SAFETY DATA SHEET



Synfluid® PAO 6 cSt HVI

Version 1.15

Revision Date 2023-05-19

According to Regulation (EC) No. 1907/2006, Regulation (EC) No. 2020/878

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product information

Product Name	:	Synfluid® PAO 6 cSt HVI
Material	:	10691074, 1113306, 1113305, 10691818

EC-No.Registration number

Chemical name	CAS-No. EC-No. Index No.	Legal Entity Registration number
1-Dodecene, Trimer, Hydrogenated	151006-62-1 417-070-7 601-064-00-8	Chevron Phillips Chemical Company LP 01-0000016388-62-0004
1-Dodecene, Homopolymer, Hydrogenated	151006-63-2 438-390-3	Chevron Phillips Chemical Company LP 01-0000018318-67-0002

1.2	Relevant identified uses of the	substance or mixture and uses advised against
	Relevant Identified Uses : Supported	Formulation Lubricants - Industrial Lubricants - Professional Lubricants - Consumer Metal working fluids / rolling oils - Industrial Metal working fluids / rolling oils – Professional Functional Fluids - Industrial Functional Fluids - Professional Functional Fluids - Consumer
1.3	Details of the supplier of the s	afety data sheet
	Company :	Chevron Phillips Chemical Company LP 10001 Six Pines Drive The Woodlands, TX 77380
	Local :	Chevron Phillips Chemicals International N.V. Airport Plaza (Stockholm Building) Leonardo Da Vincilaan 19
SDS	S Number:100000101665	1/34

