



EUROPEAN
COMMISSION

Brussels, **XXX**
[...] (2016) **XXX** draft

COMMISSION DECISION

of **XXX**

establishing the EU Ecolabel criteria for lubricants

(Text with EEA relevance)

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel¹, and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

- (1) Under Regulation (EC) No 66/2010, the EU Ecolabel may be awarded to those products with a reduced environmental impact during their entire life cycle.
- (2) Regulation (EC) No 66/2010 provides that specific EU Ecolabel criteria are to be established for each product group.
- (3) Commission Decision 2011/381/EU² has established the ecological criteria and the related assessment and verification requirements for lubricants, which are valid until 31 December 2018.
- (4) In order to take into account the recent market developments and the innovation that has taken place during the intervening period, it is considered appropriate to establish a revised set of ecological criteria for that product group.
- (5) The revised criteria, as well as the related assessment and verification requirements, should be valid for six years from the date of notification of this Decision, taking into account the innovation cycle for that product group. Those criteria aim at promoting products that have a limited impact on aquatic environment, contain a limited amount of hazardous substances, have equal to or better performance than a conventional lubricant available on the market, and to facilitate transition to the more circular economy by encouraging the reuse (take-back systems), improved design and recyclability of packaging.
- (6) For reasons of legal certainty, Decision 2011/381/EU should be repealed.
- (7) A transitional period should be allowed for producers whose products have been awarded the EU Ecolabel for lubricants on the basis of the criteria set out in Decision

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¹ Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel (OJ L 27, 30.1.2010, p. 1).

² Commission Decision of 24 June 2011 on establishing the ecological criteria for the award of the EU Ecolabel to lubricants (OJ L 169, 29.6.2011, p. 28).

2011/381/EU, so that they have sufficient time to adapt their products to comply with the revised criteria and requirements.

- (8) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010,

HAS ADOPTED THIS DECISION:

Article 1

The product group 'lubricants' shall comprise any lubricant falling within the following 3 main sub-groups and their corresponding lubricant categories:

Total Loss Lubricants (TLL): chainsaw oils, wire rope lubricants, concrete release agents, open gear oils, stern tube oils, total loss greases and other total loss lubricants.

Partial Loss Lubricants (PLL): 2-stroke oils, temporary protection against corrosion and partial loss greases.

Accidental Loss Lubricants (ALL): hydraulic systems, metalworking fluids, closed gear oils and accidental loss greases.

Article 2

1. For the purpose of this Decision, the following definitions shall apply:

- (1) 'lubricant' means a product capable of reducing friction, adhesion, heat, wear and corrosion when introduced between two solid surfaces in relative motion and capable to transmit power. The most common ingredients are base fluids and additives.
- (2) 'Base fluid' means a lubricating fluid whose flow, ageing, lubricity and anti-wear properties, as well as its properties regarding contaminant suspension, have not been improved by the inclusion of additive(s);
- (3) 'Substance' as defined in Regulation No 1907/2006, means a chemical element and its compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the products and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition;
- (4) 'Ingoing substances' means substances intentionally added, by-products and impurities from raw materials in the final product formulation
- (5) 'Thickener' means one or more substances in the base fluid used to thicken or modify the rheology of a lubricating fluid or grease;
- (6) 'Main component' means any substance accounting for more than 5 % by weight of the lubricant;
- (7) 'Additive' means a substance or mixture whose primary functions are the improvement of the flow, ageing, lubricity, anti-wear properties or of contaminant suspension;
- (8) 'Total Loss Lubricant (TLL)' means a lubricant product that is fully released to the environment during use.
- (9) 'Partial Loss Lubricant (PLL)' means a lubricant product that is partially released to the environment during use.
- (10) 'Accidental Loss Lubricant (ALL)' means a lubricant product that is used in closed systems. These products can be released to the environment only incidentally.

