ECOMARK_STD_09 LUBRICANTS STANDARD

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Title: ECOMARK – ECOLOGICAL PRODUCTS CERTIFICATION

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ABOUT US

A directive numbered 1980/2000 (EC) was issued by the European Union in 2000 within the scope of harmonization laws. This directive sample is required to draw a circle on the contour lines. The directive in question calls for the removal of the environment and the removal of this product with the target target indicated in the environmental labeling. Ekomark © Standard has prepared this product to be grown in aquaculture products that are not grown in aquaculture products and in aquaculture standards. While designing this standard, the Eco-Label Regulation 66/2010/EC updated by the European Union and updated in 2010 was taken as a basis for certification studies. The example of the products within the scope of use in the Ekomark © Standard is in line with the application given by Europe.

1 entrance

This User's Guide1 is for guidance only and is designed to help you contact Ecomark for Lubricants. It contains a summary of all the data, tests and documents required to demonstrate compliance with the criteria.

The basis of the guideline is commission resolution 2018/1702 dated November 8, 2018 and determines ecomark criteria for lubricants. A copy of the criteria is availablein the following locations:

While this document does not aim to duplicate the content of the criteria, it does not intend to support their interpretation and focuses solely on useful explanations and explanations. Each criteria name appears as a title under section 2 in a brief summary of which documents are required to verify the criteria. The full criteria text does not appear in this user guide. Only additional information, descriptions and descriptions are included.

2 Product Evaluation and Verification

The following tlo summarizes all the criteria of the Commission Decision.

No. criteria

1 Excluded or limited items

1(a) Hazardous substances

1(b) Specified restricted items

1(c) Very high levels of alarming substances (SVHC's)

2 Additional water toxicity requirements

2.1 Requirement for lubricant and its main components

2.2 Requirement for each item that is intentionally added or created at or above 0.10% weight in the final product

3 Biodegradable and bioachemical potential

Biyobozunurluk

Biyoakümülasyon

4 Renewable content requirements

5 Packaging/container requirements

6 Minimum technical performance

7 Consumer information about use and disposal

8 Information about Ecomark

Each of these criteria must be met with an exemption of the criteria 2 and 8. In order to meet the 2nd criterion, sub-criterion 2.1 or sub-criterion 2.2 must be fulfilled. If Ecomark with an optional text box is used, go to the 8th century.

2.1 Step-by-step walkthrough between criteria

It is recommended that you start checking internally whether prospective products can meet the criteria. Before you begin:

Make sure that the candidateproduct meets all applicable legal requirements of the country or countries in which the product is intended to be released.

Download the application form and two attachments.

Application form

You must fill in the fields highlighted in yellow on the reference form. Purple highlighted fields are for evaluation by the competent authority.

Please enter numbers without units.

Please fill in the yellow highlighted fields on the info page and check the appropriate boxes.

You can choose the language at the top of Sayf interests. The version number of the application form is locatedin the upper right corner of eachpage. An overview of changes to the appli catalyst formpage Versions.

Provide relevant evidence about your company's status and, if applicable, EMAS or ISO 14001 certifications. This relates to application fees.

2.2 For which products are applications made?

Criteria total loss oils and greases (TLL), partial loss oils and greases (PLL) Covers. Nd Accidentally lost Oils (ALL) for use by special Consumer and professional User.

Check that the candidate product is covered (1. article).

If the application area of the candidate product is not explicitly assigned to a category, you must justify why the product should be assigned to the category you recommend.

If there is any doubt which category to choose, the candidate product will be evaluated as TLL.

If the application area of the candidate product is not already explicitly assigned to a category, it is justifiedin a separate document why the product should be assigned tothecategoryyou recommend.

2.2.1 Criterion 1 – Excluded or limited items

- Prepare or collect the security datasheet for the candidate product.

- Collect security datasheets for items and blends added to the candidate product.

Ensure that the security datasheets are in accordance with Regulation 1907/2006 (EC) and Regulation 1272/2008 (EC). Security datasheets should be the most up-to-date.

If a safety datasheet is not available for an item in the candidate product, your supplier must make such a statement as the article is covered by an exemption from Annex IV and V (EC) dated 1907/2006.

The total mass of matter specified in the security datasheets is not countedup to 100%. Therefore, non-toxic substances are not specified, for example. However, an assessment should be made to determine the EEL classifications. For mixtures that are not on the LuSC list, always ask your supplier to contact your authorized authority regarding the exact composition of the mixture so that the Competent Authority can evaluate the mixture.

(a) Criterion 1(a) – Hazardous substances

Tlo 1:1 of the Commission's Decision:

Hazard Category	**Declaration of Danger**	Limit [% (w/w)] per item in the end product
Moulting. 1[A,B]	H340	0.010
Moulting. 2	H341	0.010
Carc. 1[A,B]	H350 H351i	0.010
Carc. 2	H351	0.010
1.01[A,B]	H360F H360D H360FD H360Fd H360Df	0.010
2.	H361f H361d H361fd	0.010
Lakt.	H362	≤ 0.010
Acute Toxicology. 1 to 1 Acute Toxicology. 2nd	H300 (oral)	≤ 0.010
Acute Toxicology. 1 to 1 Acute Toxicology. 2nd	H310 (dermal)	≤ 0.010
Acute Toxicology. 1 to 1 Acute Toxicology. 2nd	H330 (inhale.)	≤ 0.010
Acute Toxicology. 3	H301 (oral)	< final product classification limit for H301
Acute Toxicology. 3	H311 (dermal)	< the final product classification limit for H311
Acute Toxicology. 3	H331 (cell.)	Final product classification limit < for H331
ASP. Toksikoloji. 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	Declaration of Danger	Limit [% (w/w)] per item in the end product
Cilt Corr. 1[A,B,C]	H314	Final product classification limit < for H314
Up to Irrit. 2	H315	< the final product classification limit for H315
Eye Dam. 1	H318	Final product classification limit < for H318
Eye Irritate. 2	H319	Final product classification limit < for H319
Auth. Meaning. 1[A,B]	H334	≤ 0.010
Cilt Sens. 1[A,B]	H317	Final product classification limit < for H317
Aquatic Acute 1	H400	≤ 0.5 x final product classification limit for H 400
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 tlo 1 of the Commission Decision.