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	1831 Diegem Belgium
	SDS Requests: (800) 852-5530 Responsible Party: Product Safety Group Email:sds@cpchem.com
1.4 Emergency telephone:	
Mexico CHEMTREC 01-800- South America SOS-Cotec In Argentina: +(54)-1159839431 EUROPE: BIG +32.14.58454 Austria: VIZ +43 1 406 43 43 Belgium: 070 245 245 (24 ho Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 Cyprus: 1401 Czech Republic: Toxicologica Denmark: Danish Poison Cer Estonia: BIG +32.14.584545 Finland: 0800 147 111 09 47 France: ORFILA number (INF Germany: BIG +32.14.584545 Greece: (0030) 2107793777 Hungary: +36-80-201-199 (24 Iceland: 543 2222 (24 hours/o Ireland: BIG +32.14.584545 (ph Latvia: State Fire and Rescue Poisoning and Drug Informat 67042473. (24 hours.) Liechtenstein: BIG +32.14.58 Lithuania: +370 (85) 2362052 Luxembourg: (+352) 8002 55 Malta: +356 2395 2000 The Netherlands: NVIC: +31 Norway: 22 59 13 00 (24 hou Poland: BIG +32.14.584545 (Portugal: CIAV phone numbe Romania: +40213183606 Slovakia: +421 2 5477 4166 Slovenia: Phone number: 112	<pre>n) r 703.527.3887(int'l) 186 1132) China: 0532 8388 9090 681-9531 (24 hours) iside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600 5 (phone) or +32.14583516 (telefax) (24 hours/day, 7 days/week) hours/day, 7 days/week) al Information Center +420 224 919 293, +420 224 915 402 iter (Giftlinjen): +45 8212 1212 (phone) or +32.14583516 (telefax) 1 977 (24 hours/day) RS): + 33 (0) 145 42 59 59 (24 hours/day, 7 days/week) 5 (phone) or +32.14583516 (telefax) (24 hours/day, 7 days/week) 4 hours/day, 7 days/week) 4 hours/day, 7 days/week) (24 hours/day, 7 days/week) bione) or +32.14583516 (telefax) (24 hours/day, 7 days/week) 4 hours/day, 7 days/week) (24 hours/day, 7 days/week) (25 (phone) or +32.14583516 (telefax) (26 (phone) or +32.14583516 (telefax)) (27 (phone) or +32.14583516 (telefax)) (28 (phone) or +32.14583516 (telefax) (29 (phone) or +32.14583516 (telefax)) (20 (24 hours/day, 7 days/week) (20 (24 hour</pre>
E-mail address : Website	Product Safety and Toxicology Group SDS@CPChem.com www.CPChem.com
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SE(SECTION 2: Hazards identification							
SEC	TION 2: Hazards ident	Incation						
2.1	Classification of the s REGULATION (EC) No		ixture					
	Not a hazardous substa	ance or mixture.						
2.2	Labeling (REGULATION (EC) No 1272/2008)							
	Not a hazardous substa		-					
2.3	Other hazards Results of PBT and vP assessment	be ei	substance/mixture conta ther persistent, bioaccun stent and very bioaccum gher.	nulative and toxic	c (PBT), or very			
	Endocrine disrupting properties	cons to RI (EU)	substance/mixture does sidered to have endocrine EACH Article 57(f) or Co 2017/2100 or Commissi s of 0.1% or higher.	e disrupting prop mmission Delega	erties according ated regulation			
SEC	CTION 3: Composition/i	nformation on	ingredients					
-	- 3.2 ostance or Mixture Synonyms	: Polya PAO	Iphaolefin					
	Molecular formula	: UVCI	B, UVCB					
	Hazardous ingredients	S						
	Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]	Specific Conc. Limits, M-factors and ATEs			
	1-Dodecene, Trimer, Hydrogenated	151006-62-1 417-070-7 601-064-00-8		50 - 80				
SEC	CTION 4: First aid meas	sures						
4.1	Description of first-aid	d measures						
	General advice	: No ha	azards which require spe	cial first aid mea	isures.			
	If inhaled	: If unc	onscious, place in recov	ery position and	seek medical			
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			advice. If symptoms persist, call a physician.
	In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
	If swallowed	:	Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
4.2	Most important symptoms Notes to physician	and	effects, both acute and delayed
	Symptoms	:	No information available.
4.3	Risks Indication of any immediate	: e me	No information available. edical attention and special treatment needed
	Treatment	:	No information available.
SEC	CTION 5: Firefighting measu	res	
	Flash point	:	246-271°C (475-520°F) Method: Cleveland Open Cup
	Autoignition temperature	:	351°C (664°F)
5.1	Extinguishing media		
	Suitable extinguishing	:	Lies water enroy, cleaned registent from dry chemical or
	media		Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	Special hazards arising fro	om ti	carbon dioxide.
	Special hazards arising fro Specific hazards during fire	om ti :	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread
	Special hazards arising fro Specific hazards during fire fighting Advice for firefighters Special protective	om ti :	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus for firefighting if
	Special hazards arising fro Specific hazards during fire fighting Advice for firefighters Special protective equipment for fire-fighters	om ti :	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus for firefighting if necessary. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the
	Special hazards arising fro Specific hazards during fire fighting Advice for firefighters Special protective equipment for fire-fighters Further information Fire and explosion	om ti :	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus for firefighting if necessary. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
5.3	Special hazards arising fro Specific hazards during fire fighting Advice for firefighters Special protective equipment for fire-fighters Further information Fire and explosion protection Hazardous decomposition	em ti : : :	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus for firefighting if necessary. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Normal measures for preventive fire protection. Carbon oxides.
5.3 SE(Special hazards arising fro Specific hazards during fire fighting Advice for firefighters Special protective equipment for fire-fighters Further information Fire and explosion protection Hazardous decomposition products	m ti : : : :	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus for firefighting if necessary. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Normal measures for preventive fire protection. Carbon oxides.
5.2 5.3 <u>SE(</u> 6.1	Special hazards arising fro Specific hazards during fire fighting Advice for firefighters Special protective equipment for fire-fighters Further information Fire and explosion protection Hazardous decomposition products	ecti	carbon dioxide. he substance or mixture Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Wear self-contained breathing apparatus for firefighting if necessary. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Normal measures for preventive fire protection. Carbon oxides.

