



USER'S MANUAL FOR THE APPLICATION FOR TISSUE PAPER

Connected to the criteria approved 2001



General Information

Application forms for awarding the European Ecolabel shall be provided in two copies bearing original signatures.

All information on the ecolabelled product/products should refer to the requirements in the criteria document. For the general information required in Section 1 in the checklist to this user's manual, a declaration from the applicant including all the mentioned information will be regarded as sufficient.

Specific information that must be complete

The Applicant shall assemble a dossier containing all relevant data and manufacturers' declarations related to the ecolabelled product. This dossier should be presented as a part of the application to verify compliance with the criteria.

If there are more than one candidate product, the information in the application dossier might be separated into one product specific part and one site specific part, in order to avoid duplicates in the application dossier information that is common to several candidate products. Note that if the tissue product is made of several pulps, there will also be more than one production site to report.

Three main processes or phases may be isolated in the manufacture of the tissue products. These are pulp manufacture (including de-inking of waste paper), paper production and converting into rolls or smaller reels. This separation of processes facilitates calculations of the emissions in case the processes are carried out at different plants.

In the following notes, the levels of data collection (registrations) are specified for each of the criteria and for the three phases of the production process. These specifications are given with the aim of being as product specific as possible, without causing unacceptable costs for the data collection. This means that the level of specificity generally is lower for those parts of the production process that usually are part of a complex production facility where a number of different products are processed at the same time.

For each ecolabelled product covered by the application, the applicant has to specify the product composition. Pulp qualities, chemical products and water content must be referred according to their percentages of the content in the tissue products sold at the market.

Chemical substances accounting for less than 0,5% of the total final product weight, do not need to be declared.

The various pulp qualities are to be declared in terms of trade name, fibre source (wood species or waste paper grade) and production method (Kraft, sulphite, CTMP, de-inked etc). For bleached pulp qualities, the bleaching sequences shall be declared.

In case of non-integrated production, the applicant has to state the names and location of production sites of all pulp suppliers with a reference to the trade names of the pulps.

If it is the intention of the applicant to use a range of mixtures of pulps, the assessment of compliance with the criteria for ecolabelling should in this case be based on a "worst case scenario". It is not necessary to provide assessments for all possible pulp mixes, but the manufacturer must identify the "worst case" and ensure that compliance with the criteria is maintained for all mixtures.



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1 Ecological criteria

1.1 Emission to water

1.1.1 Emission parameters and analysing methods

The testing of AOX and COD shall be performed according to the methods given below or to the respective equivalent standards. Data shall be provided for each type of pulp used for the ecolabelled paper product. The total emission values of 0.5 kg / ADT for AOX and 40 kg / ADT for COD must not be exceeded as weighted averages for the pulp and paper production. In calculating the weighed average, each pulp is taken into account regarding to its share in the final product.

The verifier shall recognise in-house testing methods if they are commonly used and accepted on a national basis and the equivalence is established by a calibration curve at 95% significance. The applicant has to report the test methods used.

The application must include the full results of the tests and the basis for calculations of emissions per a tonne of pulp or paper.

The COD-emission contributions from each plant in the manufacturing process are added to give a sub-total in each phase of the manufacturing process. If a mixture of pulps are included in the furnish, the respective contributions to COD emission and AOX emission are calculated according to the pulp's share of the furnish.

Data on concentrations in waste water are necessarily site-specific, since there is normally only one effluent treatment plant per site regardless of the number of production steps performed at the site. If the candidate product is manufactured at an integrated plant, only data for this plant is necessary, and allocation of the data to pulping and de-inking is unnecessary.

Analysing methods:

COD: ISO 6060

AOX: ISO 9562

1.1.2 Sampling

Samples for measuring of AOX and COD shall be taken after external purification, either at the plant or at a public treatment plant. Both AOX and COD shall be measured in samples that neither have settled nor been filtered.

At the date of application the measurements must have been executed within the last 12 months. The period for the measurements must be based on the production during 12 months. If the measurements concern a new or a re-built production plant, the measurements must be based on a period of at least 45 consecutive days of stable running of the plant.



A sample shall be composed of a representative 24-hr collection sample (daily samples) e.g. flow-proportional sampling or an equivalent procedure. The minimum sampling frequency should be 5 daily samples per week. A number of daily samples may be added together and analysed as one.