For evaluation, it is necessary to indicate above 0.010%in the final lubricant of each classified substance, regardless of whether it was intentionally added or whether it was as impurity or additives to stylize substances or mixtures added to the final lubricant. It is preferable to specify all substances above 0.010% in the last lubricant.

Please note the following:

•If a substance or mixture below 10% (w/w) is added to the last lubricant, anything below 0.10% in that substance or mixture will be in the final lubricant below 0.010%. No action is required, SDS is enough.

•If a substance or mixture of 10% (w/w) or higher is added to the final lubricant, the classified substances in that substance or mixture must be specified below 0.10%. SDS is not enough.

"Reaction products..." substances or mixtures called: Please check the classification of reasepants. Please make sure that the fraction of this special substance is below 0.010% in the last lubricant.

Ask for additional information, expressions and/or chromatograms that polyalkyleneglycols (PAO) and elkylethoxylated (AEO) monomers have ethylene oxide and/or propylene oxide (cmr classified monomers): fraction of EO/PO monomers is below 0.010%.

Check that any of the substances that are chemically generated after a deliberate chemical reaction and are above 0.010% (w/w) in the candidate product are classified with any of the H-statements listed in Tlo 1 of the Commission's Decision.

Confirm that these items do not exceed the limit values listed in the tlo 1 of the Commission's Decision on the candidate product.

If a mixture contains deliberately added and classified substances, each substance itself, for example, if additive packages are used, the candidate cannot exceed the li mit values given in Tlo 1 in the lubricant.

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

Check that any of the items specified under (a) appear in the Priority Association List

articles in the water policy2 field or on the OSPAR Priority Action chemicals list3.

(a) to check whether any of the substances specified under point (a) are organic halogen compounds, nitrite compounds or metallic compounds (exceptNa,K, Mg and Ca, and in the case of thickeners, li and/or Al).

(c) Criterion 1(c) – Very high number of alarming substances (SVHC's)

Check that any of the items specified under (a) appear in the Candidate List.

If the H statement is shownin red, the item/brand candidate cannot be used above 0.01% (w/w) in the lubricant. If the H is shown in blue, you must ensure that the limit values in tlo 1 of the Commission Decision are not exceeded.

Please enter the function of the item in column Q and the shape of the item in column

Possible functions include: base liquid, thickener, overpressure additive/ anti-wear additive, antioxidant, corrosion inhibitor, detergent/ emulsifier,viscosity changer / bulk point depressant / viscosity optimizer, antifoam / demulsive / dispersant,additive package, etc.

Possible forms include:liquid, solid, nano,polymer, UVCB, etc.

If you are using a thickening system containing Al or Li or a metal or metallic compound containing Na, K, Mg or Ca, please use "metal or metallic compound (Na, K, Mg or Ca; Al or Li)" column

Bark to select "metal or metallic compound" in all other metal or metallic compounds.

If items appear in one of the lists specified in Criterion 1(b) or 1 (c) or belong to one of the specified compound classes, concentration is used if the < 0.01% (w/w) in the candidate product.

Add security datasheets of the candidate product and components.

If necessary, add a declaration of the supplier, if an articleis covered by an exemption described in Annex IV and V Regulation (EC) no. 1907 /2006.

1.1.1 Criterion 2 – Additional water toxicity requirements

Please demonstrate compliance by meeting the requirements of criteria 2.1 or 2.2.

Decide which criteria you want to use to demonstrate compliance.

If all your materials are already listedon the LuSC list, the advice would be to choose the criteria2.2, as you do not have to test your candidate product.

If the data is missing for the few components you use, it is probably easier and cheaper to choose criterion 2.1.

Permitted tests for both criteria 2.1 and 2.2:

Acute water toxicity tests - used or manufactured for application		
Moss	• ISO 10253 • ISO 8692 • OECD 201 / Section C.3 Regulation Annex (EC) No 440/2008	only 72 h ErC_{50}
Daphnia (akut)	• ISO 6341 • OECD 202 / Chapter C.2 Regulation Annex (EC) No 440/2008	only 48 h EC_{50}
Fish (acute)	(• OECD 203 / Section C.1 Regulation Annex (EC) No'440/2008[5]) • OECD 236 / Chapter C.49 Regulation Annex (EC) No 440/2008	only 96 h LC_{50}
Chronic water toxicity tests - available		

Moss	• ISO 10253 • ISO 8692 • OECD 201 / Section C.3 Regulation Annex (EC) No 440/2008	NOEC
Daphnia (kronik)	• OECD 211 / Section C.20 Annex (EC) No 440/2008	NOEC
Fish (chronic)	• ISO 12890 • OECD 210 / Section C.47 Regulation Annex (EC) No 440/2008 • OECD 212 / Section C.15 Regulation Annex (EC) No. 440/2008 • OECD 215 / Section C.14 Patch of Regulation (EC) No 440/2008	NOEC

Application form

Please select which criteria you want to use for the assessment on page 2.1.