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6.2		create slippery conditions.
0.2	Environmental precautions	
	Environmental precautions :	No special environmental precautions required.
6.3 6.4	Methods and materials for co Methods for cleaning up :	ntainment and cleaning up Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.
0.4	Reference to other sections	
	Reference to other sections :	For personal protection see section 8. For disposal considerations see section 13.
SEC	CTION 7: Handling and storage	3
7.1	Precautions for safe handling Handling	3
	Advice on safe handling :	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
	Advice on protection : against fire and explosion	Normal measures for preventive fire protection.
7.2	2	ncluding any incompatibilities
	Storage	
	Requirements for storage : areas and containers	Electrical installations / working materials must comply with the technological safety standards.
	Advice on common storage :	No materials to be especially mentioned.
7.3	Specific End Use	For additional details, see the Exposure Scenario in the Annex portion
SEC	CTION 8: Exposure controls/pe	ersonal protection
8.2	Exposure controls Engineering measures	
	Consider the potential hazards activities, and other substances personal protective equipment. exposure to harmful levels of the recommended. The user should	airborned concentrations below the exposure guidelines/limits. of this material (see Section 2), applicable exposure limits, job is in the work place when designing engineering controls and selecting If engineering controls or work practices are not adequate to prevent is material, the personal protective equipment listed below is d read and understand all instructions and limitations supplied with is usually provided for a limited time or under certain circumstances.
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Pospiratory protoction	: If ventilation or other engineering controls are not adequate to
Respiratory protection	maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate.
Hand protection	: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	: Eye wash bottle with pure water. Tightly fitting safety goggles.
Skin and body protection	: Choose body protection according to the amount and concentration of the substance and the task performed at the work place. Appropriate PPE may include:. Lightweight protective clothing.
Hygiene measures	: General industrial hygiene practice.
CTION 9: Physical and cher	nical properties
Information on basic phys	sical and chemical properties
Appearance	
	sical and chemical properties Iiquid Iiquid Colorless Odorless
Appearance Form Physical state Color	: liquid : liquid : Colorless
Appearance Form Physical state Color Odor	: liquid : liquid : Colorless
Appearance Form Physical state Color Odor Safety data	 liquid liquid Colorless Odorless 246-271°C (475-520°F)
Appearance Form Physical state Color Odor Safety data Flash point	 liquid liquid Colorless Odorless 246-271°C (475-520°F) Method: Cleveland Open Cup
Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit	 liquid liquid Colorless Odorless Odorless 246-271°C (475-520°F) Method: Cleveland Open Cup No data available
Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit	 liquid Colorless Odorless Odorless 246-271°C (475-520°F) Method: Cleveland Open Cup No data available No data available
Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit Oxidizing properties	 liquid liquid Colorless Odorless Odorless 246-271°C (475-520°F) Method: Cleveland Open Cup No data available No data available no
AppearanceFormPhysical stateColorOdorSafety dataFlash pointLower explosion limitUpper explosion limitOxidizing propertiesAutoignition temperature	 liquid liquid Colorless Odorless Odorless 246-271°C (475-520°F) Method: Cleveland Open Cup No data available No data available No data available no 351°C (664°F)
AppearanceFormPhysical stateColorOdorSafety dataFlash pointLower explosion limitUpper explosion limitOxidizing propertiesAutoignition temperatureMolecular formula	 liquid Colorless Odorless Odorless 246-271°C (475-520°F) Method: Cleveland Open Cup No data available No data available no 351°C (664°F) UVCB, UVCB

