:	Result: Not readily Biodegradation: 2 Exposure time: 28 Method: OECD Te	2 - 8 %
II Petrol	leum gases, liquefied,	swe	eetened:	
Biode	gradability	:	Result: Readily bio Remarks: Based o	odegradable. on data from similar materials
	acids, tall-oil, reaction	pro	oducts with dietha	nolamine:
Biode	gradability	:	Remarks: The tes	odegradable. est Guideline 301D t was conducted according to guideline m similar materials
2,2'-In	ninodiethanol:			
Biode	gradability	:	Result: Readily bio Biodegradation: 9 Exposure time: 28 Method: OECD Te	93 %
Bioac	cumulative potential			
<u>Comp</u>	oonents:			

Petroleum gases, liquefied, sweetened:

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025	SDS Number: 11182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023	
Partition coefficient: n- octanol/water		: log Pow: <= 2	.8	
Fatty	acids, tall-oil, reactio	n products with die	ethanolamine:	
Partition coefficient: n- octanol/water		: log Pow: > 4 Remarks: Exp	pert judgment	
2,2'-lr	minodiethanol:			
	ion coefficient: n- ol/water	: log Pow: -2.46 Method: OEC	6 D Test Guideline 107	
Mobil	lity in soil			
No da	ata available			
Other	r adverse effects			
No da	ata available			
SECTION 13. DISPOSAL CONSIDERATIONS				
Dispo	osal methods			
-	e from residues	· Do not dispos	e of waste into sewer	

Waste from residues	:	Do not dispose of waste into sewer.		
		Dispose of in accordance with local regulations.		
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or ex- pose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product. Please ensure aerosol cans are sprayed completely empty (including propellant)		

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name Class Packing group Labels Environmentally hazardous	:	UN 1950 AEROSOLS 2.1 Not assigned by regulation 2.1 yes
IATA-DGR UN/ID No. Proper shipping name Class Packing group	:	UN 1950 Aerosols, flammable 2.1 Not assigned by regulation

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025	DS Number: Date of last issue: 12/14/2023 1182657-00003 Date of first issue: 03/20/2023		
Labels Packing instruction (cargo aircraft) Packing instruction (passen- ger aircraft)		Flammable Gas 203 203		
IMDG-Code UN number Proper shipping name Class Packing group Labels EmS Code Marine pollutant		 UN 1950 AEROSOLS (4-Nonylphenol, branched, ethoxylated, Fatty acids, tall-oil, reaction products with diethanolamine) 2.1 Not assigned by regulation 2.1 F-D, S-U yes 		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.				
Dome	estic regulation			
	umber er shipping name	UN 1950 AFROSOLS		

Proper shipping name	: AEROSOLS	
Class Packing group Labels ERG Code Marine pollutant	 2.1 Not assigned by regulation 2.1 126 yes(4-Nonylphenol, branched, ethoxylated, Fatty acids reaction products with diethanolamine) 	s, tall-oil,

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

Volatile organic compounds (VOC) content	Canada - Volatile Organic Compound Concentration Limits for Certain Products Regulations VOC content: 20.1 %
The ingredients of this product	t are reported in the following inventories:
DSL :	All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version 3.0	Revision Date: 01/22/2025		S Number: 182657-00003	Date of last issue: 12/14/2023 Date of first issue: 03/20/2023	
ACGI				eshold Limit Values (TLV)	
CA AB OEL		:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)		
CA BO	OEL	:	Canada. British Columbia OEL		
CA QC OEL		:	Québec. Regulation respecting occupational health and safe- ty, Schedule 1, Part 1: Permissible exposure values for air- borne contaminants		
ACGIH / TWA		:	8-hour, time-weighted average		
ACGIH / STEL		:	Short-term exposure limit		
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 BC OEL / STEL		:	short-term exposure limit		
CA QC OEL / TWAEV		:	Time-weighted av	verage 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 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

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
Revision Date Date format	-	01/22/2025 mm/dd/yyyy

according to the Hazardous Products Regulations



CHAIN AND WIRE ROPE LUBRICANT, 454 g

Version	Revision Date:	SDS Number:	Date of last issue: 12/14/2023
3.0	01/22/2025	11182657-00003	Date of first issue: 03/20/2023

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8