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

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

Data on chronic water toxicity in the candidate product are used only if the acute water toxicity test is incomplete for certain trophic levels.

If you don't have any old tests available, get new tests on acute water toxicity for the trophic levels required for your candidate product.

In this case, the candidate product must be tested for ACUTE water toxicity.

Check if your main components are listed on the LuSC list or contact your supplier to see if they have a Letter of Conformity(LoC)for them.

If your main components are listed in the LuSC list, no additional documentation should be presented.

If the applicable LoC is available for your main components, the LoC must be submitted with the application form.

If both are not available, ask your suppliers for existing test reports on the necessary trophic levels (acute: algae and daphnia,chronic daphnia and fish). If the supplier does not want to share the data with you, the Competent Authority can submit the test reports directly to the applicant.

Data on chronic water toxicity in the main components are used only if the acute water toxicity test is incomplete for certain trophic levels.

If test reports are also not available, you should also have tests on the main components or ask your supplier to do so for you.

In this case, the main components should be tested for ACUTE water toxicity.

Make sure that the values listed in the following tlo are not exceeded.

Threshold:

		TLL	Pll	entire
Candidate product	Esik(acutee)[6]	≥ 1000 mg/l	≥ 1000 mg/l	≥ 100 mg/l
	Threshold (chronic)[7]	≥ 100 mg/l	≥ 100 mg/l	≥ 10 mg/l
Main components	Threshold (acute)[6]	≥ 100 mg/l	≥ 100 mg/l	≥ 100 mg/l
	Threshold (chronic)7	≥ 10 mg/l	≥ 10 mg/l	≥ 10 mg/l

Please place a space between the > or < icon and the number under Result [mg/l].

The basis of self-evaluation should be a test protocol for the candidate lubricant.

The limit value in the "Limit [mg/l]" column depends on your product category selection and changes automatically depending on what you select on page 1.

If the limit value is exceeded, the result is ok, or the page is calculated automatically (see

- in the picture above). You'd see □ because it wasn't good.On page 2.1, you will see the results of toxicity tests starting from column I.

- the results of all three trophic levels for the candidate product, you can select YES in column G of page 2.1.

If the classification of your candidate product and main component ts is YES, the criteria are substituted.

Add the required test reports.

(a) Criterion 2.2 – Requirements for each item intentionally added or created at or above 0.10% weight in the final product

Check if the items or mixtures you want to use are listed on the LuSC list, or contact your supplier to see if they have a Letter of Conformity(LoC)for them.

If items and mixtures are listed in the LuSC list, no additional documentation should be submitted.

If the applicable LoC is available for your main components, the LoC must be submitted with the application form.

If both are not available, ask your supplier for existing test reports on the required trophic levels. If the Supplier does not want to share the data with you, it can submit the test reports directly to the Authorised Authority to which the application will be made. You should also tell the supplier that it has the option to list its products on the LuSC list.

Data on acute water toxicity on substances and mixtures are used only if the chronic water toxicity test is incomplete for certain trophic levels.

If test reports are also not available, you should have tests on each item or mixture or ask your supplier to do so for you.

In this case, substances and mixtures should be tested for ACUTE water toxicity. Make sure that the values listed in the above tlo are not exceeded.

	threshold	TLL	Pll	ALL	TLL	Pll	all
Eden' i (**D**)	acute > 100 mg/l NOEC > 10 mg/l	in the					
Important	~~10 mg/l < acute ≤ 100 mg/l~~	≤ 2	≤ 10	≤ 10	≤ 10	≤ 15	≤ 20
Importan	~~1 mg/l < NOEC ≤ 10 mg/l~~ 1 mg/l < acute ≤ 10 mg/l	≤ 0,4	≤ 0,6	≤ 2.5	≤ 0,4	≤ 0,6	≤ 1
Too many	0.1 mg/l < NOEC ≤ 1 mg/l ~~acute < 1 mg/l~~	≤ 0,1/M[8]	≤ 0,1/M[8]	≤ 0,1/M[8]	≤ 0,1/M[8]	≤ 0,1/M[8]	≤ 0,1/M[8]

In the LuSC list, you find an unappealing fraction and chemicals with a maximum processing rateof over0.1%. This means that some of these chemicals are a mixture of several substances that are not evaluated. Please make sure that the maximum treatment rate given on the LuSC list has not been exceeded.

Be sure to check the S columns (Mono-constituent item?) In the right way.

If the value in column K is blue, the unevaluated fraction is over 0.1%. You need to check whether it obtains this fraction from a mixture, UVCB or a multicomponent substance.

If the mono-constituent substance is controlled and the fraction is above 0.1%, the result of non-evaluation substances

If the mono-constituent substance is controlled and the fraction is above 0.1%, then the result of untated substances. In this case, please first check if the material is listed on the LuSC list and check if the maximum treatment rate has been exceeded. If the component is not listed in the LuSC list, you or CB need to get the exact composition of the component to see if the mono-substituent substance in the component is below 0.1% and exceeds 0.5% when added together.

As you can see for "blending", a value is entered for D [%] and another value is entered as F [%]. This means that the mixture consists of at least two substances that are different aquatic to the xicity classifications. One substance has a D classification in the mixture with 90%, and the other substanceis found in10% with a classification or 10%. Therefore, both values must be filled in with the percentage corresponding to the form.

There is no value entered for "other". Since this substance ispresent in the candidate product with0.01%, water toxicity does not need to be tested. The 0.01% rate is added to the fraction of the candidate product that is not evaluated.