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Boiling point/boiling range	: >260°C (>500°F)
Vapor pressure	: No data available
Density	: 6,87 - 6,96 L/G
Water solubility	: Soluble in hydrocarbon solvents; insoluble in water.
Viscosity, kinematic	: 29,5 cSt at 40°C (104°F) Method: ASTM D 445
Relative vapor density	: No data available
Evaporation rate	: No data available
SECTION 10: Stability and reacti	vity
10.1	
Reactivity	: Stable at normal ambient temperature and pressure.
10.2	
Chemical stability	: No decomposition if stored and applied as directed.
10.3 Possibility of hazardous rea	ctions
Hazardous reactions	: Further information: Stable under recommended storage conditions., No hazards to be specially mentioned.
10.4	conditions., no nazards to be specially mentioned.
Conditions to avoid	: No data available.
10.5 Materials to avoid	: No data available.
10.6 Hazardous decomposition products	: Carbon oxides
Other data	: No decomposition if stored and applied as directed.
SECTION 11: Toxicological infor	nation
11.1 Information on toxicological	effects
Synfluid® PAO 6 cSt HVI Acute oral toxicity	 LD50: > 5.000 mg/kg Species: Rat Information given is based on data obtained from similar
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	substances.
Synfluid® PAO 6 cSt HVI Acute inhalation toxicity	: LC50: > 5 mg/l Exposure time: 4 h Species: Rat Test atmosphere: dust/mist Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Acute dermal toxicity	 LD50: > 2.000 mg/kg Species: Rat Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Skin irritation	: No skin irritation Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Eye irritation	: No eye irritation Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Sensitization	: Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Repeated dose toxicity	 Species: Rat, Male and female Sex: Male and female Application Route: oral gavage Dose: 0, 1000 mg/kg/day Exposure time: 28 days NOEL: 1.000 mg/kg Method: OECD Test Guideline 407 Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Genotoxicity in vitro	: Test Type: Ames test Result: negative Remarks: Information refers to the main ingredient.
	Test Type: Chromosome aberration test in vitro Result: negative Remarks: Information refers to the main ingredient.
Synfluid® PAO 6 cSt HVI Genotoxicity in vivo	: Test Type: Mouse micronucleus assay Result: negative Remarks: Information refers to the main ingredient.
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Synfluid® PAO 6 cSt HVI Reproductive toxicity	 Animal testing did not show any effects on fertility. Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Developmental Toxicity	: Animal testing did not show any effects on fetal development. Information given is based on data obtained from similar substances.
Synfluid® PAO 6 cSt HVI Aspiration toxicity Toxicology Assessment	: No aspiration toxicity classification.
Synfluid® PAO 6 cSt HVI Specific Target Organ Toxicity (Single Exposure)	: Remarks: Not classified due to data which are conclusive : although insufficient for classification.
Synfluid® PAO 6 cSt HVI Specific Target Organ Toxicity (Repeated Exposure)	: Remarks: Not classified due to data which are conclusive : although insufficient for classification.
Synfluid® PAO 6 cSt HVI CMR effects	 Carcinogenicity: Contains no ingredient listed as a carcinogen Mutagenicity:
11.2 Information on other hazards	
Synfluid® PAO 6 cSt HVI Further information Endocrine disrupting properties	 No data available. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
SECTION 12: Ecological informati	on
12.1 Toxicity Ecotoxicity effects Toxicity to fish	
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1-Dodecene, Trimer, Hydrogenated	 LC50: > 1.000 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) The product has low solubility in the test medium. An aqueous dispersion was tested.
Toxicity to daphnia and oth	er aquatic invertebrates
1-Dodecene, Trimer, Hydrogenated	 EC50: > 1.000 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) The product has low solubility in the test medium. An aqueous dispersion was tested.
Toxicity to algae	
1-Dodecene, Trimer, Hydrogenated	 EC50: > 1.000 mg/l Species: Selenastrum capricornutum (algae) The product has low solubility in the test medium. An aqueous dispersion was tested.
2.2 Persistence and degradabi	lity
Biodegradability	: Result: Expected to be inherently biodegradable.
I2.3 Bioaccumulative potential Elimination information (persi	stence and degradability)
Bioaccumulation	: This material is not expected to bioaccumulate.
2.4 Mobility in soil	
Mobility	: No data available
12.5 Results of PBT and vPvB a Results of PBT assessment	 ssessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Endocrine disrupting prope	erties
Endocrine disrupting properties	: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7 Other adverse effects	
Uther adverse effects	10/34

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1	Additional ecological information 12.8 Additional Information		No data available	
	Ecotoxicology Assessment Short-term (acute) aquatic hazard	:	This material is not expected to be harmful to aquatic organisms.	
	Long-term (chronic) aquatic hazard	:	This material is not expected to be harmful to aquatic organisms.	

SECTION 13: Disposal considerations

13.1

Waste treatment methods

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Contaminated packaging

: Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 - 14.7

Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

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SAFETY DATA SHEET Synfluid[®] PAO 6 cSt HVI Version 1.15 Revision Date 2023-05-19 ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE)) NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY. **RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF** DANGEROUS GOODS (EUROPE)) NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY. ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS) NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY. Other information : Polyolefin (molecular weight 300+), S.T. 2, Cat.Y Maritime transport in bulk according to IMO instruments **SECTION 15: Regulatory information** 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **National legislation** Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Water hazard class : WGK 1 slightly water endangering (Germany) Classification according VwVwS, Annex 2. 15.2 **Chemical Safety Assessment** Components 1-Dodecene, : Trimer, Hydrogenated **Chemical Safety Assessment** 1-Dodecene, Homopolymer, Hydrogenated **Major Accident Hazard** : ZEU_SEVES3 Update: Legislation Not applicable **Notification status** Europe REACH This product is in full compliance according to REACH regulation 1907/2006/EC.