The minimum testing frequency for COD is one test per week. The minimum testing frequency for AOX is one test per month. For shorter measuring periods than six months, the minimum number of AOX tests performed is at least six.

If the production of ecolabelled products is running in campaigns shorter than 45 days, averages from more than one campaign during a longer period will be accepted only if the total average for several short campaigns is based on samples from at least 45 days. In cases of such discontinuous measurements this shall be explicitly stated in the application documents.

For processes where chlorine-containing chemicals are not used, AOX are assumed to be zero and the analyses of AOX is unnecessary.

1.2 Emissions to the air

1.2.1 Energy related emission parameters

The emissions to the air are closely related to the energy consumption in the different phases of the production process. In cases where parts of or the total energy production takes place in one or more boilers, it is necessary to have some *basic data* for the energy production. This data is the amount of fuel (both fossil fuels in the form of oil, coal, or gas as well as renewable resources) consumed to produce one MJ of steam. This data must be established for each of the boilers used and must be used in the calculation of the boilers contribution to the energy-related parameters in the scoring system as explained below.

The basic data for each boiler is the annual average for the production of one MJ of steam and should be calculated from the amount of steam produced yearly and the amount of fuels consumed during the same period. This is based on the assumption that the amount of fuel consumed to produce one MJ of steam is the same irrespective of which machine uses the steam. Therefore it is also possible to use a mixture of fuels.

The consumption of steam in each step of the production process can be measured and the emissions of CO₂ and SO₂ can be calculated specific for the candidate product



1.2.1.1 Sulphur

If gas-cleaning technology is used, gaseous sulphur shall be measured after purification or otherwise the efficiency of the gas-cleaning technology shall be used in the calculation. Data must be provided for each quality of pulp used for the ecolabelled product and for the paper production. The sulphur must be expressed as kg S per air dry tonne (> 85 % dry) of pulp and paper and summed up for the whole process of pulp and paper production.

The total emission value of 2,5 kg S / ADT must not be exceeded for the pulp and paper production together as a weighted average. In calculating the weighed average, each pulp is taken into account regarding to its share in the final product.

The calculation can be performed in three different ways:

1. The applicant may calculate the sulphur emissions from measurement of all individual sources, such as energy generation (except electricity), recovery boilers, lime kilns, steam boilers, destructor furnaces for strong-smelling gases etc.
2. The applicant may calculate the sulphur emissions from the sulphur content of the fuels (usually oil or gas) for the on-site energy generation, if all sulphur emissions originate from fuels with know sulphur content.
3. If the sulphur emissions originate from different sources, the applicant may calculate the emissions related to the energy generation from oil, coal and other external fuels. A template of 0.5 kg/ADT for diffuse emissions can be used. The emissions from recovery boilers and lime kilns must be measured. All emission sources must be added up to a total amount of gaseous sulphur emissions.

If there is one major source for sulphur emissions and a few minor sources, the major source must be measured or calculated whereas the template of 0.5 kg/ADT may cover the minor sources.

In case of measurements, the applicant must report the test methods/standards used. The application must include the full results of the tests and/or the basis for calculations to emissions per every certain quantity of pulp or paper.

Suggested analysing methods (optional)

Sulphur content in oil:	ISO 8754:1995
Sulphur content in coal	ISO 351
Sulphur emissions:	EPA No 8 and EPA No 16A



1.2.1.2 CO₂

The applicant shall provide a balance of all carbon dioxide emissions derived from the production of pulp and paper, from the production of wood-chips or de-inking to the final product. This balance must include all sources of non-renewable fuels, at the mills during the production of pulp and paper as well as the purchased electricity. In case of non-integrated production, the applicant must provide such information for the pulp/pulps used for the respective product.

CO₂-equivalents for the energy consumption at the plants are given in table 1. Data on gaseous carbon dioxide emissions must be provided for each kind of pulp used for the ecolabelled product and for the paper production. The calculation shall be expressed as kg CO₂ per air-dry tonne (> 85 % dry) pulp and paper and added up for the whole process of pulp and paper production.

If grid electricity is used for the process energy production for any of the phases of manufacturing, the contribution to CO₂ emission due to public electricity generation, must be calculated. Grid electricity consumption for pulping, de-inking, paper production and converting shall be included.

The CO₂ contribution is calculated by multiplying the electricity required to produce one tonne of candidate product by 400 g CO₂ / kWh. See table 1.

