



**EU Ecolabel  
Lubricants**

# User Manual

European Commission

EU Ecolabel Lubricants

Commission Decision (EU)  
2018/1702

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## Using this manual

This user manual serves as guiding document for the applicant through the process of applying for an EU Ecolabel, in accordance with the criteria requirements published in the Commission Decision (EU) 2018/1702 of 8 November 2018 establishing the EU Ecolabel criteria for Lubricants. The following symbols are used throughout:

Symbol	Description
	If necessary for the interpretation of the criterion, subtitles with explanations, examples of calculations, decisions from the Competent Body Forum, etc.
	Boxes with definitions or additional explanations of technical terms that could complement the definitions already included in the article 2 of the Commission Decision (EU) 2018/1702.
	Notable or important information.
	Steps to do.
	Documentation on how to fill in the application form and information about documents to be handed in with the application.
	Website links where further information can be found.

The manual contains the following elements as separate files:

**"Requirements for Verifying Usability of Chain Lubricants Version 2017" from the Kuratorium für Waldarbeit und Forsttechnik e.V. (KWF)** – The so called KWF test includes the tests required to fulfil the KWF test and an appendix with test methods developed by the KWF. This is a Pdf-file.

**Application Form** – This application form should be completed by the applicant. For each lubricant composition a separate application form needs to be handed in. A short guide on how to fill out the application form can be found in chapter 3. This is an Excel-file.

**Annex 1** – Declaration of the producer/supplier of the ingredients concerning the renewable content from palm oil, palm kernel oil or its derivatives. These declarations are to be completed as part of the application process by suppliers of the applicants. This is a Word-formula.

**Annex 2** – Declaration of the producer/supplier of the plastic packaging/containers concerning the recycled content of the packaging/containers. These declarations are to be completed as part of the application process by suppliers of the applicants. This is an Excel-file.



***Please read this manual all the way through before completing and submitting the application form or any other documentation.***



## 1 Introduction

This User Manual<sup>1</sup> is for guidance only and is designed to help you to apply for the EU Ecolabel for Lubricants. It includes an outline of all data, tests and documentation that are required to demonstrate compliance with the criteria.

The basis for the manual is the Commission Decision (EU) 2018/1702 of 8 November 2018 establishing the EU Ecolabel criteria for Lubricants. A copy of the criteria can be found at:



<http://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html>

This document is not aimed to duplicate the content of the criteria but is intended to support their interpretation, and only focused on helpful explanations and clarifications. Each criterion name appears as heading under chapter 2 with a short summary of what documents are needed for the verification of the criterion. The exact criterion text does not appear in this user manual. Only additional information, clarifications and explanations are included.



***Please read the Commission Decision (EU) 2018/1702 of 8 November 2018 establishing the EU Ecolabel criteria for Lubricants and this manual all the way through before completing and submitting the application form or any other documentation.***

For general questions about the EU Ecolabel and the application process please check out following pages:



<http://ec.europa.eu/environment/ecolabel/faq.html>

<http://ec.europa.eu/environment/ecolabel/how-to-apply-for-eu-ecolabel.html>

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<sup>1</sup> This User Manual is for guidance only; it does not have any legal standing and does not, in any way, replace the Commission Decision or any relevant legislation. In case of doubt on specific points in the Manual, please refer directly to the national Competent Body.

## 2 Product Assessment and Verification

### Definitions:

"**Commission Decision**" refers to the Commission Decision (EU) 2018/1702 of 8 November 2018 establishing the EU Ecolabel criteria for Lubricants.

"**Hydraulic fluid**" will replace the term "Hydraulic system" in the User Manual.

"**Oil for temporary protection against corrosion**" will replace the term "temporary protection against corrosion" in the User Manual.

"**Candidate product**" is the lubricant or grease the application is prepared for. In the Commission Decision you will find "final product" which means basically the same.

"**Category**" means one of the sub-groups mentioned in the Commission Decision under Article 1.

"**LuSC list**" or Lubricant Substance Classification list is a list of substances and brands that have been assessed on its biodegradation/bioaccumulation, aquatic toxicity and exclusion lists of substances by a competent body. The assessment is only based on a maximum treat rate allowed in a lubricant. The list is published on the EU Ecolabel website and the data can be used directly in the application form (see also chapter 2.4 for some further remarks). The LuSC list can be downloaded here:



<https://ec.europa.eu/environment/ecolabel/documents/LuSC-list%20vs%20200120%2018-1702%20without%20track%20changes.pdf>

"**LoC**" or Letter of Compliance. This letter is emitted by one of the EU Ecolabel competent body indicating the assessment of a substance or brand used in a lubricant. It contains the same information as listed on the LuSC-list.

**(Q)SARs:** Structure-activity relationship (SAR) and quantitative structure-activity relationship (QSAR) models are mathematical models that can be used to predict the physicochemical, biological and environmental fate properties of compounds from the knowledge of their chemical structure. These models are available for free or as commercial software.

The following table summarises all criteria of the Commission Decision.

No.	Criteria
1	Excluded or limited substances
1(a)	Hazardous substances
1(b)	Specified restricted substances
1(c)	Substances of very high concern (SVHC's)
2	Additional aquatic toxicity requirements
2.1	Requirement for the lubricant and its main components
2.2	Requirement for each intentionally added or formed substance at or above 0.10% weight by weight in the final product
3	Biodegradability and bioaccumulative potential
	Biodegradation
	Bioaccumulation
4	Renewable ingredients requirements
5	Packaging/container requirements



6	Minimum technical performance
7	Consumer information regarding use and disposal
8	Information appearing on the EU Ecolabel



***Each of those criteria needs to be fulfilled with the exemption of criteria 2 and 8. For the fulfilment of criterion 2 either sub-criterion 2.1 OR sub-criterion 2.2 needs to be fulfilled. Criterion 8 needs to be fulfilled in case the EU Ecolabel with the optional text box is used.***

## 2.1 Step-by-step walkthrough through the criteria

It is recommended that you start checking internally, if the candidate products can fulfill the criteria. Before you start:

-  Make sure the candidate product fulfils all applicable legal requirements of the country or countries in which the product is intended to be placed on the market.
-  Download the application form and the two annexes.

### Application form



***In the application form you have to fill in the yellow highlighted fields. The purple highlighted fields are for the assessment by the competent body.***



***Please enter the numbers without units.***



Please fill in the yellow highlighted fields in the sheet **Info** and tick the appropriate boxes.



You can select the language in the upper part of the sheet Info. At the moment English and German are available. The version number of the application form can be found in the upper right corner of each sheet. An overview over the changes made to the application form can be found in sheet **Versions**.

G	H
Sprache/Language: <span style="background-color: yellow;">English</span>	

K
v 0.0



Provide relevant evidence on the status of your company and if applicable EMAS or ISO 14001 certificates. This is related to the application fees.

## 2.2 For which products can applications be made?

The criteria cover total loss lubricants and greases (TLL), partial loss lubricants and greases (PLL) and accidental loss lubricants (ALL) for the use by private consumers and professional users.



Following areas of application of products are assigned to specific categories so far:

**TLL:** Chainsaw oils, wire rope lubricants, concrete release agents

**PLL:** Gear oils for open gears, stern tube oils, two-stroke oils, oils for temporary protection against corrosion

**ALL:** Hydraulic fluids, metalworking fluids, gear oils for closed gears

➡ Check whether the candidate product is in the scope (Article 1 of the Commission Decision).

⚠ **If the area of application of the candidate product is not expressly assigned to a category, you have to justify, why the product should be assigned to the category you suggested.**

⚠ **In case of doubt which category to choose, the candidate product will be assessed as a TLL.**

### Application form

📄 Tick the corresponding category under "Product Information" in the lower part of the sheet **Info**.

Tic which category the lubricant belongs to:	
<input type="checkbox"/> Total Loss Lubriacants (TLL)	e
<input type="checkbox"/> Partial Loss Lubricants (PLL)	e
<input type="checkbox"/> Accidental Loss Lubricants (ALL)	e

📄 Please choose on sheet **1**, if the candidate product is a grease. If you pick "a", the symbol shown will be ✓ (meaning the product is a grease); if you pick "r" the symbol shown will be ✗ (meaning the candidate product is no grease).

<b>Grease?"</b>	
<input checked="" type="radio"/> a <input type="radio"/> r	

📄 Please choose the category of the candidate product.

<b>Category:</b>	
<input checked="" type="radio"/> TLL <input type="radio"/> PLL <input type="radio"/> ALL <input type="radio"/> -	

📄 Justify in a separate document, why the product should be assigned to the category you suggested, if the area of application of the candidate product is not expressly assigned to a category already.

### **2.2.1 Criterion 1 – Excluded or limited substances**

➡ Prepare or collect the safety data sheet for the candidate product.

➡ Collect safety data sheets for the substances and mixtures added to the candidate product.



**Make sure the safety data sheets are in accordance with Regulation (EC) No 1907/2006 and Regulation (EC) No 1272/2008. The safety data sheets should be the most up to date ones.**



**If no safety data sheets are available for a substance in the candidate product, because the substance is covered by an exemption described in the Annexes IV and V to Regulation (EC) No 1907/2006, your supplier has to submit a declaration to this effect.**



**The total mass of substances mentioned in the safety data sheets may not count up to 100%. Therefore substances that are e.g. non-toxic are not indicated. Still an assessment to establish their EEL classification must be made. For mixtures that are not present on the LuSC list always ask your supplier to get in contact with your Competent Body concerning the full composition of the mixture so the Competent Body can assess the mixture.**



**(a) Criterion 1(a) – Hazardous substances**

Table 1 of the Commission Decision:

Hazard Category	Hazard Statement	Limit value [% (w/w)] per substances in the final product
Muta. 1[A,B]	H340	0.010
Muta. 2	H341	0.010
Carc. 1[A,B]	H350 H351i	0.010
Carc. 2	H351	0.010
Repr. 1[A,B]	H360F H360D H360FD H360Fd H360Df	0.010
Repr. 2	H361f H361d H361fd	0.010
Lact.	H362	≤ 0.010
Acute Tox. 1 Acute Tox. 2	H300 (oral)	≤ 0.010
Acute Tox. 1 Acute Tox. 2	H310 (dermal)	≤ 0.010
Acute Tox. 1 Acute Tox. 2	H330 (inhal.)	≤ 0.010
Acute Tox. 3	H301 (oral)	< final product classification limit for H301
Acute Tox. 3	H311 (dermal)	< final product classification limit for H311
Acute Tox. 3	H331 (inhal.)	< final product classification limit for H331
Asp. Tox. 1	H304	≤ 0.5 x final product classification limit for H304
STOT SE 1	H370 H372	≤ 0.010
STOT SE 2	H371	≤ 0.010
STOT SE 2	H373	< final product classification limit for H373
STOT SE 3	H335	≤ 0.010
STOT SE 3	H336	< final product classification limit for H336



Hazard Category	Hazard Statement	Limit value [% (w/w)] per substances in the final product
Skin Corr. 1[A,B,C]	H314	< final product classification limit for H314
Skin Irrit. 2	H315	< final product classification limit for H315
Eye Dam. 1	H318	< final product classification limit for H318
Eye Irrit. 2	H319	< final product classification limit for H319
Resp. Sens. 1[A,B]	H334	≤ 0.010
Skin Sens. 1[A,B]	H317	< final product classification limit for H317
Aquatic Acute 1	H400	≤ 0.5 x final product classification limit for H400
Aquatic Chronic 1	H410	≤ 0.5 x final product classification limit for H410
Aquatic Chronic 2	H411	< final product classification limit for H412 and H413
Aquatic Chronic 3	H412	< final product classification limit for H412 and H413
Aquatic Chronic 4	H413	< final product classification limit for H412 and H413
Ozone 1	H420	≤ 0.010
-	EUH029	≤ 0.010
-	EUH031	≤ 0.010
-	EUH032	≤ 0.010
-	EUH066	< final product classification limit for EUH066
-	EUH070	≤ 0.010

-  Confirm that the candidate product is not classified with any of the H-statements listed in table 1 of the Commission Decision.
-  For the assessment it is required to state each classified substance above **0.010%** in the final lubricant regardless whether it is added intentionally or is present as impurity or additive to stabilise the substances or mixtures added to the final lubricant. It is preferred if possible to state all substances present above 0.010% in the final lubricant.

Please note following:

- If a substance or mixture is added to the final lubricant below 10% (w/w), everything below 0.10% in that substance or mixture will be in the final lubricant below 0.010%. No action is required, the SDS is sufficient.
- If a substance or mixture is added to the final lubricant with 10% (w/w) or above, the classified substances in that substance or mixture below 0.10% need to be stated. The SDS is not sufficient.



**Substances or mixtures called “Reaction products of...”: Please check the classification of the reactants. Please make sure that the fraction of this specific substance is below 0.010% in the final lubricant.**



**Polyalkyleneglycols (PAO) and alkylethoxylated (AEO) where the monomers are ethylene oxide and/or propylene oxide (which are CMR classified monomers): Request additional information, statements and/or chromatograms that the fraction of the EO/PO monomers is below 0.010%.**



Check whether any of the substances that are added intentionally and/or are chemically formed after an intentional chemical reaction and present above 0.010% (w/w) in the candidate product are classified with any of the H-statements listed in Table 1 of the Commission Decision.

- Confirm that those substances do not exceed the limit values listed in table 1 of the Commission Decision in the candidate product.

If a mixture contains substances that are intentionally added and are classified, each substance itself cannot exceed the limit values given in Table 1 in the candidate lubricant, for example if additive packages are used.

**(b) Criterion 1(b) – Specified restricted substances**

- Check whether any of the substances mentioned under point (a) appear in the Union List of priority substances in the field of water policy<sup>2</sup> or in the OSPAR List of Chemicals for Priority Action<sup>3</sup>.
- Check whether any of the substances mentioned under point (a) are organic halogen compounds, nitrite compounds or metals or metallic compounds (except Na, K, Mg and Ca and in the case of thickeners, also Li and/or Al).

**(c) Criterion 1(c) – Substances of very high concern (SVHCs)**

- Check whether any of the substances mentioned under point (a) appear in the Candidate List for Substances of Very High Concern<sup>4</sup>.



**Please use the Candidate List for Substances of Very High Concern valid at the time of application.**

**Application form**




Please fill in the table in sheet 1. For example:


1(a)i): Lubricant; 1(a)ii)+1(b)+1(c): ingredients > 0,01 % (w/w)					Headings		
No.	CAS No.	EC No.	Substance/Brand name (as stated on the LuSC-list) (IUPAC name)	Fraction present [% (w/w)]	H-phrases (Re Please enter		
			**				
1	Lubricant:		Candidate Product				
2	1234-56-7	123-456-7	Main component 1	68			
3	2345-67-8	234-567-8	Main component 2	26			
4	3456-78-9	345-678-9	Substance	0,5	H411		
5			Mixture	2,3	H413		
6	4567-89-0	456-789-0	UVCB	0,19	H304	EUH066	
7			Polymer	3			
8			Other	0,01	H370		
9							

<sup>2</sup> Annex X to Directive 2000/60/EC of the European Parliament and of the Council as amended by Decision No 2455/2001/EC

<sup>3</sup> <http://www.ospar.org/work-areas/hasec/chemicals/priority-action>


<sup>4</sup> <https://echa.europa.eu/web/guest/candidate-list-table#download>


 If the H statement shows up in **red**, the substance/brand cannot be used above 0.01% (w/w) in the candidate lubricant. If the H statement shown up in **blue** you will have to make sure the limit values in table 1 of the Commission Decision are not exceeded.


 Please enter the function of the substance in column Q and the form of the substance in column R.


Possible functions are: Base fluid, thickener, extreme pressure additive/anti-wear additive, antioxidant, corrosion inhibitor, detergent/emulsifier, viscosity modifier/pour point depressant/viscosity improver, antifoam/demulsifier/dispersant, additive package, and so on.

Possible forms are: liquid, solid, nano, Polymer, UVCB, and so on.

 If you use a thickening system which contains Al or Li or a metal or metallic compound containing Na, K, Mg or Ca please select "metal or metallic compound (Na, K, Mg or Ca; Al or Li)" in column S. In all other cases of metals or metallic compounds you have to choose "metal or metallic compound".


 ***If the substances appear in one of the lists mentioned in Criterion 1(b) or 1 (c) or belong to one of the mentioned compound classes, it can be used, if the concentration is < 0.01% (w/w) in the candidate product.***

 Attach the safety data sheets of the candidate product and the components.

 If necessary attach a declaration of the supplier, if a substance is covered by an exemption described in the Annexes IV and V to Regulation (EC) No 1907/2006.

## 2.2.2 Criterion 2 – Additional aquatic toxicity requirements

 ***Please demonstrate compliance by meeting the requirements of either criterion 2.1 or criterion 2.2.***

 Decide which criterion you want to use for demonstrating compliance.

If all of your ingredients are listed on the LuSC list already the advice would be to pick criterion 2.2, since you do not have to test your candidate product.

If data is missing for several of the ingredients you use, it is probably easier and cheaper to pick criterion 2.1.

*Permissible tests for both criteria 2.1 and 2.2:*

Acute aquatic toxicity tests - available or generated for the application		
Algae	<ul style="list-style-type: none"> <li>• ISO 10253</li> <li>• ISO 8692</li> <li>• OECD 201 / Part C.3 of the Annex to Regulation (EC) No 440/2008</li> </ul>	only 72 h ErC <sub>50</sub>
Daphnia (acute)	<ul style="list-style-type: none"> <li>• ISO 6341</li> <li>• OECD 202 / Part C.2 of the Annex to Regulation (EC) No 440/2008</li> </ul>	only 48 h EC <sub>50</sub>
Fish (acute)	<ul style="list-style-type: none"> <li>• OECD 203 / Part C.1 of the Annex to Regulation (EC) No 440/2008<sup>5)</sup></li> <li>• OECD 236 / Part C.49 of the Annex to Regulation (EC) No 440/2008</li> </ul>	only 96 h LC <sub>50</sub>
Chronic aquatic toxicity tests - available		

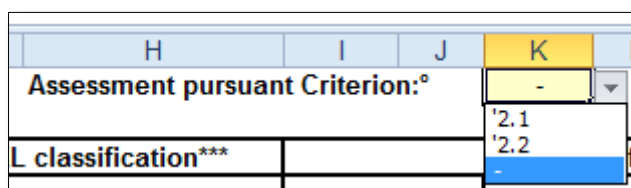
<sup>5</sup> Only applies to available existing data. This test method shall not be used for tests that have to be performed for the application.

Algae	<ul style="list-style-type: none"> <li>• ISO 10253</li> <li>• ISO 8692</li> <li>• OECD 201 / Part C.3 of the Annex to Regulation (EC) No 440/2008</li> </ul>	NOEC
Daphnia (chronic)	<ul style="list-style-type: none"> <li>• OECD 211 / Part C.20 of the Annex to Regulation (EC) No 440/2008</li> </ul>	NOEC
Fish (chronic)	<ul style="list-style-type: none"> <li>• ISO 12890</li> <li>• OECD 210 / Part C.47 of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 212 / Part C.15 of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 215 / Part C.14 of the Annex to Regulation (EC) No 440/2008</li> </ul>	NOEC

## **Application form**



Please choose which criterion you want to use for the assessment on sheet **2.1**.



### **(a) Criterion 2.1 – Requirements for the lubricant and its main components**



Check if you already have tests on aquatic toxicity for your candidate product for all three trophic levels.



***Data on chronic aquatic toxicity on the candidate product are only accepted, if test on the acute aquatic toxicity are missing for the specific trophic levels.***



If you do not have old tests available have new tests on acute aquatic toxicity performed for your candidate product for the required trophic levels.



***In that case the candidate product has to be tested for ACUTE aquatic toxicity.***



Check, if your main components are listed on the LuSC list or contact your supplier to find out if a Letter of Compliance (LoC) is available for them.



***In case your main components are listed on the LuSC list no additional documents must be submitted.***

***In case valid LoC for your main components are available the LoC must be submitted with the application form.***



If both are not available, ask your suppliers for available test reports on the required trophic levels (acute: algae and daphnia, chronic daphnia and fish). The supplier can hand in the test reports directly to the Competent Body where the application will be submitted, if he does not want to share the data with you.



***Data on chronic aquatic toxicity on the main ingredients are only accepted, if test on the acute aquatic toxicity are missing for the specific trophic levels.***



If test reports are also not available, you will have to have tests performed on the main components, too, or ask your supplier to do that for you.



**In that case the main ingredients have to be tested for ACUTE aquatic toxicity.**



**Make sure that the values listed in the table below are not exceeded.**

Thresholds:

		TLL	PLL	ALL
<b>Candidate product</b>	Threshold (acute) <sup>6</sup>	≥ 1000 mg/l	≥ 1000 mg/l	≥ 100 mg/l
	Threshold (chronic) <sup>7</sup>	≥ 100 mg/l	≥ 100 mg/l	≥ 10 mg/l
<b>Main components</b>	Threshold (acute) <sup>6</sup>	≥ 100 mg/l	≥ 100 mg/l	≥ 100 mg/l
	Threshold (chronic) <sup>7</sup>	≥ 10 mg/l	≥ 10 mg/l	≥ 10 mg/l



**(Q)SARs are only allowed to be used to fill data gaps for acute or chronic aquatic toxicity in ONE of the relevant trophic levels.**

The ECHA Guidance on QSARs can be found here:



[https://echa.europa.eu/documents/10162/13632/information\\_requirements\\_r6\\_en.pdf/77f49f81-b76d-40ab-8513-4f3a533b6ac9](https://echa.europa.eu/documents/10162/13632/information_requirements_r6_en.pdf/77f49f81-b76d-40ab-8513-4f3a533b6ac9)



**In case of slightly soluble substances or mixtures (< 10 mg/l) the method of water-accommodated fraction (WAF) can be used.**

For the preparation of a WAF following guidelines can be used:

- Appendix C to ECETOC Technical Report No 26 (1996)
- OECD 2002 Guidance Document of Aquatic Toxicity Testing for Difficult Substances and Mixtures (OECD Series of Testing and Assessment, No 23)
- ISO 5667-16 Water quality - Sampling - Part 16 (Guidance on biotesting of samples)
- ASTM D6081-98 (Standard practice for Aquatic Toxicity Testing for Lubricants: Sample Preparation and Results Interpretation)

## **Application form**



In sheet **2.1** please enter the source of the assessment in column H. You can choose from self-assessment or data from the LuSC list or a LoC.



**The candidate product can only be assessed by self-assessment, meaning you have to hand in test reports on aquatic toxicity for the three trophic levels.**




For the candidate product and in case you pick self-assessment for the main components please fill in the sheets **2 - Algae**, **2 - Daphnia**, **2 - Fish** and **2 - Other**.


For example sheet **2 - Algae**:


<sup>6</sup> Tests for following two trophic levels must be presented: Algae, daphnia (acute).


<sup>7</sup> Tests for following two trophic levels must be presented: Daphnia (chronic), fish (chronic).


		Algae toxicity test results							2.1	
Substance/Brand name (as stated on the LuSC-list) (IUPAC name)	Fraction present [% (w/w)]	Base of self-assessment	Test Protocol (EC 440/2008, OECD,...)	WAF	Result [mg/l]	Result [mg/l]	GLP	Document attached	Limit [mg/L]	Result ok?
					(72hE <sub>50</sub> )	(NOEC)			(72hE <sub>50</sub> )	(72hE <sub>50</sub> )
Candidate Product		test protocol	C.3 / OECD 201	YES	> 1000		YES	YES	1000	✓
Main component 1	68	-	-	-			-	-	100	

 **Please put a space between the > or < symbol and the number under Result [mg/l].**

 **The base of self-assessment has to be a test protocol for the candidate lubricant.**

 The limit value in the column "Limit [mg/l]" is linked to your selection of the product category and changes automatically depending what you choose in sheet 1.

 If the limit value is exceeded, the sheet will automatically calculate, if the result is ok or not (see ✓ in the picture above). For not ok you would see ✗.

 In sheet 2.1 you will see the results of the toxicity tests starting from column I.

If the results of all three trophic levels are ✓ for the candidate product, you can choose YES in column G of sheet 2.1.


If you use the LuSC list or a LoC, a classification of "D" means you can choose YES in column G of sheet 2.1.

E	F	G	H	I	J	K	L	M
Assessment pursuant Criterion:°							2.1	
Category:		EEL classification***			EEL classification D?			
TLL		Aquatic toxicity			Algae	Daphnia	Fish	
5% (w/w)								
Substance/Brand name stated on the LuSC-list (IUPAC name)	Fraction present [% (w/w)]	EEL classification ok? (D)	Source of assessment (self-assessment* or LuSC-list or LoC**)	Result				
				(72hE <sub>50</sub> )	(NOEC)	(48hE <sub>50</sub> )	(NOEC)	(96hLC <sub>50</sub> )
Candidate Product		YES	self-assessment	✓		✓		✓
Main component 1	68	YES	LuSC list					
Main component 2	26	YES	LuSC list					

If the classification of your candidate product and the main components is YES, the criterion is fulfilled.

 Attach the required test reports.

**(b) Criterion 2.2 – Requirements for each intentionally added or formed substance at or above 0,10% weight by weight in the final product**

 Check, if the substances or mixtures you want to use are listed on the LuSC list or contact your supplier to find out if a Letter of Compliance (LoC) is available for them.



**In case the substances and mixtures are listed on the LuSC list no additional documents must be submitted.**

**In case valid LoC for your main components are available the LoC must be submitted with the application form.**



If both are not available, ask your supplier for available test reports on the required trophic levels. The supplier can hand in the test reports directly to the Competent Body where the application will be submitted, if he does not want to share the data with you. You should also tell the supplier, that he has the option to have his products listed on the LuSC list.



**Data on acute aquatic toxicity on the substances and mixtures are only accepted, if test on the chronic aquatic toxicity are missing for the specific trophic levels.**



If test reports are also not available, you will have to have tests performed on each substance or mixture, or ask your supplier to do that for you.



**In that case the substances and mixtures have to be tested for ACUTE aquatic toxicity.**



**Make sure that the values listed in the table above are not exceeded.**

Cumulative mass percentage [% (w/w)] limits:

	Threshold	TLL	PLL	ALL	TLL grease	PLL grease	ALL grease
Non-toxic (D)	acute > 100 mg/l	unlimited					
	NOEC > 10 mg/l						
Harmful (E)	10 mg/l < acute ≤ 100 mg/l	≤ 2	≤ 10	≤ 10	≤ 10	≤ 15	≤ 20
	1 mg/l < NOEC ≤ 10 mg/l						
Toxic (F)	1 mg/l < acute ≤ 10 mg/l	≤ 0.4	≤ 0.6	≤ 2.5	≤ 0.4	≤ 0.6	≤ 1
	0.1 mg/l < NOEC ≤ 1 mg/l						
Very toxic (G)	acute ≤ 1 mg/l	≤ 0.1/M <sup>8</sup>	≤ 0.1/M <sup>8</sup>	≤ 0.1/M <sup>8</sup>	≤ 0.1/M <sup>8</sup>	≤ 0.1/M <sup>8</sup>	≤ 0.1/M <sup>8</sup>
	NOEC ≤ 0.1 mg/l						



**(Q)SARs are only allowed to be used to fill data gaps for acute or chronic aquatic toxicity in ONE of the relevant trophic levels.**

**To make it easier for the assessment of the applications for the Competent Bodies the nomenclature and letters from the previous EU Ecolabel for Lubricants are used again:**

**D** = non-toxic - thresholds: acute > 100 mg/l and NOEC > 10 mg/l

**E** = harmful - thresholds: 10 mg/l < acute ≤ 100 mg/l and 1 mg/l < NOEC ≤ 10 mg/l

**F** = toxic - thresholds: 1 mg/l < acute ≤ 10 mg/l and 0.1 mg/l < NOEC ≤ 1 mg/l

**G** = very toxic - thresholds: acute ≤ 1 mg/l and NOEC ≤ 0.1 mg/l

**Fraction of substances not assessed (-):**

The candidate product allows a small fraction of substances that are not assessed or not allowed (X) on its biodegradation/ bioaccumulation potential or aquatic toxicity. This is caused by the fact that the biodegradation and aquatic toxicity of each substance is only assessed above 0.1% (w/w)

<sup>8</sup> M-factors for highly toxic components of mixtures shall be applied in accordance with article 10 of Regulation (EC) No 1272/20018 as described in Section 4.1.3.5.5.5 of Annex I to that Regulation.

but the list of stated substances starts from 0.010% (w/w). In order to limit the number of substances just below 0.1% and are therefore not assessed, a limit of 0.5% (w/w) has been set for biodegradation or aquatic toxicity (criterion on measurement thresholds).

That means in your candidate product you can have for example 5 substances with each of them at or below 0.1% (w/w). It is not allowed to add a substance not assessed to the candidate product with for example 0.12% (w/w) since that would exceed the limit of 0.1% (w/w). All substances above 0.1% (w/w) need to be assessed according to biodegradation/ bioaccumulation potential or aquatic toxicity.

The application tool calculates, if the amount of not assessed substances fulfils the criteria or not.



***In the LuSC list you might find chemicals with an unassessed fraction and a maximum treat rate above 0.1%. That means that those chemicals are mixtures of several substances where some of them are not assessed. Please make sure that the maximum treat rate given in the LuSC list is not exceeded.***



***Make sure to check columns S (Mono-constituent substance?) correctly.***



***If the value in column K is blue it means that the unassessed fraction is above 0.1%. You need to check whether this fraction results from a mixture, UVCB or a multi-constituent substance.***

***If mono-constituent substance is checked with ✓ and the fraction is above 0.1%, the result of unassessed substances is ✗.***

***If mono-constituent substance is checked with ✗ and the fraction is above 0.1%, the result of unassessed substances is ?. In this case please check first, if the ingredient is listed in the LuSC list and check if the maximum treat rate is not exceeded. If the ingredient is not listed in the LuSC list, you or the CB need to get the exact composition of the ingredient, to see if the mono-substituent substance in the ingredient are all below 0.1% and do not exceed 0.5% when added together.***

## **Application form**



In sheet **2.2** the source of the assessment is copied from sheet **2.1**. Therefore please enter the source of the assessment in column H. You can choose from self-assessment or data from the LuSC list or a LoC.



If LuSC list of LoC data is available for the components please enter the values given there in the appropriate column. For example:



Substance/Brand name stated on the LuSC-list (IUPAC name)	Fraction present [% (w/w)]	D [%]	E [%]	F [%]	G [%]	M", if EEL clas- sification is G	Source of assessment (self-assessment* or LuSC-list or LoC**)
<b>Candidate Product</b>							
Main component 1	68	100				0	1 LuSC list
Main component 2	26	100				0	1 LuSC list
Substance	0,5		100			0	1 self-assessment
Mixture	2,3	90		10		0	1 LuSC list
UVCB	0,19	100				0	1 LuSC list
Polymer	3	100				0	1 self-assessment
Other	0,01					0,01	1 LuSC list


As you can see for **"Mixture"** a value is entered for D [%] and another value is entered at F [%]. This means that the mixture consists of at least two substances which have different aquatic toxicity classifications. One substance is in the mixture with 90% has the classification D and the other substance is present at 10% with a classification or 10%. Therefore both values need to be filled into the form with the corresponding percentage.

For **"Other"** there is no value entered at all. Since this substance is present in the candidate product with 0.01% the aquatic toxicity does not need to be tested. The 0.01% are added to the fraction of the candidate product which is not assessed.

For **"Substance"** self-assessment is chosen. The results of the self-assessment can be seen here:

Substance	0,5		100			0	1	self-assessment	E	D			
Mixture	2,3	90		10		0	1	LuSC list					
UVCB	0,19	100				0	1	LuSC list					
Polymer	3	100				0	1	self-assessment					✓

The aquatic toxicity on algae resulted in "E", the aquatic toxicity on daphnia resulted in "D". The worst case applies to the classification of the substance: The substance will be 100% E.


 If your component is classified with G please enter the M-factor in the appropriate column. You need to pick the highest M-factor listed in the safety data sheet of the component.

 Attach the required test reports.

### (c) Exemptions from criteria 2.1 and 2.2

*Exempted, if the substance fulfils one of the conditions below:*

	Threshold
<b>Molecular weight and molecular diameter</b>	> 800 g/mol and > 1,5 nm (< 15 Å)
<b>Polymer molecular weight fraction below 1000 g/mol</b>	< 1%
<b>Water solubility</b>	< 10 µg/l

 Check, if your added substances fall under one of the exemptions mentioned.



**In case that the substance is a polymer, prepare test reports on the molecular weight fraction of the polymer below 1000 g/mol.**

**If that fraction is less than 1%, the substance counts as polymer and you do not have to do anything else.**

**If the fraction below 1000 g/mol is  $\geq$  1% you need to treat that fraction according to sub-criterion 2.2.**



**The molecular weight and molecular diameter only applies for mono-constituent substance where the structure is clearly defined. This verification is NOT possible for polymers, mixtures, UVCBs and multi-constituent substances.**

Permissible tests:

<b>Water solubility</b>	• OECD 105 / Part A.6 of the Annex to Regulation (EC) No 440/2008
<b>Polymer molecular weight fraction below 1000 g/mol</b>	• OECD 119 / Part A.19 of the Annex to Regulation (EC) No 440/2008

**i Molecular diameter:** The diameter in question is the average maximum diameter (D<sub>max aver</sub>); see the ECHA guidance Chapter R.11: PBT/vPvB assessment, Chapter R.11.4.1.2.10, page 82.

Normally it is calculated by the Software package OASIS (LMC). In the ECHA guidance Chapter R.11: PBT/vPvB assessment it is stated in Appendix R.11-1, page 124, footnote 45: *“Please note that the indicator value of 1.7 nm for the average maximum diameter was derived using the descriptor D<sub>max</sub> from OASIS. However, it appears from the Environment Agency (2009) that the use of different software tools could lead to variable results for the same substance.”*

This means that not only one but all appropriate models may be used albeit it is known that the results may differ slightly and this should be taken into account. Long calculation times are not unusual and should be no obstacle for an applicant. Alternative ways of calculating the molecular diameter may include scientific standard software for conducting geometry optimizations and we do not expect that a very high level of quantum chemical calculation is required, i.e. calculation times may be perceived to be “long” in some cases but calculation time should not prevent determination of this parameter. However, the most convenient way is certainly to determine D<sub>max</sub> as described in the ECHA guidance. The authors of the OASIS software describe their approach to D<sub>max</sub> in a paper (Dimitrov et al. 2005), and this paper also contains the respective references for the earlier empiric cut-off at 1.5 nm.



The ECHA Guidance Chapter R.11 can be found here:

[https://echa.europa.eu/documents/10162/23047722/ir\\_csa\\_r11\\_msc\\_bpc\\_en.pdf/f43d277c-835e-a208-5c51-53c5826f0845](https://echa.europa.eu/documents/10162/23047722/ir_csa_r11_msc_bpc_en.pdf/f43d277c-835e-a208-5c51-53c5826f0845)



As verification for the molecular diameter the following options are valid:

- Have a calculation done following the ECHA Guidance as described in the green box above.
- Submit scientific evidence from a peer-reviewed journal.



As verification for the molecular weight submit an underlying report with the molecular formula and the calculation of the molecular mass.

## Application form



If one of the exemptions applies please fill in sheet **2 - Andere (Other)**.

For example: For "**Polymer**" also self-assessment was chosen:

Substance	0,5		100		0	1	self-assessment	E	D			
Mixture	2,3	90		10	0	1	LuSC list					
UVCB	0,19	100			0	1	LuSC list					
Polymer	3	100			0	1	self-assessment					✓

At the end on the line for "**Polymer**" you see a ✓ in the column with the header "*Other*" and "*Data sufficient?*". This means one of the exemptions applied, which have to be filled in in sheet **2 - Other**. In this case a test on the polymer fraction below 100 g/mol was performed and resulted in an amount below 100 g/mol of 0.9%. This means the data is sufficient and no test on aquatic toxicity needs to be performed:

Substance/Brand name as stated on the LuSC-list) (IUPAC name)	Fraction present [% (w/w)]	Molecu- lar mass [g/mol]	Mole- cule dia- meter [nm]	Test Protocol (EC 440/2008, OECD,...)	Polymer fraction < 1000 g/mol? [%]	GLP	Document attached
<b>Candidate Product</b>							
Main component 1	68			-		-	-
Main component 2	26			-		-	-
Substance	0,5			-		-	-
Mixture	2,3			-		-	-
UVCB	0,19			-		-	-
Polymer	3			A.19 / OECD 119	0,9	YES	YES
Other	0,01						

For sheet **2.2** it means the polymer can be classified as 100% D.



Attach the required test reports.



When all data is added in the sheet **2.2** the actual amounts of D, E, F, G and the not assessed parts (-) of the candidate lubricants are calculated and compared to the thresholds of the chosen category:

99,26	D	Limit D	∞	<b>Re- sult</b>	✓
0,5	E	Limit E ≤	10		✓
0,23	F	Limit F ≤	0,4		✓
0	G	Limit G ≤	0,1		✓
0,01	-	unassessed	0,5		✓

In this example the results are overall ✓, which means the thresholds are fulfilled and the criterion is fulfilled.

## 2.2.3 Criterion 3 – Biodegradability and bioaccumulative potential

### (a) Biodegradation

- ➡ Check, if the substances or mixtures you want to use are listed on the LuSC list or contact your supplier to find out if a Letter of Compliance (LoC) is available for them.



***In case the substances and mixtures are listed on the LuSC list no additional documents must be submitted.***

***In case valid LoC for your main components are available the LoC must be submitted with the application form.***

- ➡ If both are not available, ask your supplier for available test reports on the biodegradability of the substances or the substances in the mixtures. The supplier can hand in the test reports directly to the Competent Body where the application will be submitted, if he does not want to share the data with you. You should also tell the supplier, that he has the option to have his products listed on the LuSC list.
- ➡ If test reports are also not available, and the component in question is a substance you will have to have tests performed on the substance, or ask your supplier to do that for you.
- ➡ If test reports are not available, and the component in question is a mixture, you will have to find out which substances are in the mixture and test each of them, or ask your supplier to do that for you.



***Contrary to the aquatic toxicity the biodegradation shall be tested on SUBSTANCE LEVEL only.***

Permissible tests:

	Thresholds	Permissible tests
<b>Ready biodegradability</b>	≥ 70% (dissolved organic carbon)	<ul style="list-style-type: none"> <li>• OECD 301 A / Part C.4 A of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 E / Part C.4 B of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 306 / Part C.42 of the Annex to Regulation (EC) No 440/2008 (Shake Flask)</li> </ul>
	≥ 60% (O <sub>2</sub> depletion/CO <sub>2</sub> generation)	<ul style="list-style-type: none"> <li>• OECD 301 B / Part C.4 C of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 C / Part C.4 F of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 D / Part C.4 E of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 F / Part C.4 D of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 306 / Part C.42 of the Annex to Regulation (EC) No 440/2008 (Closed Bottle)</li> <li>• OECD 310 / Part C.29 of the Annex to Regulation (EC) No 440/2008</li> </ul>
<b>Inherent biodegradability</b>	> 70%	<ul style="list-style-type: none"> <li>• OECD 302 B / Part C.9 of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 302 C</li> </ul>
	20% < X < 60% (O <sub>2</sub> depletion / CO <sub>2</sub> generation)	<ul style="list-style-type: none"> <li>• OECD 301 B / Part C.4 C of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 C / Part C.4 F of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 D / Part C.4 E of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 301 F / Part C.4 D of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 306 / Part C.42 of the Annex to Regulation (EC) No 440/2008 (Closed Bottle)</li> <li>• OECD 310 / Part C.29 of the Annex to Regulation (EC) No 440/2008</li> </ul>
<b>BOD5/COD</b>	≥ 0,5	<ul style="list-style-type: none"> <li>• Part C.5 of the Annex to Regulation (EC) No 440/2008</li> <li>• Part C.6 of the Annex to Regulation (EC) No 440/2008</li> </ul>

All substances that do not meet these criteria are considered as **non-biodegradable**.

① For inherently biodegradability measurements only the OECD 302 B and OECD 302 C tests are valid, as stated in the ECHA guidance Chapter R.11: PBT/vPvB assessment on page 42. The OECD 302 A test (SCAS-test) is not an option:

• **Assessment of inherent biodegradation test data** - Results of a Zahn-Wellens test (OECD TG 302B) or MITI II test (OECD TG 302C) only (not SCAS-test) may be used to confirm that the substance does not fulfil the criteria for P provided that certain additional conditions are fulfilled.

① Sometimes during a biodegradation test stable metabolites are formed which lead to values that would make these substances inherently biodegradable but that is an incorrect interpretation of inherent biodegradability. In that case, whenever indicated in the information source the substance shall be regarded as not biodegradable and the bioaccumulation potential of the metabolite shall be assessed.

① The inorganic substances shall be also assessed. They are in general considered not to biodegrade so automatically a bioaccumulation assessment must be made.

The ECHA guidance on PBT/vPvB assessment can be found here:



[https://echa.europa.eu/documents/10162/13632/information\\_requirements\\_r11\\_en.pdf](https://echa.europa.eu/documents/10162/13632/information_requirements_r11_en.pdf)



**Make sure that the values listed in the table below are not exceeded.**

*Cumulative mass percentage [% (w/w)] limits:*

	TLL	PLL	ALL	Greases (TLL, PLL, ALL)
Readily aerobically biodegradable (A)	> 95	> 75	> 90	> 80
Inherently aerobically biodegradable (B)	≤ 5	≤ 25	≤ 10	≤ 20
Non-biodegradable and non-bioaccumulative (C)	≤ 5	≤ 20	≤ 5	≤ 15
Non-biodegradable and bioaccumulative (X)	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1

**To make it easier for the assessment of the applications for the Competent Bodies the nomenclature and letters from the previous EU Ecolabel for Lubricants are used again:**

**A** = readily aerobically biodegradable

**B** = inherently aerobically biodegradable

**C** = non-biodegradable and non-bioaccumulative

**X** = non-biodegradable and bioaccumulative

**Fraction of substances not assessed (-):**

The candidate product allows a small fraction of substances that are not assessed or not allowed (X) on its biodegradation/ bioaccumulation potential or aquatic toxicity. This is caused by the fact that the biodegradation and aquatic toxicity of each substance is only assessed above 0.1% (w/w) but the list of stated substances starts from 0.010% (w/w). In order to limit the number of

substances just below 0.1% and are therefore not assessed, a limit of 0.5% (w/w) has been set for biodegradation or aquatic toxicity (criterion on measurement thresholds).

That means in your candidate product you can have for example 5 substances with each of them at or below 0.1% (w/w). It is not allowed to add a substance not assessed to the candidate product with for example 0.12% (w/w) since that would exceed the limit of 0.1% (w/w). All substances above 0.1% (w/w) need to be assessed according to biodegradation/ bioaccumulation potential or aquatic toxicity.

The application tool calculates, if the amount of not assessed substances fulfils the criteria or not.



***In the LuSC list you might find chemicals with an unassessed fraction and a maximum treat rate above 0.1%. That means that those chemicals are mixtures of several substances where some of them are not assessed. Please make sure that the maximum treat rate given in the LuSC list is not exceeded.***



***Make sure to check columns P (Mono-constituent substance?) correctly.***

***If the value in column K is blue it means that the unassessed fraction is above 0.1%. You need to check whether this fraction results from a mixture, UVCB or a multi-constituent substance.***

***If mono-constituent substance is checked with ✓ and the fraction is above 0.1%, the result of unassessed substances is ✗.***

***If mono-constituent substance is checked with ✗ and the fraction is above 0.1%, the result of unassessed substances is ?. In this case please check first, if the ingredient is listed in the LuSC list and check if the maximum treat rate is not exceeded. If the ingredient is not listed in the LuSC list, you or the CB need to get the exact composition of the ingredient, to see if the mono-substituent substance in the ingredient are all below 0.1% and do not exceed 0.5% when added together.***

## **Application form**



In sheet 3 please enter the source of the assessment in column H. You can choose from self-assessment or data from the LuSC list or a LoC.



If LuSC list of LoC data is available for the components please enter the values given there in the appropriate column.

For example:

Substance/Brand name (as stated on the LuSC-list) (IUPAC name)	Fraction present [% (w/w)]	A [%]	B [%]	C [%]	X [%]	-	Source of assessment (self-assessment* or LuSC-list or LoC**)
<b>Candidate Product</b>							
Main component 1	68	100				0	LuSC list
Main component 2	26	100				0	LuSC list
Substance	0,5		100			0	self-assessment
Mixture	2,3	57	29	10		0,092	LuSC list
UVCB	0,19			100		0	LuSC list
Polymer	3			100		0	self-assessment
Other	0,01				100	0	LuSC list

As you can see for "Mixture" values are entered for A [%], B [%] and C [%]. Additionally in the column for the not assessed amounts you find the value 0.092. This means that the mixture consists of at least 4 substances which have different biodegradabilities. One substance is in the mixture with 57% is readily biodegradable (A), a second substance with 29% is inherently biodegradable (B) and a third substance is present at 10% which is not biodegradable (C). A fourth substance with 4% has not been assessed on biodegradation at all. In the LuSC list the different values for the assessed substances can be found and all three values need to be filled into the form with the corresponding percentage. The remaining unassessed part gets calculated automatically.

For "Substance" self-assessment is chosen. Therefore sheet 3 - Biodegradation has to be filled in:

Substance/Brand name stated on the LuSC-list (IUPAC name)	Fraction present [% (w/w)]	Base of self- assessment	Test Protocol (EC 440/2008, OECD,...)	Method 1* 2** 3***	BOD5/ COD	WAF	Degradation after 28 days <sup>o</sup> [%]	GLP	Document attached	Re- sult
<b>Candidate Product</b>										
Main component 1	68	-	-	-	-	-	-	-	-	-
Main component 2	26	-	-	-	-	-	-	-	-	-
Substance	0,5	test protocol	C.4 E / OECD 301 D	2		NO	45	YES	YES	B

In this case a test according to OECD 301 D was performed with a result of 45% after 28 days. This means following the criterion that the substance is inherently biodegradable and the assessment result is B. The result is automatically calculated and is automatically copied to sheet 3.

For "Polymer" also self-assessment is chosen. There is no test on biodegradation available so the sheet 3 - **Biodegradation** has to be filled out as follows:

Substance	0,5	test protocol	C.4 E / OECD 301 D	2		NO	45	YES	YES	B
Mixture	2,3	-	-	-	-	-	-	-	-	-
UVCB	0,19	-	-	-	-	-	-	-	-	-
Polymer	3	-	-	-	-	-	0	-	-	?

In the column "Degradation after 28 days" you have to enter 0, to show that no data is available and the compound is considered as not biodegradable. As result you will get a "?". You will get that "?" for every non-biodegradable substance indicating that you still have to prove that the substance is not bioaccumulating.



Attach the required test reports.

## (b) Bioaccumulation

- ➔ Check, if your added substances are potentially bioaccumulative or not. Your substance is bioaccumulative (X), if the substance fulfils one of the conditions below:

*Bioaccumulative (X), if:*

	Threshold
<b>Molecular weight (MW) and molecular diameter (MD)</b>	MW ≤ 800 g/mol and MD ≤ 1,5 nm (< 15 Å)
<b>log K<sub>ow</sub></b>	3 ≤ log K <sub>ow</sub> ≤ 7
<b>BCF</b>	> 100 l/kg
<b>Polymer molecular weight fraction below 1000 g/mol</b>	≥ 1%

- ➔ As verification for the molecular diameter the following options are valid:
- Have a calculation done following the ECHA Guidance as described in the green box above.
  - Submit scientific evidence from a peer-reviewed journal.
- ➔ As verification for the molecular weight submit an underlying report with the molecular formula and the calculation of the molecular mass.
- ➔ In case that the substance is a polymer, prepare test reports on the molecular weight fraction of the polymer below 1000 g/mol.

If that fraction is less than 1%, the substance counts as polymer and you do not have to do anything else.

If the fraction below 1000 g/mol is ≥ 1% you need to identify the substances in that fraction and proof that none of these substances are bioaccumulative.

*Permissible tests:*

<b>log K<sub>ow</sub></b> (measured, organic chemicals only)	<ul style="list-style-type: none"> <li>• OECD 107 / Part A.8 of the Annex to Regulation (EC) No 440/2008</li> <li>• OECD 123 / Part A.23 of the Annex to Regulation (EC) No 440/2008</li> </ul>
<b>log K<sub>ow</sub></b> (calculated, organic chemicals only)	<ul style="list-style-type: none"> <li>• CLOGP</li> <li>• LOGKOW</li> <li>• (KOWWIN)</li> <li>• SPARC</li> </ul>
<b>BCF</b>	<ul style="list-style-type: none"> <li>• OECD 305 / Part A.13 of the Annex to Regulation (EC) No 440/2008</li> </ul>
<b>Polymer molecular weight fraction below 1000 g/mol</b>	<ul style="list-style-type: none"> <li>• OECD 119 / Part A.19 of the Annex to Regulation (EC) No 440/2008</li> </ul>

ⓘ If an organic acid shall be assessed for bioaccumulation potential, the form in the environmental pH value is also important. The log K<sub>ow</sub> shall not be calculated from the neutral compound if the ionic form is found in the relevant environmental pH range (pH 5 - 8).



### Application form

For the "Polymer" the bioaccumulation potential needs to be determined. The same exemption can be used as for the aquatic toxicity: The polymer fraction below 1000 g/mol. Since this value is below 1% no bioaccumulation is expected and you see a "✓" in the corresponding column:

Substance/Brand name stated on the LuSC-list (IUPAC name)	Fraction present [% (w/w)]	Test Protocol (EC 440/2008, OECD,...)	Polymer fraction < 1000 g/mol? [%]	GLP	Document attached	No Bioaccumulation expected
Candidate Product						
Main component 1	68	-	-	-	-	
Main component 2	26	-	-	-	-	
Substance	0,5	-	-	-	-	
Mixture	2,3	-	-	-	-	
UVCB	0,19	-	-	-	-	
Polymer	3	A.19 / OECD 119	0,9	YES	YES	✓
Other	0,01	-	-	-	-	

In sheet 3 you will then see the following in the "Polymer" row:

Polymer	3		100	0	self-assessment	?	✓	C
---------	---	--	-----	---	-----------------	---	---	---

Since there is no bioaccumulation potential expected, the classification is C.

Attach the required test reports.

When all data is added in the sheet 3 the actual amounts of A, B, C, X and the not assessed parts (-) of the candidate lubricants are calculated and compared to the thresholds of the chosen category:

95,31	A	Limit A >	80	<b>Result</b>	✓
1,167	B	Limit B ≤	20		✓
3,42	C	Limit C ≤	15		✓
0,01	X	Limit X ≤	0,1		✓
0,092	-	unassessed	0,5		✓

In this example the results are overall "✓" which means the thresholds are fulfilled and the criterion is fulfilled.

### 2.2.4 Criterion 4 – Renewable ingredients requirements

#### (a) Criterion 4(a) – Renewable ingredients from palm oil or palm kernel oil or derived from palm oil or palm kernel oil

##### Definitions:

**Palm (kernel) oil or its derivatives (PO/PKO)** summarizes:

- **Palm oil** is oil obtained by pressing from the flesh of the fruits of the oil palm tree.
- **Palm kernel oil** is oil produced from the kernel (or stone) of the fruit of the oil palm tree.
- **Derivatives** are chemical products obtained by further processing of the palm oil and palm kernel oil. A range of derivatives and fractions can be produced.

**Chain of custody certification (CoC)** is a tool/system that verifies that certified material is identified or kept segregated from non-certified or non-controlled material throughout the chain of custody. The CoC system must be in place from the forest unit of origin to the final point of sale, which provides a link between the sustainable-certified material in the product or product line and certified forest/plantation unit. Mixing of sustainable-certified and non-certified products must be done under controlled procedures that meet the CoC requirements.

CoC certification allows companies to label their products with the stamp of the certification scheme (e.g. RSPO), which in turn enables consumers to identify and choose products that support responsible area management.

The **Book and Claim supply chain system** allows all actors of the palm oil supply chain to trade in certificates for RSPO-certified sustainable palm oil. Buying certificates - so called **RSPO Credits** - allows retailers and manufacturers to claim that their business supports the production of sustainable palm oil. The money raised from selling certificates is then used by a palm oil grower to reduce environmental and social impact of palm oil production. **RSPO PalmTrace**, RSPO's traceability system for certified palm oil products, offers, amongst other things, a marketplace and the possibility to register off market deals for RSPO Credits.

Regarding the certification schemes that fulfil or exceed the requirements of this criterion, one example of scheme is the RSPO. This certification scheme complies with this criterion because it holds 8 principles and several criteria, summarised as follows:

- ◆ Commitment to transparency
- ◆ Compliance with applicable laws and regulations
- ◆ Commitment to long-term economic and financial viability
- ◆ Use of appropriate best practices by growers and millers of activities
- ◆ Environmental responsibility and conservation of natural resources and biodiversity
- ◆ Responsible consideration of employees, and of individuals and communities affected by growers and mills
- ◆ Responsible development of new plantings
- ◆ Commitment to continuous improvement in key areas

And more in detail, there is a criterion that requires that "No primary forests or areas which contain significant concentrations of biodiversity (e.g. endangered species) or fragile ecosystems, or areas which are fundamental to meeting basic or traditional cultural needs of local communities (high conservation value areas), can be cleared". And also "a significantly reduced use of pesticides and fires; fair treatment of workers according to local and international labour rights standards, and the need to inform and consult with local communities before the development of new plantations on their land" is required.

Therefore, it can be considered that the RSPO has developed a set of environmental and social criteria which companies must comply with in order to produce Certified Sustainable Palm Oil (CSPO) and these fulfil the requirements set out in this criterion. When they are properly applied, these criteria can help minimize the negative impact of palm cultivation on the environment and communities in palm oil-producing regions.

For palm oil and kernel oil, the RSPO certification, and any other certification schemes that also fulfil the requirement of this EU Ecolabel criterion and are independent third-party certifications, can be considered as valid.



RSPO website: <http://www.rspo.org/>



***The acceptance of an equivalent certification scheme shall be decided at CB Forum level.***

Besides the certification system on sustainable production, the certification scheme should have set up a third-party certified system that ensures the integrity of the trade (i.e. that palm oil or palm kernel oil sold as sustainable palm oil or palm kernel oil have indeed been produced in certified plantations).

Between the forest/plantation and the final user, products may undergo many stages of processing, manufacturing and distribution. The CoC is a traceability system from the point of forest unit to the final point of sale as explained in the definitions. The CoC of a certification system needs to meet the following requirements:

- ◆ Each individual organization in the CoC possesses an operational CoC system with a management system that provides sufficient guarantees that the requirements of the CoC standard are being met.
- ◆ Each individual organization registers the quantities and the names and certificate numbers of the organizations from which it purchases palm oil or palm kernel oil.
- ◆ Certified oil, oil from other verified legal sources and oil from non-verified legal sources are administratively separated. Oil from non-verified legal sources is also physically separated from the other two sources.

The RSPO Supply Chain Standard guarantees that the palm oil or palm kernel oil used is covered through this system. It supports the following supply chain models for the uptake of the certified palm oil and palm kernel oil products:

- ◆ Identify Preserved (**IP**): CSPO is kept segregated from all other sources (certified and non-certified) and a batch of certified palm oil can be traced from plantation to factory to retailer.
- ◆ Segregated system (**SG**): ensures that certified palm oil is kept apart throughout the supply chain. Only certified oil from certified plantations is mixed. The buyer can be sure that its oil comes from RSPO certified plantations.
- ◆ Mass Balance system (**MB**): it allows buying a volume of palm oil corresponding to a quantity of sustainable palm oil really produced. The RSPO certified palm oil enters the classic supply chain where it is mixed with non-certified palm oil entered in the supply chain. The buyer does not buy only physical certified palm oil but supports the implementation of traceability.

The traceability of certified palm oil is ensured throughout the supply chain until the last refinery through the RSPO supply chain database thanks to identification numbers put on invoices and certificates. From the final refinery until the end product, the traceability is made by invoices and supply chain certification of companies.

To ensure the equivalence of the certification scheme chosen, with a proper traceability system, any of the mentioned traceability systems are accepted for this criterion: IP, SG or MB. Additionally the Book and Claim supply chain model can be used.



Check if your substances are on the LuSC list and see what it says in the column "Fraction of PO/PKO" or "Remarks" and the explanation given under footnote j in the LuSC list.



Send Annex 1 to your suppliers of the substances **not** listed in the LuSC list and ask them to fill it in. In case the supplier uses certified PO/PKO Annex 1 and other relevant documents for showing compliance with the criterion can be sent directly to the Competent Body where the application will be submitted, if he does not want to share the data with you.

➡ **Case 1:** The ingoing substances that contain PO/PKO originating from sustainable managed plantations are covered by chain of custody certificates:

**The proofs of compliance are:**

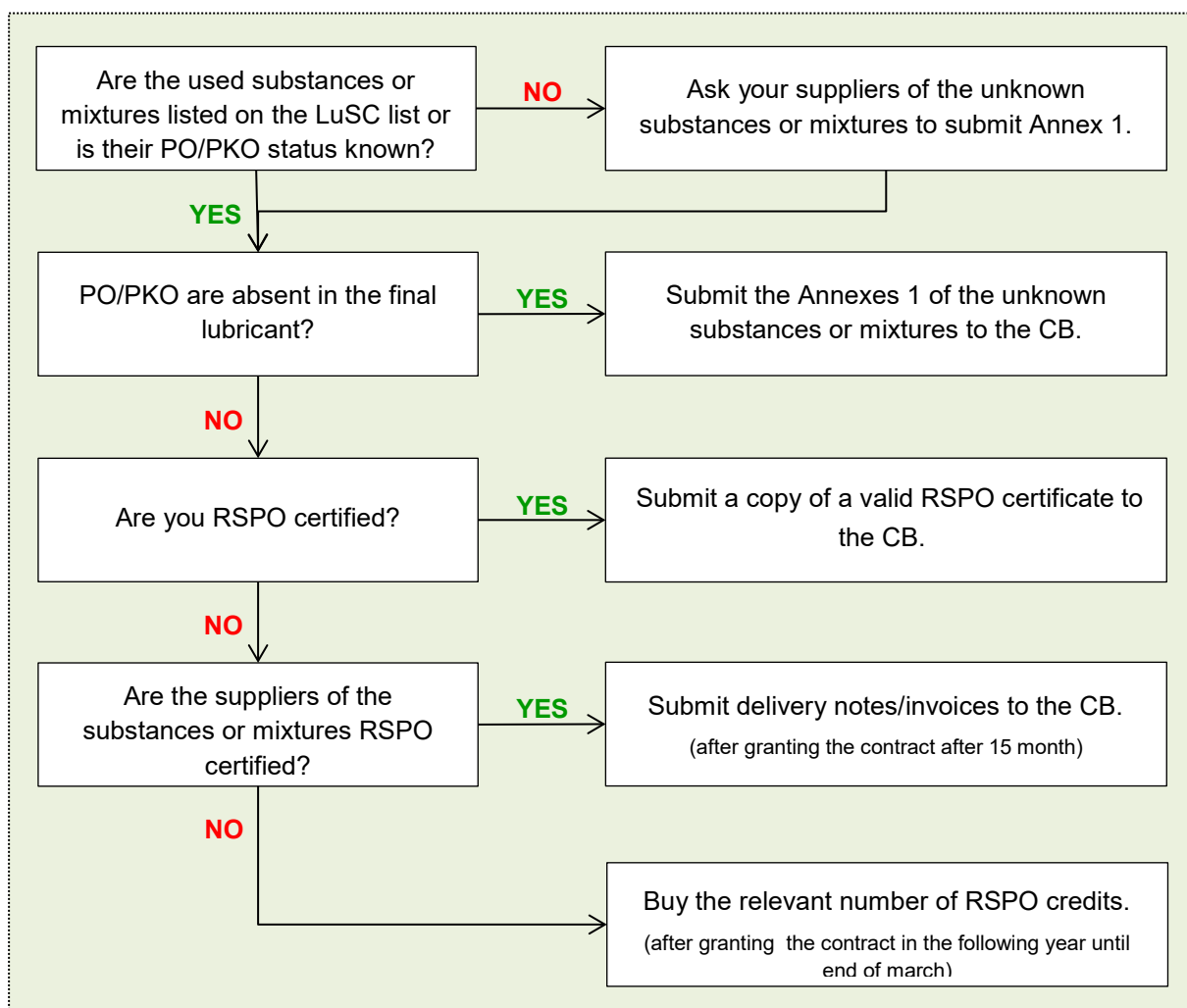
- Annex 1 with the reference to the suppliers RSPO membership number at the end of the calendar year.
- You have to prove throughout invoices that you bought enough amounts of those substances to produce your EU Ecolabel product.

➡ **Case 2:** The ingoing substances contain non certified PO/PKO:


Ask your supplier the amount of palm based part of the product in question in % (w/w). You then have to purchase and claim enough RSPO credits to cover those palm based parts in the RSPO PalmTrace system model during the most recent annual trading period.


**The proofs of compliance are:**

- Your own membership number at the time of applying (see field in sheet 4(a)).
- A calculation that shows that you bought and redeemed enough RSPO credits to produce the EU Ecolabel products.




**Application form**

 Fill in sheet 4(a).

 Attach the proofs of compliance as described above in Case 1 and Case 2.


**(b) Criterion 4(b) – Usage of the term "bio-based" or "bio-lubricant"**

 Have a test performed that shows that your product has a minimum bio-based carbon content of 25%.

*Permissible tests:*


- EN 16807
- ASTM D 6866
- DIN CEN/TS 16137 (SPEC 91236)
- EN 16640
- EN 16785-1

**Application form**

 Fill in sheet 4(b). For example in Row 7:

Total fraction present (measured)	≥ Limit [% (w/w)]	Re-sult	Test protocol	Document attached
88	25	✓	ASTM D 6866	YES

 Attach the test report.

 **You do not have to fill in the columns G and H, but you can use the calculation there as additional information for yourself, to see how high the calculated amount of renewable materials is.**

**2.2.5 Criterion 5 – Packaging/container requirements**

**(a) Criterion 5(a) – Recycled content**

**Definitions:**

**Post-consumer plastic** means plastic generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of plastic from the distribution chain.

 **The criterion can be fulfilled for each packaging/container separately or by calculating a combined limit value over several packagings/containers.**



***If your packaging/container consists of for example a plastic body and a metal frame, the metal frame can be disregarded in the calculation.***

- ① If you deliver your candidate product to a retailer/distributor and he uses your product name, but changes the packaging/container, you need to hand in an application form sheet **5(a) - Plastic Calculation** and **5(a)(b) - Packaging**, an Annex 2 for the new additional plastic packaging/container and declare that the packaging/container used by the retailer/distributor fulfills the criteria.
- ① The same applies, if the retailer additionally renames the product and wants it to be EU Ecolabel certified, too.  
If the retailer renames the product and does **not** want to have the renamed product EU Ecolabel certified, the packaging/container of the renamed product does not have to fulfill the criterion, though.
- ① If you want to add a packaging/container type and/or size at a later stage, you have to send in an application form sheet **5(a) - Plastic Calculation** and **5(a)(b) - Packaging**, an Annex 2 for the new type/size and declare that it fulfills the criteria.



***Please note following changes to the original criteria:***

- ① The 25% minimum content of recycled plastic can also be measured on the average of the total amount of EU Ecolabel packagings/containers and not only on each single container individually.  
That means that it is possible to have a packaging/container with 100% recycled content and one with 0% recycled content, as long as the average recycling content of the total amount of EU Ecolabel packagings/containers is 25%. See example below.
- ① Reused plastic containers are considered compliant with criterion 5(a) if a documentation on the reuse system can be provided and a description on how the reuse system is communicated to the customers. Additionally, delivery notes or similar documents can proof the reuse.



Send Annex 2 to your suppliers and ask them to fill it in.



For reused packagings/containers please hand in following documents:

- a documentation of the reuse system
- a declaration on how the reuse system is communicated to the customers
- additional evidence like for example delivery notes that proof, that the packagings/containers are indeed reused



Example:

You have seven different packagings for the candidate product; two plastic bottles (0.5 and 1 l), two metal barrels (200 and 100 l), an IBC-container (1000 l) that is reused, a plastic cartridge (0.25 l) and a plastic canister (20 l).

You need Annexes 2 for all plastic packagings/containers that are not reused. In this example that are the two plastic bottles, the plastic cartridge and the plastic canister.

<b>Packaging size 1</b>			
<b>Description of the packaging/container</b> (e.g. bottle):	Bottle		
<b>Volume of the packaging/container</b> (l or kg):	1	l	
<b>Part of the packaging/container</b> (please specify part, e.g. closure, bottle, label, nozzle,...)	<b>Plastic material used</b> (e.g. PE, PP, PET,...)	<b>Weight of this part</b> [g]	<b>thereof post consumer material</b> [g]
Bottle		47,00	13,25
Cap		6,00	0,00
<b>Recycled post consumer material in the packaging/container -</b>	<b>Σ</b>	53,00	13,25
			<b>25,00</b>
<b>Packaging size 2</b>			
<b>Description of the packaging/container</b> (e.g. bottle):	Bottle		
<b>Volume of the packaging/container</b> (l or kg):	0,5	l	
<b>Part of the packaging/container</b> (please specify part, e.g. closure, bottle, label, nozzle,...)	<b>Plastic material used</b> (e.g. PE, PP, PET,...)	<b>Weight of this part</b> [g]	<b>thereof post consumer material</b> [g]
Bottle		32,00	0,00
Cap		4,00	0,00
<b>Recycled post consumer material in the packaging/container -</b>	<b>Σ</b>	36,00	0,00
			<b>0,00</b>
<b>Packaging size 3</b>			
<b>Description of the packaging/container</b> (e.g. bottle):	Canister		
<b>Volume of the packaging/container</b> (l or kg):	20	l	
<b>Part of the packaging/container</b> (please specify part, e.g. closure, bottle, label, nozzle,...)	<b>Plastic material used</b> (e.g. PE, PP, PET,...)	<b>Weight of this part</b> [g]	<b>thereof post consumer material</b> [g]
Body		150,00	100,00
Cap		5,00	0,00
<b>Recycled post consumer material in the packaging/container -</b>	<b>Σ</b>	155,00	100,00
			<b>64,52</b>
<b>Packaging size 4</b>			
<b>Description of the packaging/container</b> (e.g. bottle):	Cartridge		
<b>Volume of the packaging/container</b> (l or kg):	0,25	l	
<b>Part of the packaging/container</b> (please specify part, e.g. closure, bottle, label, nozzle,...)	<b>Plastic material used</b> (e.g. PE, PP, PET,...)	<b>Weight of this part</b> [g]	<b>thereof post consumer material</b> [g]
Tube		10,00	0,00
Cap		2,00	0,00
<b>Recycled post consumer material in the packaging/container -</b>	<b>Σ</b>	12,00	0,00
			<b>0,00</b>

The caps are all made of virgin material; the recycled content is 0%. The bottles, the cartridge and the canister themselves are made out of different types of plastic where one bottle and the container contain post-consumer recycled material.

As you can see in the table above the packaging size 1 - the 1 l bottle - fulfils the criteria as single packaging/container because the amount of post-consumer material is at 25%.

Packaging size 3 - the 20 l container - also fulfils the criteria as single packaging/container with 48.39% of post-consumer material.

Packaging size 2 - the 0.5 l bottle and Packaging size 3 – the 0.25 l cartridge - however do not fulfil the criteria as single packagings/containers since no post-consumer material is used at all.

The candidate product cannot fulfil the EU Ecolabel if each used packaging/container has to have a recycled content of 25%.

To fulfil the criteria the average of the total amount of EU Ecolabel packagings/containers need to be calculated, so lets go to the application form.

### Application form

 Please fill in sheet 5(a)(b) - Packaging.

Criterion 5 (a) - 1					
	Material used (e.g. plastic, metal)	Form (e.g. bottle, canister)	Size (e.g. 1 l, 1 kg)	Plastic packaging/ container is reused.	Descriptions of the system and delivery notes are attached.
Packaging/Container 1	plastic, metal	IBC-container	1000 l	YES	YES
Packaging/Container 2	metal	barrel	200 l	-	-
Packaging/Container 3	metal	barrel	100 l	-	-
Packaging/Container 4	plastic	cartridge	250 ml	NO	-
Packaging/Container 5	plastic	bottle	1 l	NO	-
Packaging/Container 6	plastic	bottle	0,5 l	NO	-
Packaging/Container 7	plastic	canister	20 l	NO	-
Packaging/Container 8				-	-

Please select "YES" or "NO" in the column "Plastic Packaging/Container is reused."

For packagings/containers that consist of a metal part and a plastic part only the plastic part is relevant. Therefore for the IBC you only have to calculate the plastic parts and the metal frame does not need to be listed in Annex 2 as mentioned above.

 Attach the declarations from your packaging suppliers (Annexes 2).

 Fill in the data from your Annexes 2 in sheet 5(a) – Plastic Calculation:

Form = Annex 2: Description of the packaging/container

Size = Annex 2: Volume of the packaging/container

Amount of packagings/containers = The estimated amount of packagings/containers you will use for the EU Ecolabel product for this certain size and producer/supplier of the packaging/container for 12 month.




**Since you cannot say how many packagings/containers you will really use in the next twelve month you have to hand in the actual amount after the twelve month are over.**

Weight of the packaging = Annex 2:  $\Sigma$  left side (red in the picture below)

thereof post consumer recycling material = Annex 2:  $\Sigma$  right side (blue in the picture below)

Container -	$\Sigma$	53,00	13,25	25,00
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 The amount of recycled plastic is then calculated and shown in the cell on the right bottom.





**i Applicant's clients' approval** means a letter/document/statement **issued by clients** for a specific product, assuring the product meet their specifications and work correctly in its intended application. It is **not** sufficient if you send internal test reports and a technical data sheet of the candidate product which states its good quality and functionality.

Table 5 of the Commission Decision:

Product category	Minimum technical performance
Chainsaw oils	KWF-test version 2017
Wire rope lubricants Concrete release agents Other total loss lubricants Stern tube oils Metalworking fluids	Fit for purpose (at least one clients' approval is attached)
Gear oils for closed gears	DIN 51517 section I, II or III or ISO 12925-1
Gear oils for open gears	fit for purpose (at least one clients' approval is attached)
Two-stroke oils	for marine use: NMMA TC-W3
Two-stroke oils	for terrestrial use: ISO 13738 (EGD)
Hydraulic fluids	ISO 15380 (table 2 - 5)
Fire resistant hydraulic fluids	ISO 15380 (table 2 - 5) + ISO 12922 (table 1 - 3) or "Factory Mutual" Approval
Oils for temporary protection against corrosion	ISO/TS 12928 Fit for purpose (at least one clients' approval is attached)
Lubricating greases for temporary protection against corrosion	ISO/TS 12928 or fit for purpose (at least one clients' approval is attached)
Lubricating greases for closed gears	DIN 51826
Lubricating greases for roller bearings, plain bearings and sliding surfaces	DIN 51825
Lubricating greases – All others	ISO 12924 or fit for purpose (at least one clients' approval is attached)



**You only have to fulfil one option for each group if more than one option is given.**



Make sure your candidate product fulfils the minimum technical performance by having it tested according to the corresponding tests.



In case a clients' approval is required please ask your client to provide one.

**i KWF test version 2017** (= "Requirements for Verifying Usability of Chain Lubricants Version 2017" from the Kuratorium für Waldarbeit und Forsttechnik e.V.) - **equivalent test methods:**

The KWF test consist of eleven separate tests, which are:

- 1 Viscosity/density
- 2 Flash point
- 3 Cold temperature flow characteristics\*
- 4 Ageing resistance\*

- 5 Lubrication characteristics
- 6 Phase separation\*
- 7 Contact material\*
- 8 Staining clothes\*
- 9 Chainsaw soiling\*
- 10 Odour development\*
- 11 Labelling\*

For the **tests 1, 2 and 5** the following test methods can be used:

Test criteria	Test methods
Viscosity/density	DIN 51562 DIN ISO 2209 DIN EN ISO 12158
Flash point	DIN 2592
Lubrication characteristics	ISO/TS 19858:2015-08-15

For the eight test marked with \* the approach is different. Since no norms exist for those test criteria and because it makes most sense to test chainsaw oils according to their designated use, the KWF developed their own test methods in order to carry out product-specific tests. Those methods are described in the Appendix to the KWF test "Requirements for Verifying Usability of Chain Lubricants Version 2017".

For the **tests 3, 4, 6, 7 and 11** nearly every testing laboratory should be able to perform the test according to the KWF-Methods described in the Appendix to the KWF test "Requirements for Verifying Usability of Chain Lubricants Version 2017".

Test criteria	Test methods
Cold temperature flow characteristics	KWF-Method Appendix 1
Ageing resistance	KWF-Method Appendix 2
Phase separation	KWF-Method Appendix 3
Contact material	KWF-Method Appendix 4
Labelling	KWF-Method Appendix 8

**Tests 8, 9 and 10:** In the standard ISO 6535 for Portable Chain-Saws where saw-cuts are described it says: "Cut softwood for the time it takes to use one tankful of fuel at approximately power speed." The testing laboratory has to take this method for the three tests. The test procedures are described in the Appendix to the KWF test "Requirements for Verifying Usability of Chain Lubricants Version 2017".

Test criteria	Test methods
---------------	--------------

Staining clothes	KWF-Method Appendix 5
Chainsaw soiling	KWF-Method Appendix 6
Odour development	KWF-Method Appendix 7

The KWF test "Requirements for Verifying Usability of Chain Lubricants Version 2017" is attached to this User Manual.



***If you want to use equivalent test methods for proving compliance with the KWF test please name all the test methods you want to use and make sure that all parts of the test are included. It is not possible to award the EU Ecolabel if only a part of the KWF tests are fulfilled.***



***For hydraulic fluids please make sure the tested elastomers are indicated on the product information sheet.***

### **Application form**



Fill in sheet 6.



Attach the test report or a clients' approval from your client.



In case of *hydraulic fluids*: Attach the product information sheet.

### **2.2.7 Criterion 7 – Consumer information regarding use and disposal**

If you sell your product to private end consumers some additional information regarding the use and disposal have to be present. You can either use the given text, comparable text formulations or pictograms can be used.

### **Application form**



Please fill in Criterion 7 on sheet 7 & 8.



Attach a sample of the packaging/container artwork.

### **2.2.8 Criterion 8 – Information appearing on the EU Ecolabel**

You have several options to show that your product is certified with the EU Ecolabel. For further information on those options please check out the EU Ecolabel Logo Guide:



[http://ec.europa.eu/environment/ecolabel/documents/logo\\_guidelines.pdf](http://ec.europa.eu/environment/ecolabel/documents/logo_guidelines.pdf)






***Please demonstrate compliance in case you are going to use the EU Ecolabel with the additional text box.***



***Attach the sample of the packaging/container artwork no matter which option of displaying the EU Ecolabel logo you choose.***


## **Application form**

-  Please fill in Criterion 8 on sheet 7 & 8.
-  Attach a sample of the packaging/container artwork.
-  Please enter the percentage of renewable materials you will put in the textbox in field B15. Only the proportion of renewable raw materials that comes from CERTIFIED cultivation is to be specified here.

Example:

Your lubricant contains 80% of a base fluid, where 100% come from renewable sources, but only 60% are RSPO certified. Although 80% of the lubricant consist of renewable materials, the value that has to be entered here is 48% (60% of 80 is 48), since only that amount of renewable materials is certified.





## **2.3 Addition for greases in the application form**

-  If your candidate product is a grease and a thickening system is used please fill in the sheet **For Greases**.

Example:

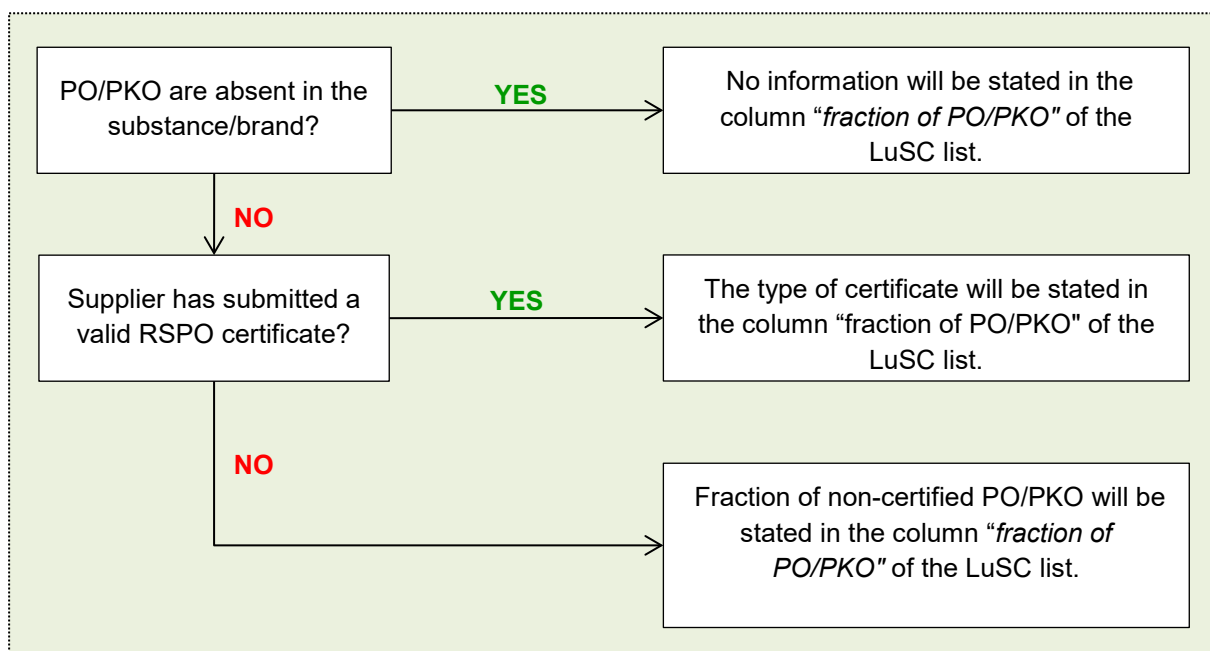
Thickening system in case of greases					
Is a reactive thickening system used in the grease?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If YES, fill in the following tables:
Information on the reactants of the thickening system:					
CAS No.	EC No.	Chemical Name	Mass [g] of reactant (in 100 g of the grease)	Tic reactants used in excess	
1310-66-3		Lithium hydroxide	0.532	<input checked="" type="checkbox"/>	
106-14-9	203-366-1	12-hydroxystearic acid	3,8	<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
State the intended chemical reaction:					
Lithium hydroxide + 12-hydroxystearic acid -> Lithium 12-hydroxystearate + water					
Information on the products formed during the intended chemical reaction:			Information on the substances remaining in excess after the intended chemical reaction:		
CAS No.	Chemical Name	Mass [g] of product (in 100 g of the grease)	CAS No.	Chemical Name	Mass [g] of substances in excess (in 100 g of the grease)
7620-77-1	Lithium 12-hydroxystearate	3,876	1310-66-3	Lithium hydroxide	0,00136
7732-18-5	water	0,456			

## **2.4 Last but not least**

-  Fill in the Confirmation on sheet **Confirmation**.
-  Do not forget to undersign the complete application form.
-  Check whether you have confirmed that the applicant lubricant fulfils each criterion.
-  Check whether you have attached all required documents to your application form.

## 2.5 Additional information on the LuSC list

- ① **Function of the substance/brand:** On the LuSC list you will find the substances/brands sorted by its function in the candidate product. If the substance or product is used as another function, the product will not be included another time on the LuSC list. So only **ONE** entry is allowed. If the substance/brand is used in the candidate product with a different function, the EEL classifications on the LuSC list **DOES NOT** change. The treat rates can be applied independently of the function.
- ① **Treat rates:** The treat rates indicated on the LuSC list are maximum treat rates if **NO OTHER** substance/brand has the same or worse EEL classification. Please make sure that the biodegradation and aquatic toxicity assessment must be conducted on the formulation of the candidate product as described in the chapters 2.2.2 and 2.2.3.
- ① **Palm (kernel) oil or its derivatives (PO/PKO)** (chapter 2.2.4(a)): If a supplier wants to list their products on the LuSC list they have to follow the scheme below:



- ① **Bio-based amount** (chapter 2.2.4(b)): If a supplier has tested the base fluid with any C14-methods mentioned in chapter 2.2.4(b) then the full formulation does not need to be tested if the overall fraction exceeds the 25% limit.
- ① **Adding a substance/brand to the LuSC list:** If your supplier is interested in putting substances/brands on the LuSC list, tell him to contact your Competent Body for further information.

### 3 Checklist

Following documents should be collected:

1	Application form.	<input type="checkbox"/>
2	Relevant evidence on the status of your company.	<input type="checkbox"/>
	<i>If applicable:</i> EMAS certificate.	<input type="checkbox"/>
	<i>If applicable:</i> ISO 14001 certificate.	<input type="checkbox"/>
3	Justification, why the product should be assigned to the category suggested if the candidate product is not expressly assigned to a specific category already.	<input type="checkbox"/>
4	<b>Criterion 1</b>	
	Safety data sheet for the candidate product.	<input type="checkbox"/>
	Safety data sheets for all substances and mixtures in the candidate product.	<input type="checkbox"/>
	<i>If no safety data sheets are available for a substance in the candidate product, because the substance is covered by an exemption described in the Annexes IV and V to Regulation (EC) No 1907/2006:</i>  Declaration of the supplier to this effect.	<input type="checkbox"/>
5	<b>Criterion 2.1: Candidate product</b>	
	• Test reports on aquatic toxicity for algae.	<input type="checkbox"/>
	• Test reports on aquatic toxicity for daphnia.	<input type="checkbox"/>
	• Test reports on aquatic toxicity for fish embryo.	<input type="checkbox"/>
	<b>Criterion 2.1: Main ingredients of the candidate product, if the substances and mixtures are not listed on the LuSC list or are covered by a LoC</b>	
	• Test reports on acute aquatic toxicity for algae for each substance or mixture required.	<input type="checkbox"/>
	• Test reports on aquatic toxicity for daphnia for each substance or mixture required.	<input type="checkbox"/>
• Test reports on chronic aquatic toxicity for fish for each substance or mixture required.	<input type="checkbox"/>	
• <i>Alternatively:</i> (Q)SARs for one of the trophic levels.	<input type="checkbox"/>	
6	<b>Criterion 2.2: Substances and/or mixtures in the candidate product, if the substances and mixtures are not listed on the LuSC list or are covered by a LoC</b>	
	• Test reports on acute aquatic toxicity for algae for each substance or mixture required.	<input type="checkbox"/>
	• Test reports on aquatic toxicity for daphnia for each substance or mixture required.	<input type="checkbox"/>
	• Test reports on chronic aquatic toxicity for fish for each substance or mixture required.	<input type="checkbox"/>
	• <i>Alternatively:</i> (Q)SARs for one of the trophic levels.	<input type="checkbox"/>



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7	<b>Criterion 2.2: Exemptions</b>	
	<ul style="list-style-type: none"> <li>• Test reports showing that the substances and/or mixtures are covered by the exemptions for polymers or water solubility. <input type="checkbox"/></li> <li>• Evidence based on molecular weight and molecular diameter. <input type="checkbox"/></li> </ul>	
8	<b>Criterion 3: Biodegradation, in case the substances and mixtures are not listed on the LuSC list or are covered by a LoC:</b> <ul style="list-style-type: none"> <li>• Test reports on biodegradability for the substances (in the candidate product or in the mixtures in the candidate product). <input type="checkbox"/></li> </ul>	
9	<b>Criterion 3: Bioaccumulation, in case the substances and mixtures are not listed on the LuSC list or are covered by a LoC</b> <ul style="list-style-type: none"> <li>• Test reports or calculations on the log K<sub>ow</sub> for the substances (in the candidate product or in the mixtures in the candidate product). <input type="checkbox"/></li> <li>• Test reports on the BCF for the substances (in the candidate product or in the mixtures in the candidate product). <input type="checkbox"/></li> <li>• Test reports showing that the substances and/or mixtures are covered by the exemption for polymers. <input type="checkbox"/></li> <li>• Evidence based on molecular weight and molecular diameter. <input type="checkbox"/></li> </ul>	
	<b>Criterion 4(a) - Case 1</b> <ul style="list-style-type: none"> <li>• Annexes 1 for all substances and mixtures in the candidate product that contain PO/PKO. <input type="checkbox"/></li> <li>• Invoices that prove that enough amounts of certified substances were bought to produce the candidate product(s). <input type="checkbox"/></li> </ul>	
	<b>Criterion 4(a) - Case 2</b> <ul style="list-style-type: none"> <li>• Your RSPO membership number at the time of applying (application form, sheet 4(a)). <input type="checkbox"/></li> <li>• A calculation that shows that enough RSPO credits were bought and redeemed to produce the EU Ecolabel products. <input type="checkbox"/></li> </ul>	
	<b>Criterion 4(b):</b> Test report on the amount of bio-based content of the candidate product. <input type="checkbox"/>	
12	<b>Criterion 5</b> <ul style="list-style-type: none"> <li>Annexes 2 for all plastic packagings/containers used to sell the candidate product. <input type="checkbox"/></li> <li>Documentation of the reused system. <input type="checkbox"/></li> <li>Description on how the reuse system is communicated to the customers. <input type="checkbox"/></li> <li>Additionally, delivery notes or similar documents can proof the reuse. <input type="checkbox"/></li> <li>Description of the design of the packaging/container, along with photos or technical drawings. <input type="checkbox"/></li> </ul>	
	<b>Criterion 6</b> <ul style="list-style-type: none"> <li>Test reports of the minimum technical performance of the candidate product or applicant's clients' approvals. <input type="checkbox"/></li> <li>Applicant's clients' approvals of the candidate product. <input type="checkbox"/></li> </ul>	
13	<b>Criterion 6</b> <ul style="list-style-type: none"> <li>Test reports of the minimum technical performance of the candidate product or applicant's clients' approvals. <input type="checkbox"/></li> <li>Applicant's clients' approvals of the candidate product. <input type="checkbox"/></li> </ul>	



	In Case of hydraulic fluids: Product information sheet	<input type="checkbox"/>
14	<b>Criterion 7 &amp; 8:</b> Sample of the packaging/container artwork.	<input type="checkbox"/>

## 4 Remarks for the Competent Body

- i** In the application for all violet fields are for the Competent Body to enter the assessment result. For a positive result please type in "a" and the symbol ✓ will be shown. For a negative result please type in "r" and the symbol ✗ will be shown.

(The symbols ✓ and ✗ are coming from the font "Webdings". If you want to generate them with the keyboard you have to type a small "a" or a small "r".)

- i** In sheet **CB** - a summary sheet for Competent Bodies - you will see all the results in an overview, depending what you entered in the fields of the other sheets.

In case there is a ✗ somewhere, the lubricant does not fulfill the criteria and cannot be awarded the EU Ecolabel.

If you see a ? next to Limit D and/or Limit A the value of substances classified as **D** and/or **A** is 0. The assessment has not been completed and the EU Ecolabel cannot be rewarded.

Under "Notes" you can add your comments as CB to that specific substance/mixture or the Limit values.

- i** Unassessed fraction:

In the LuSC list you might find chemicals with an unassessed fraction and a maximum treat rate above 0.1%. That means that those chemicals are mixtures of several substances where some of them are not assessed. Please make sure that the maximum treat rate given in the LuSC list is not exceeded.

Make sure that the applicant filled in the check in columns S (sheet "2") and P (sheet "3") (Mono-constituent substance?) correctly.

If the value in column K is blue it means that the unassessed fraction is above 0.1 %. You need to check whether this fraction results from a mono-constituent substance, mixture, UVCB or a multi-constituent substance.

If it is a mono-constituent substance the cell has to contain a ✓. In that case if the fraction is above 0.1%, the result of unassessed substances is ✗ and the lubricant cannot be awarded the EU Ecolabel.

If it is no mono-constituent substance the cell has to contain an ✗. In that case if the fraction is above 0.1%, the result of unassessed substances is ?. In this case please check first, if the ingredient is listed on the LuSC list and check if the maximum treat rate is not exceeded. If the ingredient is not listed in the LuSC list, you as CB need to get the exact composition of the ingredient, to see if the mono-substituent substance in the ingredient are all below 0.1% and do not exceed 0.5% when added together.

## 5 Version changes

Date	Version	Action
November 2018	Version 1.0	First publicised version
November 2019	Version 1.1	Added additional info in chapter 2.2.1, 2.2.2(b) and 2.2.3(a).



## EU ECOLABEL USER MANUAL LUBRICANTS

Commission Decision (EU) 2018/1702 establishing the EU Ecolabel criteria for lubricants

		Added clarification in chapter 2.2.3(a). Added two schemes in chapter 2.2.4(a). Added the link to the LuSC list in chapter 2.
February 2020	Version 1.2	Added information concerning substances and mixtures with classified substances below 0.10% in chapter 2.2.1. Added a clarification on unassessed substances and the calculation in the application form in the chapters 2.2.2(b), 2.2.3(a) and 4.
April 2020	Version 1.3	Changed in chapter 2.2.5(a).
March 2021	Version 1.4	Clarification in chapter 2.2.6. Clarification and example in Chapter 2.2.8.