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United States	of America (USA)	: On or	in compliance	with the active portion of the
TSCA Canada DSL		: All con	inventory nponents of thi	s product are on the Canadian
Other AICS New Zealand	NZIoC			n compliance with the inventory n compliance with the inventory
Japan ENCS Korea KECI		: On the : All sub to be r CPChe K-REA permit include	e inventory, or i ostances in this egistered, or e em through an ACH regulation ted if the Korea ed on CPChem	in compliance with the inventory product were registered, notified xempted from registration by Only Representative according to s. Importation of this product is an Importer of Record was h's notifications or if the Importer of notified the substances.
Philippines P	ICCS	: On the	e inventorv, or i	n compliance with the inventory
China IECSC Taiwan TCSI	;	: On the	e inventory, or i	in compliance with the inventory in compliance with the inventory
CTION 16: Oth	er information			
	Re	eactivity Haza	ard: 0	
Further inform	mation 1 Registered, meets L	JSDA 1998 H	11 Guidelines	
NSF H1, HX-1	1 Registered, meets L anges since the last v			e margin. This version replaces all
NSF H1, HX-1 Significant cha previous versi	1 Registered, meets L anges since the last v	ersion are hi	ghlighted in the	
NSF H1, HX-1 Significant cha previous versi The informatio The information information ar guidance for s not to be cons specific mater	1 Registered, meets L anges since the last v ions. on in this SDS pertain on provided in this Sai nd belief at the date of safe handling, use, pro- sidered a warranty or o	ersion are high s only to the fety Data She f its publication pressing, sto quality specif ay not be vali	ghlighted in the product as ship eet is correct to on. The informa rage, transport fication. The inf id for such mat	
NSF H1, HX-1 Significant cha previous versi The information The information an guidance for s not to be cons specific mater other material	1 Registered, meets L anges since the last v ions. on in this SDS pertain on provided in this Sain d belief at the date of safe handling, use, pro- sidered a warranty or rial designated and main s or in any process, u	ersion are high s only to the fety Data She f its publication ocessing, sto quality specification ay not be valion nless specification	ghlighted in the product as ship eet is correct to on. The informa rage, transport fication. The inf id for such mat ed in the text.	opped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any
NSF H1, HX-1 Significant cha previous versi The information The information an guidance for s not to be cons specific mater other material	1 Registered, meets L anges since the last v ions. on in this SDS pertain on provided in this Sa nd belief at the date of safe handling, use, pro- sidered a warranty or ial designated and ma s or in any process, u	ersion are high s only to the fety Data She f its publication occessing, sto quality specification quality spe	ghlighted in the product as ship eet is correct to on. The informa rage, transport fication. The inf id for such mat ed in the text.	opped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the
NSF H1, HX-1 Significant cha previous versi The information The information an guidance for s not to be cons specific mater other material	1 Registered, meets L anges since the last v ions. on in this SDS pertain on provided in this Sai nd belief at the date of safe handling, use, pro- sidered a warranty or ial designated and ma s or in any process, u ey or legend to abbrea American Conference Government Industri Australian Inventory	ersion are high s only to the fety Data She f its publication occessing, sto quality specification quality spe	ghlighted in the product as ship eet is correct to on. The informa rage, transport fication. The inf id for such mat ed in the text.	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect
NSF H1, HX-1 Significant cha previous versi The informatio information ar guidance for s not to be cons specific mater other material	1 Registered, meets L anges since the last v ions. on in this SDS pertain on provided in this Sai nd belief at the date of safe handling, use, pro- sidered a warranty or ial designated and ma s or in any process, u ey or legend to abbrea American Conference Government Industri Australian Inventory Chemicals Canada, Domestic S	ersion are high s only to the fety Data She f its publication occessing, sto quality specific ay not be valian ness specific viations and a e of al Hygienists of Industrial	ghlighted in the product as ship eet is correct to on. The informat rage, transport fication. The inf id for such mat ed in the text.	opped. to the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50%
NSF H1, HX-1 Significant cha previous versi The informatio The information ar guidance for s not to be cons specific mater other material	1 Registered, meets L anges since the last v ions. In in this SDS pertain on provided in this Sain ad belief at the date of safe handling, use, pro- sidered a warranty or ial designated and ma s or in any process, u ey or legend to abbrea American Conference Government Industri Australian Inventory Chemicals Canada, Domestic S List Canada, Non-Domes	ersion are high s only to the fety Data She f its publication pocessing, sto quality specific ay not be valian ness specific viations and a e of al Hygienists of Industrial	ghlighted in the product as ship eet is correct to on. The informa rage, transport fication. The inf id for such mat ed in the text. acronyms used LD50 LOAEL	oped. the best of our knowledge, ation given is designed only as a tation, disposal and release and is formation relates only to the terial used in combination with any d in the safety data sheet Lethal Dose 50% Lowest Observed Adverse Effect Level National Fire Protection Agency National Institute for Occupational
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EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate

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Annex: Exposure Scenarios

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Number	Title			
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ES 2	Lubricants - Industrial; Industrial uses (SU3).			
ES 3	Lubricants - Professional; Professional uses (SU22).			
ES 4 Lubricants - Consumer; Consumer uses (SU21).				
ES 5 Metal working fluids / rolling oils - Industrial; Industrial uses (SU3).				
ES 6 Metal working fluids / rolling oils - Industrial; Professional uses (SU22).				
ES 7 Functional Fluids - Industrial; Industrial uses (SU3).				
ES 8 Functional Fluids - Professional; Professional uses (SU22).				
ES 9	Functional Fluids - Consumer; Consumer uses (SU21).			

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ES 1: Formulation; Industrial us	ses (SU3).
1.1. Title section	
Exposure Scenario name	: Formulation
Structured Short Title	: Formulation; Industrial uses (SU3).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7
Environment	
CS 1 Formulation	ERC2
1.2. Conditions of use affecting	exposure
-	•
1.2.1. Control of environmental exp	oosure: Formulation into mixture (ERC2)
Product (article) characteristics	
Covers percentage substance in the	product up to 100 %.
Amount used (or contained in artic	cles), frequency and duration of use/exposure
Release type	: Continuous release
Emission days	: 300
Technical and organisational cond	litions and measures
Try to prevent the material from enter Provide onsite wastewater treatment Air - minimum efficiency of 0,001 % Water - minimum efficiency of 0,01 % Soil - minimum efficiency of 0,001 %	6
Conditions and measures related	to sewage treatment plant
STP type	: Municipal sewage treatment plant
STP sludge treatment	: Controlled application of sewage sludge to agricultural soil
STP effluent	: 2.000 m3/d
Other conditions affecting environ	imental exposure
Receiving surface water flow	: 18.000 m3/d
Local freshwater dilution factor	: 10
Local marine water dilution factor	: 100
SDS Number:100000101665	
SUS Number 100000101666	17/34

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1.3. Exposure estimation and reference to its source

1.3.1. Environmental release and exposure: Formulation into mixture (ERC2)

Protection Target	Exposure estimate	RCR
Air	0,0000236 mg/m ³ (EUSES)	
Freshwater	0,0000009 mg/l (EUSES)	0,000
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES)	0,000
Sea sediment	0,018 mg/kg wet weight (EUSES)	0,462
Soil	1,0 mg/kg wet weight (EUSES)	0,227

1.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 2: Lubricants - Industrial; Industrial uses (SU3).

2.1. Title section

Exposure Scenario name	: Lubricants - Industrial
Structured Short Title	: Lubricants - Industrial; Industrial uses (SU3).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Lubricants - Industrial	ERC4, ERC7, ERC8a,
		ERC8d,
		ERC9a,
		ERC9b

2.2. Conditions of use affecting exposure

2.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type	:	Continuous release
Emission days	:	300

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment. Air - minimum efficiency of 0,003 % Water - minimum efficiency of 0,000 %

Soil - minimum efficiency of 0,1 %

Conditions and measures related to sewage treatment plant

 STP type
 : Municipal sewage treatment plant

 STP sludge treatment
 : Controlled application of sewage sludge to agricultural soil

 STP effluent
 : 2.000 m3/d

Other conditions affecting environmental exposure

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Receiving surface water flow	:	18.000 m3/d
Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

2.3. Exposure estimation and reference to its source

2.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Protection Target	Exposure estimate	RCR
Air	0,0000044 mg/m³ (EUSES)	
Freshwater	0,0000009 mg/l (EUSES)	0,000
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES)	0,000
Sea sediment	0,018 mg/kg wet weight (EUSES)	0,462
Soil	0,08 mg/kg wet weight (EUSES)	0,018

2.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 3: Lubricants - Professional; Professional uses (SU22).