The total emission value of 3750 kg CO₂ / ADT must not be exceeded for the pulp and paper production as a weighted average. In calculating the weighed average, each pulp is taken into account regarding to its share in the final product.

Table 1. Equivalents of CO₂ from non renewable fuels

Fuel	CO2 emission	Unit
Coal	95	g CO ₂ / MJ
Crude oil	73	g CO ₂ / MJ
Fuel oil 1	74	g CO ₂ / MJ
Fuel oil 2 - 5	77	g CO ₂ / MJ
LPG	69	g CO ₂ / MJ
Natural gas	56	g CO ₂ / MJ
Grid electricity ¹	400	g CO ₂ / kWh

¹ European average



The application must include the full basis of the calculations of emissions per tonne of pulp or paper. In the calculations the applicant must specify the sources and the amounts of fuels used.

Calculations of mass balances and measurements of emissions for each phase in the manufacturing process must be adjusted for fibre loss and differences in humidity during paper making and converting. See notes 2 and 4 in the Example document.

Aggregation of data at each phase of the manufacturing process should be performed by summation of emissions according to the share of the pulp input into the next phase of manufacture. For example, to aggregate the CO₂ emissions in the conversion processes, CO₂ outputs from all converters are summed in relation to the proportions from each machine that make up the final tonnage of ecolabelled product.

1.3 Calculation of the total score

The aggregated data for the manufacturing process for each criterion should be scored.

Load score are calculated by dividing the total emission value for each parameter (COD, AOX, sulphur and carbon dioxide) by the corresponding coefficient given in table 2 as indicated in equation 1.

The 'total load point sum', P, is calculated by adding the individual load points, (equation 2). To obtain the label, the 'total load point sum', P, must not exceed 4.

$$L_i = (\text{Emission of parameter } i) / C_i \quad [\text{equation 1}]$$

$$P = L_1 + L_2 + L_3 + L_4 \quad [\text{equation 2}]$$

Table 2. Coefficients and hurdles for the emission parameters,

	Coefficients, tissue kg / ADT	Hurdles, kg / ADT tissue
1. Organics to water, COD	$C_1 = 15$	$H1 = 40$
2. Chlorinated organics, AOX	$C_2 = 0,2$	$H2 = 0,5$
3. Carbon dioxide, CO ₂	$C_3 = 1500$	$H3 = 3750$
4. Sulphur dioxide, as S	$C_4 = 1,0$	$H4 = 2,5$

See also examples 1 –3 in the Example document.



1.4 Brokes and fibre loss

If trimmings or broke are part of the pulp, the corresponding emissions and energy shall be allocated according to the following:

Trimmings/Broke from the own production:

If trimmings/broke from the own production is recycled to production of paper on the same paper machine or an equivalent paper machine, the quantity of trimmings/broke must be subtracted from the total formulation and the remaining components will constitute 100 % for the purpose of calculating total emissions. If broke from the own production is used in other paper machines, the emissions from the trimmings/broke shall be calculated on the basis of the average from the original pulps in the trimmings/broke.

Purchased trimmings/broke:

In the case of purchased trimmings/broke, the emissions shall be calculated on the basis of the average from the pulps in the original trimmings/broke. The averages should be calculated in relation to the ratio of each pulp in the mixture.

1.5 Testing

Independent or accredited institutes or laboratories must carry out the tests. Testing performed by on-site laboratories will be accepted only if the results are approved by the respective (local) authorities which are responsible for the working or emission permission of the plant or if the producer has been awarded a certificate for ISO 14001 or EMAS-registered.

There may be a case where the producer has to report the emission situation of the plant continuously to the local authorities. In this case the verifier may recognise this as sufficient for the application if approval is given from the respective authority.

The applicant must specify the location and the technology used for the wastewater treatment, e.g. on site or public treatment plant, as well as mechanical and/or chemical and /or biological treatment.

The applicant must provide data on the water consumption per tonne of pulp and paper during the various stages of the production process.

2 Energy use

The consumption of electricity is the net electricity. The net electricity is calculated:

Net electricity = purchased elec. + internally generated elec. – sold elec.

In case of purchased and sold electricity the consumption is calculated from the invoices for the purchased and sold quantity.

The internally generated electric power is documented on the basis of meter readings.



Electricity used for wastewater treatment and air cleaning need not be included if these amounts of electricity consumption are known.

3 Fibres-Sustainable forest management

For each virgin pulp used in the product, documentation must be presented that demonstrates that the fibre originates from forests where measures aimed at ensuring sustainable forest management are practised

According to the criterion No 3 this can be a declaration, charter, code of conduct, or statement reflecting the commitment of the operators in charge of managing the forest from which the fibres originate. The declaration has to be provided for all fibres except for recycled fibres used for production of the respective candidate product. In case there are private organisations applying sustainable forest management schemes it is regarded as sufficient to add a copy of the respective declarations issued by those organisations.

In case of using only recycled fibres the applicant doesn't have to provide the information regarding criterion No 3 on sustainable forest management.

4 Hazardous Chemical Substances

The applicant shall present a list of the chemical products used. The list shall include the brand name of the product, the area of use and the name of the supplier.

Bleaching: The applicant shall present a written commitment or declaration from each pulp supplier, that chlorine gas has not been used for the bleaching of the pulps. The production phases at the paper machine or at paper converting is not covered by this criterion.

De-inking: The producer of the de-inking chemical must certify that no alkyl phenol ethoxylates or other alkyl phenol derivatives have been added to the de-inking chemical.

Wet strength aids: The producer of wet strength aid must provide a declaration in accordance with criterion No 4 certifying that the content of chloroorganic substances- related to the dry matter content- is max 1.0%.

If the wet strength aids do not contain any chloroorganic substances, a declaration should state that the product does not contain any substances harmful to health or the environment.



5 Waste Management

The applicant must provide a copy of the procedures for;

- Separating and using recyclable materials from the waste stream.
- Recovering materials for other uses such as incineration for raising process steam for agricultural use.
- The handling of hazardous waste.

6 Product safety

The tissue producer must provide full details of analysis results for the finished tissue product made from recycled fibre or mixtures of recycled and virgin fibre for:

- Formaldehyde and Glyoxal
- PCB
- Slimicides and antimicrobial substances

The tissue producer must also provide the analysis results for:
(Mandatory for all products)

- Dyes and optical brighteners

Certification in accordance with criterion No 6 shall be provided. The dyes and inks used in the production must not contain azo-substances that may cleave to any of the amines listed in the technical appendix, table 3.

The analysis should be done before the applications has been sent to the ecolabelling competent body before the assessment procedure starts.

Thereafter it is the responsibility of the licensee to control that this requirement is fulfilled. For example should new tests be required if the recycled quality in the raw material is significantly changed. It is therefore appropriate that the control is done in co-operation with the supplier of the recycled fibre.

Analysing methods:

Formaldehyde:	EPA 8315A
Glyoxal:	EPA 8315A
PCB:	EPA 8270
Slimicides and antimicrobial substances	EN 1104
Dyes and optical brighteners	EN 646 and 648

Appendix 1

CHECKLIST

USER'S MANUAL FOR THE APPLICATION FOR TISSUE PAPER



Applications forms for awarding the European Ecolabel shall be provided in two copies bearing original signatures and approvals.

An application file for awarding the European Ecolabel must include the following documents and information:

1 General Information:

- the name, VAT-No, address and location of the applying company and the production site/s,
- the name, telephone No, Fax No of the contact person at the applying company,
- the name / trade name / trademark of the product / products in question,
- the produced amount of ecolabelled tissue paper , in tonnes per year,
- the estimated annual turnover of the ecolabelled product,
- the volume/number of units of the various consumer packages,
- the purpose of use of the products (e.g. toilet paper, kitchen rolls, serviettes, etc.),
- a declaration of the consumer information on the primary and secondary packaging,
- the applicants that are EMAS registered and/or ISO 14001 certified must include a declaration where the applicant explicitly commits itself in its environmental policy to ensure full compliance of its Eco-labelled products with the Eco-label criteria throughout the period of validity of the contract and that this commitment is appropriately incorporated into the detailed environmental objectives. Those applicants with ISO 14001 shall demonstrate annually the implementation of this commitment. Those with EMAS shall forward a copy of their annually verified environmental statement;
- the number of employees of the applicant manufacturer.

Specific Information:

1.1 Emission to water

1.1.1 Emission parameters and analysing methods

- the composition of the product/products, where the share of each pulp quality, other constituents and the water content are defined,
- the types and degree of fibre content of the pulps that are used in the production of the tissue paper,



- the name/s and production site/s of the supplier/s of pulp, in case of non-integrated production,
- measurements for COD and AOX with reference to the test methods used for both the pulp and the paper production sites, together with the calculation of the total discharge values for COD and AOX.

1.1.2 Sampling

- the frequency and sample collection method for COD and AOX for both the pulp and the paper production sites.

1.2 Emission to the air

- results from representative measurements of sulphur in the flue gas with reference to the test methods used at both the pulp and the paper production sites,
- basic data for energy consumption in cases where SO₂ and CO₂ are calculated from the fuel consumption or allocated with regard to the fuel consumption,
- the calculation of the total discharge values for gaseous sulphur. If sulphur is measured at various points at the mill, each measurement point must be documented,
- the calculation of total discharge values for gaseous carbon dioxide used at both the pulp and the paper production sites.

1.3 Calculation of the total score

- the calculation of the total load points for the emission parameters COD, AOX, gaseous sulphur and gaseous carbon dioxide in accordance with the requirements in criteria 1. 3.

1.5 Testing

- name/s of the test institutions/laboratories responsible for the measurements for both the pulp and the paper production sites,
- location and technology used for treatment of waste water (on site or in an external waste treatment plant).



2 Energy Use

- the calculation of the sum of the electricity used in the pulp and the tissue paper production.

3 Fibres –Sustainable forest management

- documentation that demonstrates that the fibre originates from forests where measures aimed at ensuring sustainable forest management are practised for pulps made of virgin fibres. One document is needed for each site of pulp production,
- a declaration that 100 % recycled fibres and/or non-wood fibres (grass, straw etc.) are used for the paper production.

4 Hazardous Chemical Substances

- a declaration from each pulp supplier that chlorine gas has not been used for the bleaching of the pulps,
- a declaration from the producer of the de-inking chemical that no alkyl phenol ethoxylates or other alkyl phenol derivatives have been added to the de-inking chemical,
- a declaration from the producer of wet strength aid that the content of chloroorganic substances- related to the dry matter content is max 1.0%.

5 Waste Management

- a description of the handling of wastes and residual materials from the different stages of the pulp and paper production.

6 Product safety

- full details of analysis results for the finished tissue product made from recycled fibre or mixture of recycled and virgin fibre for Formaldehyde, Glyoxal, PCB, slimicides and antimicrobial substances. Analysis results for the tissue paper made of recycled or of virgin fibres for dyes and optical brighteners.

Appendix 2

EXAMPLES OF THE EVALUATION OF ENVIRONMENTAL LOADS FOR THE ECOLABELLING OF TISSUE PAPER PRODUCTS.



**EXAMPLES OF THE EVALUATION OF ENVIRONMENTAL LOADS FOR THE
ECOLABELLING OF TISSUE PAPER PRODUCTS.**

PULP FURNISH

Tissue Paper products can be made from a blend of pulps. Calculations for compliance with criteria must be performed on the worst-case pulp mix.

Trade name of Pulp	Address ...	Pulp Type (pulping / bleaching methods used)
Pulp A	xxx yyy	Recycled fibres
Pulp B	xxx yyy	Recycled fibres
Pulp C	xxx yyy	Bleached sulphite pulp (TCF)
Pulp D	xxx yyy	Bleached softwood kraft pulp (TCF)
Pulp E	xxx yyy	Bleached softwood kraft pulp (ECF)



ENVIRONMENTAL LOADS OF PULPS

List the environmental loads for all of the pulps, which are used as raw materials in the manufacture of the product to be ecolabelled. Calculations for compliance with criteria must be performed on the worst-case pulp mix.

Trade name of Pulp	Environmental loads			
	Organics to Water	Chlorinated Organics	Carbon Dioxide	Sulphur Dioxide
Pulp A	12	0	1800	0.8
Pulp B ¹⁾	17	0	2000	0.9
Pulp C	30	0	1000	1.2
Pulp D	25	0	800	1.0
Pulp E	22	0.25	800	0.7

1) Emissions from both pulp and paper production at the mill are included.

**SUMMARY OF CRITERIA SCORES**

The calculations of scores should be performed according to the equations given below. Calculations for compliance with criteria must be on the worst-case pulp mix.

Criterion	Units	COEFFICIENT	HURDLE
Organics to Water	kg COD per ADT tissue	15	40
Chlorinated Organics	kg AOX per ADT tissue	0.2	0.5
Carbon Dioxide	kg CO ₂ per ADT tissue	1500	3750
Sulphur Dioxide	kg S per ADT tissue	1.0	2.5

SCORE = LOAD / COEFFICIENT

LOAD must not exceed the corresponding HURDLE.

TOTAL SCORE must not exceed 4.0.



EXAMPLE 1

100 % virgin fibers from market pulp

PULP FURNISH TO BE ASSESSED		
Pulp I.D.	Pulp Type (Virgin/ De-inked)	Percentage of Furnish (%)
Pulp D	Bleached softwood kraft pulp (TCF)	100%

Trade name of Pulp	Weighted Environmental loads				
	Amount of pulp / (paper) component	Organics to Water	Chlorinated Organics	Carbon Dioxide	Sulphur Dioxide
Paper production	1.0	5	0	400	0.2
Converting	1.0	0	0	20	0.1
Pulps:					
Pulp D	1.04 ²⁾	26	0	832	1.04
TOTAL LOAD		31	0	1252	1.34

2) 90% dry contents of pulp and 94% dry contents of paper result in an addition of $94/90 = 1.04$ ADT pulp / tonne humid paper.



Criterion	Units	LOAD	SCORE
Organics to Water	kg COD per ADT tissue	31	2.07
Chlorinated Organics	kg AOX per ADT tissue	0	0
Carbon Dioxide	kg CO ₂ per ADT tissue	1252	0.83
Sulphur Dioxide	kg S per ADT tissue	1.34	1.34
TOTAL			4.24

THIS PRODUCT IS NOT IN COMPLIANCE WITH THE ENVIRONMENTAL CRITERIA.



EXAMPLE 2

100 % recycled fibers in an integrated tissue mill

PULP FURNISH TO BE ASSESSED

Pulp I.D.	Pulp Type (Virgin/ De-inked)	Percentage of Furnish (%)
Pulp B	Recycled fibers	100%

Trade name of Pulp	Weighted Environmental loads				
	Amount of pulp / (paper) component	Organics to Water	Chlorinated Organics	Carbon Dioxide	Sulphur Dioxide
Paper production ³⁾	1.0	17	0	2000	0.9
Converting	1.0	0	0	20	0.1
Pulps:					
Pulp D ³⁾	See paper production				
TOTAL LOAD		17	0	2020	1.0

3). Emissions from both pulp and paper production at the mill are included.



Criterion	Units	LOAD	SCORE
Organics to Water	kg COD per ADT tissue	17	1.13
Chlorinated Organics	kg AOX per ADT tissue	0	0
Carbon Dioxide	kg CO ₂ per ADT tissue	2020	1.35
Sulphur Dioxide	kg S per ADT tissue	1.0	1.0
TOTAL			3.48

THIS PRODUCT FULFILS THE ENVIRONMENTAL CRITERIA.



EXAMPLE 3

60 % recycled fibers and 40 % virgin fibers

PULP FURNISH TO BE ASSESSED

Pulp I.D.	Pulp Type (Virgin/ De-inked)	Percentage of Furnish (%)
Pulp A	Recycled fibers	60%
Pulp E	Bleached softwood kraft pulp (ECF)	40%

Trade name of Pulp	Weighted Environmental loads				
	Amount of pulp / (paper) component	Organics to Water	Chlorinated Organics	Carbon Dioxide	Sulphur Dioxide
Paper production	1.0	5	0	400	0.2
Converting	1.0	0	0	20	0.1
Pulps:					
Pulp A ⁴⁾	0.63	7.6	0	1134	0.5
Pulp E ⁴⁾	0.42	9.2	0.105	336	0.29
TOTAL LOAD		21.8	0.105	1890	1.09

4). 90% dry contents of pulp and 94% dry contents of paper result in an addition of $94/90 = 1.04$ ADT pulp / tonne humid paper.



Criterion	Units	LOAD	SCORE
Organics to Water	kg COD per ADT tissue	21.8	1.45
Chlorinated Organics	kg AOX per ADT tissue	0.105	0.53
Carbon Dioxide	kg CO ₂ per ADT tissue	1890	1.26
Sulphur Dioxide	kg S per ADT tissue	1.09	1.09
TOTAL			4.33

THIS PRODUCT IS NOT IN COMPLIANCE WITH THE ENVIRONMENTAL CRITERIA.