Self-evaluation is selected for "Item". The results of the self-assessment can be seen here:

If your component is classified with a G, please enter the appropriate column in factor M. You must select the highest M factor listed in the component's security datasheet.

Add the required test reports.

(a) Exemptions from criteria 2.1 and 2.2

The item is exempt if it fulfills one of the following conditions:

	threshold
Molecular weight and molecular diameter	> 800 g/mole ve > 1.5 nm (< 15 O)
Polymer **molecular weight fraction below** 1000 g/**mol**	< 1%
Water resolution	< 10 µg/l

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

If this fractionis less than 1%, the substance is counted as polymer and you do not need to do anything else.

If the fraction below 1000 g/mol is ≥ 1%, you need to treat this fraction according to the sub-criterion 2.2.

Molecular weight and molecular diameter apply only to mono-constituent matter, in which the structure is clearly defined. This verification is NOT POSSIBLE for polymers,mixtures, UVCBs and multicomponent substances.

Water resolution	• OECD 105 / Section A.6 Regulation Annex (EC) No. 440/2008
Polymer molecular weight fraction below 1000 **g/mol**	• OECD 119 / Section A.19 Regulation Annex (EC) No. 440/2008

diameter: The diameter in question is the average maximum diameter (Dmax have); See ECHA secondary Part R.11: PBT/vPvB Zr., Part R.11.4.1.2.10, page 82.

Normally, the Oasis (LMC) was made by software. ECHA guidance Section R.11: PBT/vPvB snitch Appendix R.11-1, page 124, footnote 45 teometer: "Please note that the indicator value of 1.7 nm for the average maximum diameter has been destroyed by the OAA to Dmax. Although, it led to 100 results for the same article, which is another software roof from the Environment Agency (2009)."

This means that not only one, but all suitable models will be used, and this should be taken into account, although it is known that the results may differ slightly. Long calculation times are not unusual and should not interfere with an Apply nt. Alternative ways of calculating molecular diameter can include scientific standard software to perform geometry optimizations, and we do not expect that a very high level of quantum chemical calculation may be required, that is, calculation times will be perceived as "long" in some cases, but the calculation time should not prevent this parameter from being determined. However, the most convenient way is strictly to determine Dmax, as described in the TAKE guide. The authors of the OASIS software describe Dmax'air approach in an article (Dimitrov et al. 2005), and this article also contains related references to the previous empirical cut at 1.5 nm.

As verification for molecular diameter, the following options apply:

•Make a calculation by following the ECHA Guide as described in the green box above.

•Submit scientific evidence from a peer-reviewed journal.

Submit a basic report with molecular formula and calculation of molecular mass as verification for molecular weight.

1.1.1 Criterion 3 – Biodegradable and bioaulyst potential

(a) Biyobozunurluk

Check if the items or mixtures you want to use are listed on the LuSC list, or contact your supplier to see if they have a Letter of Conformity(LoC)for them.

If items and mixtures are listed in the LuSC list, no additional documentation should be submitted.

If the applicable LoC is available for your main components, the LoC must be submitted with the application form.

If both are not available, ask your supplier for existing test reportson the biodegradability of substances or substances in mixtures. If the supplier does not want to share the data with you, the Competent Authority may not be able to subordinate the test reports directly to the application. You should also tell the supplier that it has the option to list its products on the LuSC list.

If test reports are also not available and the component in question is an item, you must have tests on the item or ask your supplier to do so for you.

If test reports are not available and the component in question is a mixture, you need to find out what substances are in the mix and test each of the m or ask your supplier to do so for you.

Unlikewater toxicity, biodegradability will only be tested at THE SUBSTANCE LEVEL.

Allowed tests:

	Threshold	Allowed tests
Ready-made biodegradable	70% of ≥ (dissolved organic carbon)	• OECD 301 A / Part C.4 Appendix (EC) No 440/2008 • OECD 301 E / Part C.4 B Regulation Annex (EC) No 440/2008 • OECD 306 / Bölüm C.42 Yönetmelik Ek (EC) No 440/2008 (Shake Flask)
	≥ 60% (The$_2$ depletion/CO2 production)	• OECD 301 B / Part C.4 C Regulation Supplement (EC) No 440/2008 • OECD 301 C / Part C.4 F Regulation Supplement (EC) No 440/2008 • OECD 301 D / Part C.4 E Regulation E (EC) No 440/2008 • OECD 301 F / Part C.4 Regulation No. D (EC) No 440/2008 • OECD 306 / Section C.42 Regulation Annex (EC) No 440/2008 (Closed Bottle) • OECD 310 / Section C.29 Annex (EC) No 440/2008
Natural biodegradable	> %70	• OECD 302 B / Part C.9 Regulation Annex (EC) No 440/2008 • OECD 302 C
	X < %60 < %20 (O_2 exhaustion / CO_2 generation)	• OECD 301 B / Part C.4 C Regulation Supplement (EC) No 440/2008 • OECD 301 C / Part C.4 F Regulation Supplement (EC) No 440/2008 • OECD 301 D / Part C.4 E Regulation E (EC) No 440/2008 • OECD 301 F / Part C.4 Regulation No. D (EC) No 440/2008 • OECD 306 / Section C.42 Regulation Annex (EC) No 440/2008 (Closed Bottle) • OECD 310 / Section C.29 Annex (EC) No 440/2008
BOD5/COD	≥ 0,5	• Section C.5 of the Regulation Annex No. 440/2008(EC) • 440/2008 Regulation Annex (AK) C.6.