3.1. Title section

Exposure Scenario name	: Lubricants - Professional
Structured Short Title	: Lubricants - Professional; Professional uses (SU22).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Lubricants - Professional	ERC4, ERC7, ERC8a, ERC8d, ERC9a,
		ERC9b

3.2. Conditions of use affecting exposure

3.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type	: Continuous release	
Emission days	: 25	

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment. Air - minimum efficiency of 0,01 % Water - minimum efficiency of 0,25 % Soil - minimum efficiency of 0,25 %

Conditions and measures related to sewage treatment plant

STP type:Municipal sewage treatment plantSTP sludge treatment:Controlled application of sewage sludge to agricultural soilSTP effluent:2.000 m3/d

Other conditions affecting environmental exposure

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Receiving surface water flow	:	18.000 m3/d
Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

3.3. Exposure estimation and reference to its source

3.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Protection Target	Exposure estimate	RCR
Air	0,0000044 mg/m³ (EUSES)	
Freshwater	0,0000009 mg/l (EUSES)	0,000
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES)	0,000
Sea sediment	0,018 mg/kg wet weight (EUSES)	0,462
Soil	0,08 mg/kg wet weight (EUSES)	0,841

3.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 4: Lubricants - Consumer; Consumer uses (SU21).

4.1. Title section

Exposure Scenario name	: Lubricants - Consumer
Structured Short Title	: Lubricants - Consumer; Consumer uses (SU21).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Lubricants - Consumer	ERC4, ERC7,
		ERC8a,
		ERC8d,
		ERC9a,
		ERC9b

4.2. Conditions of use affecting exposure

4.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type		:	Continuous release
Emission days		:	365

	Other	condit	ions a	affecting	environmenta	exposure	j
T							

Receiving surface water flow	:	18.000 m3/d
Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

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4.3. Exposure estimation and reference to its source

4.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Additional information on exposure estimation

Not applicable for wide dispersive uses.

4.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 5: Metal working fluids / rolling oils - Industrial; Industrial uses (SU3).

5.1. Title section

Exposure Scenario name	: Metal working fluids / rolling oils - Industrial
Structured Short Title	: Metal working fluids / rolling oils - Industrial; Industrial uses (SU3).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Metal working fluids / rolling oils - Industrial	ERC4, ERC8a,
		ERC8d,
		ERC9a,
		ERC9b

5.2. Conditions of use affecting exposure

5.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type	:	Continuous release

Emission days

: 20

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment. Air - minimum efficiency of 0,001 % Water - minimum efficiency of 0,000 %

Soil - minimum efficiency of 0 %

Conditions and measures related to sewage treatment plant

STP type

STP effluent

STP sludge treatment

: Municipal sewage treatment plant : Controlled application of sewage sludge to agricultural soil : 2.000 m3/d

Other conditions affecting environmental exposure

Receiving surface water flow : 18.000 m3/d

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Version 1.15 Local freshwater dilution factor : 10 100 Local marine water dilution factor :

5.3. Exposure estimation and reference to its source

5.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Protection Target	Exposure estimate	RCR
Air	0,000009 mg/m³ (EUSES)	
Freshwater	0,0000009 mg/l (EUSES)	0,000
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES)	0,000
Sea sediment	0,018 mg/kg wet weight (EUSES)	0,462
Soil	0,167 mg/kg wet weight (EUSES)	0,038

5.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 6: Metal working fluids / rolling oils - Industrial; Professional uses (SU22).

6.1. Title section

Exposure Scenario name	: Metal working fluids / rolling oils – Professional
Structured Short Title	: Metal working fluids / rolling oils - Industrial; Professional uses (SU22).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

Metal working fluids / rolling oils - Industrial	ERC4, ERC8a,
	ERC8d,
	ERC9a,
	ERC9b
	Metal working fluids / rolling oils - Industrial

6.2. Conditions of use affecting exposure

6.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type Continuous release :

Emission days

: 365

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment. Air - minimum efficiency of 0,01 % Water - minimum efficiency of 1,25 %

Soil - minimum efficiency of 1,25 %

Conditions and measures related to sewage treatment plant

STP type

STP effluent

STP sludge treatment

: Municipal sewage treatment plant : Controlled application of sewage sludge to agricultural soil : 2.000 m3/d

Other conditions affecting environmental exposure

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Local freshwater dilution factor	:	10	
Local marine water dilution factor	:	100	

6.3. Exposure estimation and reference to its source

6.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (indoor)

Protection Target	Exposure estimate	RCR
Air	0,0000005 mg/m ³ (EUSES)	
Freshwater	0,0000009 mg/l (EUSES)	0,000
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES)	0,000
Sea sediment	0,018 mg/kg wet weight (EUSES)	0,462
Soil	0,076 mg/kg wet weight (EUSES)	0,017

6.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 7: Functional Fluids - Industrial; Industrial uses (SU3).