- (11) 'Chainsaw oil' means a lubricant product that is used to lubricate the bar and chain on all types of chainsaw. A chainsaw is a portable, mechanical saw that cuts with a set of teeth attached to a rotating chain that runs along a guide bar; it is used in activities such as tree felling, limbing, bucking, pruning, cutting firebreaks in wildland fire suppression and harvesting firewood. They are mostly covered under ISO 6743 family A, Total loss systems.
- (12) 'Wire rope lubricant' means a lubricant product that is used to lubricate wire ropes which consist of several strands of metal wire twisted into a helix. They are mostly covered under ISO 6743 family A, Total loss systems.
- (13) 'Concrete release agent' means a lubricant product that is used in the construction industry to prevent the adhesion of freshly placed concrete to the forming surface, usually plywood, overlaid plywood, steel or aluminium.
- (14) 'Gear oil' means a lubricant made specifically for transmissions, transfer cases, and differentials in automobiles, trucks, and other machinery. Open gear lubricants are used in open gears. Open gears are exposed to challenging conditions include outdoor environment, extended service operation, dust, silica, water, extreme heat and extreme pressures. Open gear oils must be specially formulated to keep equipment operating at maximum efficiency. Closed gear oils are used in closed gears. Closed gears are those gears contained within a closed box, in such a way that a lubricant loss in the environment can only happen accidentally. They are mostly covered under ISO 6743 family C, Gears.
- (15) 'Stern tube oil' means the lubricant used in stern tube which is a narrow hole in the hull structure at the rear end (aft peak) of the ship, through which the propeller shaft passes and connects the engine and propeller.
- (16) 'Grease' means a semisolid lubricant. Grease generally consists of a thickener, generally soap, with mineral or bio-based oil. The characteristic feature of greases is that they possess a high initial viscosity, which upon the application of shear, drops to give the effect of an oil-lubricated bearing of approximately the same viscosity as the base oil used in the grease. This change in viscosity is called shear thinning. Depending on application of the grease, there will be total, accidental or partial loss greases. They are mostly covered under ISO 6743 family X.
- (17) 'Other total loss lubricants' means other lubricants not specified under the TLL but that are fully released to the environment during use.
- (18) '2 stroke oil' means oil used in two-stroke engines; sometimes called two-cycle oil or simple 2T oil. These are a special case of motor oils used in crankcase compression two-stroke engines. They are mostly covered under ISO 6743 family E, Internal combustion engine oils.
- (19) 'Temporary protection against corrosion' means oils, solutions, and emulsions that are applied onto a metal surface as a thin film in order to protect water and oxygen from coming in contact with the metal surface. They are mostly covered under ISO 6743 family R, Temporary protection against corrosion.
- (20) 'Hydraulic systems' also called hydraulic fluids or hydraulic liquids means the medium by which power is transferred in hydraulic machinery. They are mostly covered under ISO 6743 family H, Hydraulic systems.
- (21) 'Metalworking fluid' means oil, emulsion or solution designed for metalworking processes, such as cutting and forming, which main roles are cooling, reducing friction,

removing metal particles, and protecting the work pieces, the tool, and the machine tool from corrosion. They are mostly covered under ISO 6743 family M, Metalworking.

- (22) 'LuSC-list or Lubricant Substance Classification list' is a list of substances and brands that have been assessed by a competent body on its biodegradation/bioaccumulation, aquatic toxicity, renewability and non-presence of excluded substances. The assessment is based only 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.
- (23) 'LoC or Letter of Compliance' means a letter 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.
- (24) 'Critical concentration for the aquatic toxicity' means the concentration of a substance at and above which injurious to an aquatic organism in an exposure to that substance.
- (25) 'Acute aquatic toxicity' means the intrinsic property of a substance to be injurious to an aquatic organism in a short-term aquatic exposure to that substance.
- (26) 'Chronic aquatic toxicity' means the intrinsic property of a substance to cause adverse effects to aquatic organisms during aquatic exposures which are determined in relation to the life-cycle of the organism.
- (27) 'M-factor' means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present.
- (28) 'Degradation' means the decomposition of organic molecules to smaller molecules and eventually to carbon dioxide, water and salts.
- (29) 'Readily biodegradable' means a substance which in 28-day ready biodegradation tests:
- achieves at least 70 % of degradation for tests based on dissolved organic carbon: 70 %;
 - achieves at least 60 % of degradation for tests based on oxygen depletion or carbon dioxide generation.

These levels of biodegradation must be achieved within 10 days of the start of degradation which point is taken as the time when 10 % of the substance has been degraded, unless the substance is identified as an UVCB or as a complex, multi-constituent substance with structurally similar components. In this case, and where there is sufficient justification, the 10-day window condition may be waived and the pass level applied at 28 days.

-In those cases, where only BOD and COD data are available, when the ratio of BOD5/COD is $\geq 0,5$; or.

- (30) 'Inherently biodegradable' means a substance, which achieves the following level of degradation:
- > 70 % after 28 days for inherent biodegradation test, or
 - > 20 % but < 60 % after 28 days based on oxygen depletion or carbon dioxide generation.
- (31) 'Non-biodegradable' means a substance which fails the criteria for ultimate and inherent biodegradability.

- (32) 'Highly insoluble' means a substance which has a water solubility < 10µg/l according to OECD 105.
- (33) 'Slightly soluble' means a substance which has a water solubility < 10mg/l according to OECD 105.
- (34) 'Bioconcentration factor' (BCF) means the ratio of chemical concentration in an organism to that in surrounding water.
- (35) 'EC50' is median effective concentration. It is the concentration that is estimated to cause some defined toxic effect to 50% of the test organisms; (e.g., death, immobilization, or serious incapacitation).
- (36) 'IC50' means the inhibiting concentration for a 50% effect on the test organisms. It represents a point estimate of the concentration of test materials that can cause a 50% impairment in a quantitative biological function (e.g. reduced growth, impairment of the reproductive). These potential impacts do not kill the organism but may reduce the total population over time thereby decreasing aquatic productivity.
- (37) 'LC50' means median lethal concentration. It is the concentration of material that is estimated to be lethal to 50% of the test organisms.
- (38) 'Octanol/water partition coefficient' (Kow) means the ratio of a chemical's solubility in n-octanol and water at equilibrium.
- (39) 'NOEC' means 'no observed effect concentration'. It is the highest concentration at which no effect on test organisms is observed over a relatively long period in a chronic aquatic toxicity test.
- (40) 'Biochemical Oxygen Demand' (BOD) means the quantity of oxygen utilized by micro-organisms growing under aerobic (oxygenated) conditions for the biochemical oxidation of organic substances under standard laboratory procedures which is usually 5 days (hence BOD5) but can be longer for specific purposes. BOD is usually expressed as a concentration (e.g., mg/l).
- (41) 'Chemical Oxygen Demand' (COD) means the quantity of oxygen utilized in the chemical oxidation of an organic substance in water, as determined using a strong oxidant, under standard laboratory procedure, usually expressed in milligrams per litre (e.g., mg/l).
- (42) 'Theoretical Oxygen Demand' (ThOD) is the calculated amount of oxygen required to oxidise an organic substance to its final oxidation products. However, there are some differences between standard methods that can influence the results obtained: for example, some calculations assume that nitrogen released from organics is generated as ammonia, whereas others allow for ammonia oxidation to nitrate. Therefore in expressing results, the calculation assumptions should always be stated.,

Article 3

In order to be awarded the EU Ecolabel under Regulation (EC) No 66/2010, a lubricant shall fall within the product group 'lubricant', as defined in Article 1 of this Decision and shall comply with the criteria as well as the related assessment and verification requirements set out in the Annex.

Article 4

The criteria for the product group ‘lubricants’ and the related assessment and verification requirements shall be valid for six years from the date of notification of this Decision.

Article 5

For administrative purposes the code number assigned to the product group ‘lubricants’ shall be ‘XXX’.

Article 6

Decision 2011/381/EU is repealed.

Article 7

1. By derogation from Article 6, applications for the EU Ecolabel for products falling within the product group ‘lubricants’ submitted before the date of notification of this Decision shall be evaluated in accordance with the conditions laid down in Decision 2011/381/EU.
2. Applications for the EU Ecolabel for products falling within the product group ‘lubricants’ submitted within two months from the date of notification of this Decision may be based either on the criteria set out in Decision 2011/381/EU or on the criteria set out in this Decision. Those applications shall be evaluated in accordance with the criteria on which they are based.
3. EU Ecolabel licenses awarded in accordance with the criteria set out in Decision 2011/381/EU may be used for 12 months from the date of notification of this Decision.

Article 8

This Decision is addressed to the Member States.

Done at Brussels,

For the Commission
Karmenu VELLA
Member of the Commission