Make sure that the values ***listed*** in the following ***tlo are not exceeded.***

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

	TLL	Pll	entire	Gresler (TLL, PLL, ALL)
Kolayca aerobically biyobozunur **(A)**	**> 95**	> 75	> 90	> 80
Aerobically biodegradable by nature (**B**)	**≤ 5**	≤ 25	≤ 10	≤ 20
Biodegradable and non-bioachemical (**C**)	**≤ 5**	≤ 20	≤ 5	≤ 15
Biodegradable and bioachemical (**X**)	**≤ 0,1**	≤ 0,1	≤ 0,1	≤ 0,1

In the LuSC list, you find an unappealing fraction and chemicals with a maximum processing rateof over0.1%. This means that some of these chemicals are a mixture of several substances that are not evaluated. Please make sure that the maximum treatment rate given on the LuSC list has not been exceeded.

Be sure to check the P columns (Mono-constituent item?) In the right way.

If the value in column K is blue, the unevaluated fraction is over 0.1%. You need to check whether it obtains this fraction from a mixture, UVCB or a multicomponent substance.

If the mono-constituent substance is controlled and the fraction is above 0.1%, then the result of substances that are not evaluated .

If the mono-constituent substance is controlled and the fraction is above 0.1%, then the result of untated substances . In this case, please first check if the material is listed on the LuSC list and check if the maximum treatment rate has been exceeded. If the component is not listed in the LuSC list, you or CB need to get the exact composition of the component to see if the mono-substituent substance in the component is below 0.1% and exceeds 0.5% when added together.

As you can see, the values"Blend" are entered for A [%], B [%] and C [%]. You also find 0.092 in the column for amounts that have not been evaluated. This means that the mixture consists of at least 4 substances with different biodegradables. In a substance

With 57%, the mixture is easily biodegradable (A), a second substance of 29% is naturally biodegradable (B), and 10% contains a third non-biodegradable substance (C). A fourth 4% substance has never been evaluated on biodegradation. The items evaluated in the LuSC list have different values and all three values must be filled in with the corresponding percentage. The remaining unvalued part is calculated automatically.

"Item" is selected for self-evaluation. Therefore, page 3 - Biodegradable should be filled:

In this case, after 28 days, a test was carried out according to OECD 301 D with a result of 45%. This means following the criterion that matter is inherently biodegradable and the evaluation result is B. The result is calculated automatically and automatically copied to page 3.

Self-evaluation for "polymer" is also selected. There are no tests on biodegradables, so page 3 - Biodegradables should be filled as follows:

In the "Corruption after 28 days" column, you need to enter 0 to indicate that no data exists and that the compound will not be used as biodegradable. As a result, you will receive a "?" It's "?" For every non-biodegradable substance, you will receive something that indicates that you need to prove that the substance is not a bioacicontor.

Add the required test reports.

(a) Biyoakümülasyon

Check if your added substances are potentially bioachemical. If the substance fulfills one of the following conditions, your substance is bioachemical (X),

Bioachemical (X), if:

	threshold
Molecular weight (MW) and molecular diameter (MD)	MW ≤ 800 g/mol ve MD ≤ 1,5 nm (< 15 Å)
daily K_{OW}	3 ≤ registration K_{OW} ≤ 7
Bcf	> 100 l/kg
Polymer **molecular weight fraction below** 1000 g/**mol**	≥ 1%

As verification for molecular diameter, the following options apply:

- Make a calculation by following the ECHA Guide as described in the green box above.
- Submit scientific evidence from a peer-reviewed journal.

Submit a basic report with molecular formula and calculation of molecular mass as verification for molecular weight.

If thesubstance is a polymer, prepare test reports on the molecular weight fraction of the polymer below1000 g/mol.

If this fraction is less than1%,the substance is counted as polymer and you do not need to do anything else.

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

Allowed tests:

log K_{OW} **(measured, organic** chemicals only)	• OECD 107 / Section A.8 Appendix (EC) No 440/2008 • OECD 123 / Section A.23 Regulation Annex (EC) No. 440/2008
daily K_{OW} **(calculated,** organic chemicals **only)**	• TAKOLOGP • LOGKOW • (KOWWIN) • Sparc
Bcf	• OECD 305 / Section A.13 Regulation Annex (EC) No. 440/2008
Polymer molecular weight fraction below 1000 **g/mol**	• OECD 119 / Section A.19 Regulation Annex (EC) No. 440/2008

If an organic acid is to be evaluated for bioaccumulation potential, the form of environmental pH value is also important. If the ionic form is found in the corresponding environmental pH range(pH 5 - 8), the K OW log is not calculated from the neutral compound.

1.1.1 Criterion 4 – Renewable content requirements

(a) Criterion 4(a)- Renewable components derived from palm oil or palm seed oil or Derived Spring oil or moon core oil

An example of a schema is RSPO when it comes to certificate layouts that meet or exceed the requirements of this criterion. This certificate program complies with this criterion, since it has 8 principles and various criteria summarized as follows:

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

And in more detail, there is a criterion that says, "No primary forest or areas with a significant amount of biodiversity (e.g. endangered species) or fragile ecosystems or areas that are fundamental to meet the basic or traditional cultural needs (areaswith high conservation value) of local communities can beremoved." And also "significantly reduced useof pesticides and fires; workers need to be treated fairly according to local and international labour rights standards and need to inform and consult with local communities before developing new fields on their land."

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

For palm oil and core oil, RSPO certification and other certification programs with independent third-party certificates, which also carry out the reorganization of this Ecomark criterion, may be used as valid.

The use of an equivalent certificate program will be decided at the CB Forum level. In addition to the certification system for sustainable production, the certification scheme should have established a third-party certified system that ensures the integrity of trade (that is, palm oil or palm seed oil sold as sustainable palm oil or palm seed oil is actually produced in certified fields).

Between forest/plantation and final user, products can go through many stages of processing, production and distribution. CoCis a traceability system from the forest unit point to the end point of sale, as described in the definitions. The CoC of a certification system meets the following requirements:

- Each organization in the CoC has an operational CoC system with a management system that provides sufficient guarantee that the requirements of the CoC standard are met.
- Each organization records the quantities, names, and certification numbers of organizations where it purchases palm oil or palm kernel oil.
- Certified oil, oil from other verified legal sources and oil from unverified legal sources are administratively separated. Oil from unverified legal sources is also physically separated from the other two sources.

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

- Define Protected(IP): CSPO is kept separate from all other sources (certified and un certified) and can be traced from a group of certified palm oil plantations to frisson and retailer.
- Reserved system(SG):ensures that certified palm oil is kept separate throughout the supply chain. Only certified oil from certified fields is mixed. The buyer is assured that his oil comes from RSPO-certified fields.
- Mass Balance system (MB): allows to purchase a quantity ofpalm oil corresponding to a really produced amount of sustainable palm oil. RSPO certified palm oil enters the classic supply chain, where it is mixed with un certified palm oil entered into the supply chain. The buyer not only buys physically certified palm oil, but also supports the traceability application.

Thanks to the identification numbers placed on invoices and certificates, traceability of certified palm oil is ensured throughout the supply chain through RSPO supply chain data diagnostics until the final refinery. From the last refinery to the end product, traceability is made with invoices of companies and supply chain certification.

To ensure the equivalence of the selected certification scheme, with an appropriate traceability system, any of the specified traceability systems are used for this criterion: IP, SG or MB. The Book and Demand supply chain model is also used.

Check if your items are on the LuSC list and see what it says in the "PO/PKO Faction" or "Re-signs" columnand the description given under the j footnote in the LuSC list.

Send Appendix 1 to your suppliers of items that are not on the LuSC list and ask them to fill in. If the Supplier uses certified PO/PKO Annex 1 and other relevant documents, or if it does not want to share the data with you, it may be sent directly to the Competent Authority to which the application will be made.

Case 1: Ingoing substances containing PO/PKO originating from sustainable managed fields are covered by the inspection certificate chain:

Compliance evidence includes:

- At the end of the calendar year, suppliers will be contacted by the RSPO membership number reference with additional 1.
- Throughout invoices, you must prove that you purchased sufficient amounts of these items to produce your Ecomark product.

Status 2: Existing items include non-certified PO/PKO:

Ask your supplier about the amount of palm-based part of the product in question in % (w/w). Then, during the most recent annual trading period, you need to purchase and claim enough RSPO credits to cover palm-based parts in the RSPO PalmTrace system model.

Compliance evidence includes:

- At the time of application, your own membership number (see
- A calculation that shows that you have purchased and used enough RSPO credits to produce Ecomark products.

1.1.2 Criterion 5 – Packaging/container requirements

(a) criterion 5(a) – Recycled content

The criterion can be fulfilled by calculating a combined limit value for each packaging/container individually or through several packaging/containers.

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

If you deliver your prospective product to a retailer/distributor and use your product name, but it changes the packaging/container, you must submit the packaging/container application form page 5(a) - Plastic Calculation and 5(a)(b) - Which is an appendix 2 for the new additional plastic packaging/container, and

declare that the packaging/container used by the retailer/distributor meets the disciples.

The same applies if the retailer also renames the product and wants it to be Ecomark certified.

If the retailer renames the product and does not want the renamed product to be EU Ecomark certified, the packaging/container of the renamed product does not have to meet the criteria.

If you want to add a packaging/container type and/or dimension at a later stage, you must submit an application form page declaring that it meets the packaging and criteria for the new type/dimension with an Appendix 2 of 5(a) - Plastic Calculationand 5(a)(b).

Please note the changes to the original criteria:

The minimum content of 25% of recycled plastic can be measured not only individually in a single container, but also by the average total amount of Ecomark packaging/containers.

This means that it is possible to have a packaging/container with 100% recycled content and 0% recycled content, as long as the average recycling content of the total Ecomark packaging/container quantity is 25%. See example below.

Reused plastic containers are used in accordance withthe criteria 5(a) if a document on the reuse system is provided and an explanation ofhow the reuse system is transmitted to customers. Additionally, delivery notes or similar documents are proven to be reused.

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

For unusedpackaging/containers, please submit the following documents:

- documentation of the reuse system
- A notification of how the reuse system is communicated to customers
- additional evidence, such as delivery, notes that packaging/containers prove that they are not actually reused

Example:

You have seven different packages for the candidate product; two plastic bottles (0.5 and 1 l), two metal barrels (200 and 100 l), aredesigned IBC ki (1000 l), a plastic cartridge (0.25 l) and a plastic box (20 l).

For all plastic packaging/containers that are not reused, you need Appendix 2. In this example there are two plastic bottles, a plastic cartridge and a plastic box.

All of the covers are made of virgin material; recycled content is 0%. The bottles are made of different types of plastic, which include cartridges and cans, a bottle and scabbard recycled material.

As you can see in the tlo above the packaging size of the 1 l bottle, it meets the criteria as a single package / container, since the amount of post-consumer material is 25%.

The packaging size descends from 3 - 20 l gasket - it also meets the criteria as a single packaging / container with 48.39% of the post-consumer material.

Packaging size 2 - 0.5 l bottle and Packaging size 3 – 0.25 l cartridge - but does not meet the criteria as single packages/containers as post-consumer material is not used.

If every packaging/container used must have25% recycled content, the candidate product cannot fulfill its Ecomark.

In order to meet the criteria, the average amount of total Ecomark packaging/container must be calculated, so let's go to the application form.

1.1.3 Criterion 6 – Minimum technical performance

The candidate product must meet the minimum technical performance criteria for qualifying for Ecomark. Compliance with minimum technical performance criteriawill be assessed with an appropriate standardized test or customer approval of the applicant to show that the level of performance is 'fitfor purpose'. For an overview of the tests and the applicant's customer approval is sufficient, please refer to The Commission's Decision 5.

Product category	Minimum technical performance
Chainsaw oils	KWF-test version 2017
Wire rope oils Concrete oscillation agents Other total lost oils Stern tube oils Metalworking liquids	Fit for purpose (approval of at least one customer has been added)
Gear oils for closed gears	DIN 51517 section I, II or III or
	ISO 12925-1
Gear olis for open gears	fit-for-purpose (at least one customer's approval has been added)
Two-stroke oils	for marine use: NMMA TC-W3
Two-stroke oils	for terrestrial use: ISO 13738 (EGD)
Hydraulic fluids	ISO 15380 (tlo 2 - 5)
Fire resistant hydraulic fluids	ISO 15380 (tlo 2 - 5) + ISO 12922 (tlo 1 - 3) or
	"Frika Mutual" Approval
Oils for temporary protection against corrosion	ISO/TS 12928
	Fit for purpose (approval of at least one customer has been added)
Lubrication greases for temporary protection against corrosion	ISO/TS 12928 or
	fit-for-purpose (at least one customer's approval has been added)
Lubrication greases for adhesion gears	DIN 51826
Lubrication greases for roller bearings, sliding bearings and sliding surfaces	DIN 51825
Lubrication greases – Others	ISO 12924 or
	fit-for-purpose (at least one customer's approval has been added)

If you are givenmore than oneoption, you must fulfill only one option for each group. Make sure your candidate product performs minimal technical performance by having it tested according to the relevant tests in hood a Customers assent you Necessary Please ask müvekkiliniz Goal ensure One.

0. **Lubrication properties**
1. **Phase separation***
2. **Communication material***
3. **Coloring clothes***
4. **Chainsaw contamination***
5. **Odor development***
6. **Tagging***

1, 2 and 5. the following test methods are used for tests:

Test criteria	Test methods
9. 10. . Viscosity/density	. DIN 51562 . DIN ISO 2209 . YOUR EN ISO 12158
. Flash point	. DIN 2592
. Lubrication properties	. ISO/TS 19858:2015-08-15

* the approach for eight tests marked with is different. Since there are no norms for these test criteria and it makes the most sense to test according to the specified uses of motorized test oil, KWF has developed its own testing methods for performing product-specific tests. These methods aredescribed in the Appendix to the "Requirements for Verifying the Availability of ChainOils Version 2017" KWF test.

For tests **3, 4, 6, 7 and 11,** almost every test locatormust be able to perform the test according to the KWF Methods described in the Appendix of the"Requirementsfor Verifying the Availability of ChainLubricants Version 2017" KWF test.

. Test criteria	. Test methods
. Cold temperature flow properties	. KWF Method Appendix 1
. Aging resistance	. KWF Method Appendix 2
. Phase separation	. KWF Method Appendix 3
. Contact material	. KWF Method Appendix 4
. Labeling	. KWF Method Appendix 8

Tests 8, 9 and 10 : In standard ISO 6535 for Portable Chain Saws, where saw cuts aredefined, it says: "Cut down the soft tree for as long as it takes to use a tank full of fuel at approximate power speed." The test locatory must take this method for three tests. Test procedures aredescribed in the Appendix of the "Requirements for Verifying the Availability of ChainOils Version 2017" KWF test.

Test criteria Test methods

If you want to use equivalent test methods to prove 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. If only a fraction of the KWF tests are carried out, their Ecomark will not be rewarded.

For hydraulic fluids, please make sure that the tested elastomers are indicated on the product information page.

Application form

Fill out the page 6.

Add the test report or your customer's approval from your customer.

In case of hydraulic fluids : Insert the product information page.

1.1.1 Criterion 7 – Consumer information on use and disposal

If you are selling your product to special end consumers, some additional information about use and disposal must be available. You usethe giventext, compareable text formulations or pictograms.

1.2 Last but not least

Fill out the Page Approval confirmation.

Don't forget to have the full application form signed.

Check to see if you have verified whether the applicant has met each criteria.

Check if you've added all the required documents to your application form.

1.3 Additional information in the LuSC list

Function of the item/brand: In the LuSC list, you will find items/brands sorted by function in the candidate product. If the item or product is used asnot the function of theproduct, the product will not be included in the LuSC list at any other time. This means that only ONE entry is allowed. If the item/brand is used as having a different function in the candidate product, the EEL classifications in the LuSC list do not change. Treat rates are applied independently of the function.

Treatment rates: If no other substance/brand has the same or worse EEL classification, the treatment rates specified in the LuSC list are maximum treatment rates. Please ensure that the biodegradability and water toxicity assessment must be carried out on the formulation of the candidate product as described in sections 2.2 .2 and 2.2.3.

Palm (core) oil or derivatives (PO/PKO) (section 2.2.4(a)): If a supplier wants to list their supplier, lusc list on products they must make follow the order below:

Bio-based amount (part 2. 2.4(b):If a supplier has tested the basic liquid with any C14 method specified in section 2.2.4(b), the full formulation does not need to be tested if the overall fraction exceeds the 25% limit.

Add an item/brand to the LuSC list: If your supplier is interested in putting an item/brand on the LuSC list, tell them to contact the Authority for more information.

Checklist

The following documents must be collected:

1	Application form.	
2	Evidence of your company's condition.	
	If any: EMAS certificate.	
	If any: ISO 14001 certificate.	
3	The reason indicates why the product should be assigned to the recommended category if the candidate product is not already explicitly assigned to a specific category.	
4	**Criterion 1** Security datasheet for the candidate product. Safety datasheets for all items and blends in the candidate product.	
	If the safety datasheet for an item in the candidate *product* does not *exist, because* it is covered by an exemption from *Annex IV and V (EC) no. 1907/2006:* The supplier's statement in this direction.	
5	**Criterion 2.1: Candidate product** • Test reports on water toxicity for algae. • Water toxicity test reports for Daphnia. • Water toxicity test reports for fish embryos.	
	Criterion **2.1:** If items *and mixtures are* not *listed* in the *LuSC list or* are covered *by a LoC,* the **main components** of *the* **candidate product** • Test reports on acute water toxicity for algae for each required substance or mixture. • Test reports on water toxicity for daphnia for each required substance or mixture. • Test reports on chronic water toxicity for fish for each necessary substance or mixture. • *Alternatively: SAR's* (Q)for oneof thetrophic levels.	
6	Criterion **2.2:** If items and **mixtures are** not *listed* in the *LuSC list* or are covered *by* a *LoC,* the *ingredients* **and/or** *mixtures in the* **candidate** product • Test reports on acute water toxicity for algae for each required substance or mixture. • Test reports on water toxicity for daphnia for each required substance or mixture. • Test reports on chronic water toxicity for fish for each necessary substance or mixture. • *Alternatively: SAR's* (Q)for oneof thetrophic levels.	

7	**Criterion 2.2: Exemptions** • Test reports showing that substances and/or mixtures are covered by polymers or water resolution exemptions. • Evidence based on molecular weight and molecular diameter.	
8	**Criterion 3: Biodegradable,** if **substances and mixtures are** not listed on the *LuSC list or covered by a LoC:* • Test reports on the biological breakdown of substances (in the candidate product or in the mixtures in the candidate product).	
9	**Criterion 3: Bioaccumulation,** *if substances and mixtures are* not *listed* on the *LuSC list or covered by a LoC* • Test reports or calculations in the K_{OW} log for items (in the candidate product or in the mixtures in the candidate product). • Test reports in BCF for items (in the candidate product or in the mixtures in the candidate product). • Test reports showing that substances and/or mixtures are covered by exemption for polymers. • Evidence based on molecular weight and molecular diameter.	
10	**Criterion 4(a) - Status 1** • Appendix 1 for all ingredients and mixtures in the candidate product containing Po/PKO. • Invoices proving that sufficient certified items havebeen received to produce the candidate product(s).	
	Criterion 4(a)- Status 2 • Your RSPO membership number at the time of application (application form, page 4(a)). • A calculation that indicates that sufficient RSPO credits have been purchased and used to produce Ecomark products.	
11	**Criterion 4(b):** Test report on the amount of bio-based content of the candidate product.	
12	**Criterion 5** Appendix 2 for all plastic packaging/containers used to sell the candidate product.	
	Documentation of the system that has not been reused. Description of how the reuse system is communicated to customers. Additionally, delivery notes or similar documents are proven to be reused.	
	Description of the design of the packaging / scabbard together with photo or technical drawings.	

2 Explanations for the Authorized Organization

In the application for all violet areas, it is aimed at the competent authority to enter the evaluation result.

Please type "a" for a positive result and the symbol will be displayed. Please type "r" for a negative result and the symbol will be displayed.

On the CB page - a summary page for Authorized Bodies - you will see all the results in an overview, depending on what you enter in the areas of other pages.

If it is in a place, the lubricant does not meet the criteria and is not awarded the Ecomark award.

If you see alimit next to D and/or LimitA, the value of items classified as D and/or A is 0. The evaluation is not yet complete and Ecomark cannot be rewarded.

Under "Notes," you can add your comments to this custom item/blend or Limit values in CB.

Unvalued fraction:

In the LuSC list, you find an unappealing fraction andchemicals with a maximum processing rateof over 0.1%. This means that some of these chemicals are a mixture of several substances that are not evaluated. Please make sure that the maximum treatment rate given on the LuSC list has not been exceeded.

Make sure that the applicantfills in columns S (page "2") and P (page "3") (Mono-componentitem?).

If the value in column K is blue, the unevaluated fraction is over 0.1%. You need to check whether this fraction comes from a mono-constituent substance, a mixture, a UVCB, or a multicomponent substance.

If it is a single-component item, the cell must contain it. In this case, if the fractionis above 0.1%, it cannot be rewarded with the result of the substances not evaluated and its lubricant Ecomark.

If it is not a mono-constituent substance, the cell must contain one. In this case, if the fraction is above0.1%,the resultof the untreated items . In this case, please first check if the material is listed on the LuSC list and check if the maximum treatment rate has been exceeded. If the component is not listed in the LuSC list, in CB, you need to get the full join of the component to see if the mono-substituent substance in the component is below 0.1% and exceeds 0.5% when added together.