7.1. Title section

Exposure Scenario name	: Functional Fluids - Industrial
Structured Short Title	: Functional Fluids - Industrial; Industrial uses (SU3).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Functional Fluids - Industrial	ERC7, ERC9a,
		ERC9b

7.2. Conditions of use affecting exposure

7.2.1. Control of environmental exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type	:	Continuous release
Emission days	:	20

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment.

Air - minimum efficiency of 0,01 %

Water - minimum efficiency of 0,000 % Soil - minimum efficiency of 0,1 %

Conditions and measures related to sewage treatment plant

STP type	:	Municipal sewage treatment plant
STP sludge treatment	:	Controlled application of sewage sludge to agricultural soil
STP effluent	:	2.000 m3/d

Other conditions affecting environmental exposure

Receiving surface water flow	:	18.000 m3/d
Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

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7.3. Exposure estimation and reference to its source

7.3.1. Environmental release and exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Protection Target	Exposure estimate	RCR
Air	0,0000012 mg/m ³ (EUSES)	
Freshwater	0,000009 mg/l (EUSES) 0,000	
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES) 0,000	
Sea sediment	0,018 mg/kg wet weight (EUSES) 0,462	
Soil	0,077 mg/kg wet weight (EUSES) 0,017	

7.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

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ES 8: Functional Fluids - Professional; Professional uses (SU22).

8.1. Title section

Exposure Scenario name : Functional Fluids - Professional	
Structured Short Title	: Functional Fluids - Professional; Professional uses (SU22).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Functional Fluids - Professional	ERC7, ERC9a,
		ERC9b

8.2. Conditions of use affecting exposure

8.2.1. Control of environmental exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type	:	Continuous release
Emission days	:	365

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment. Air - minimum efficiency of 0,01 %

Water - minimum efficiency of 0,625 % Soil - minimum efficiency of 0,625 %

Conditions and measures related to sewage treatment plant

		1
STP type	: Municipal sewage treatment plant	
STP sludge treatment	: Controlled application of sewage sludge to agricultural soil	
STP effluent	: 2.000 m3/d	

Other conditions affecting environmental exposure

Receiving surface water flow	:	18.000 m3/d
Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

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8.3. Exposure estimation and reference to its source

8.3.1. Environmental release and exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Protection Target	otection Target Exposure estimate	
Air	0,0000005 mg/m³ (EUSES)	
Freshwater	0,0000009 mg/l (EUSES)	0,000
Freshwater sediment	0,072 mg/kg wet weight (EUSES)	0,184
Sea water	0,0000002 mg/l (EUSES)	0,000
Sea sediment	0,018 mg/kg wet weight (EUSES)	0,462
Soil	0,072 mg/kg wet weight (EUSES) 0,016	

8.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable

Version 1.15

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ERC7, ERC9a,

ERC9b

SAFETY DATA SHEET

ES 9: Functional Fluids - Consumer; Consumer uses (SU21).

9.1. Title section

Exposure Scenario name : Functional Fluids - Consumer	
Structured Short Title	: Functional Fluids - Consumer; Consumer uses (SU21).
Substance	: 1-Dodecene trimer, hydrogenated <u>EC-No.:</u> 417-070-7

Environment

CS 1	Lubricants - Consumer
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9.2. Conditions of use affecting exposure

9.2.1. Control of environmental exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type	: Continuous release
Emission days	: 365

Other conditions affecting environmental exposure

Receiving surface water flow	:	18.000 m3/d
Local freshwater dilution factor	:	10
Local marine water dilution factor	:	100

9.3. Exposure estimation and reference to its source

9.3.1. Environmental release and exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Additional information on exposure estimation

Not applicable for wide dispersive uses.

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9.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable