Sustainable Public Procurement-fiche: advanced

1) Subject matter

Play ground equipment that is composed of environmentally friendly materials and produced by environmental processes.

"For <…..> (name of the public authority), the care for the environment and social aspects is important. It is stated in her <strategic policies>, <mission>, <vision>, <procurement policy>, …"

2) Exclusion criteria

Non compliance with environmental and social legislation, which has been the subject of a final judgment or a decision having equivalent effect, may be considered an offence concerning the professional conduct of the economic operator concerned or grave misconduct, permitting to exclude the party concerned from competing for the contract

Ref:
Art. 53 and 54 of Directive 2004/17/EC and Art. 45 of Directive 2004/18/EC

3)Technical capacity (not exclusive)

/

4) Technical specifications

4.1.Basic materials

4.1.1. General

It is possible to separate 90% of the parts from metal, wood or plastic from the other materials for recycling.
Exceptions are:

- panel materials with plastic or synthetical resin in the different materials.

- other combined components who can be reused as such don't have to be separatable.

4.1.2. Wood and wood-based materials

- The wood raw materials do not originate from forest environments meriting protection due to their high biological and/or social value.
- If the product contains more than 10% wood by weight: 70% of the wood for the product must consist of wood from sustainable forestry.
- After felling the wood is not treated with pesticides classified by WHO as type 1A and type 1B (extremely and highly hazardous). The list, the WHO recommended classification of pesticides by hazard, can be found on http://www.who.int/pcs/

4.1.3. Plastic materials

For products that consist of more than 10% plastics by weight, at least 50% of the plastics must consist of recycled material.

4.2. Surface treatment

4.2.1. Surface treatment of wood

- Products for surface treatment of wood don't contain those heavy metals or their compounds: cadmium, lead or chrome VI.
- Chemical ingredients of products for surface treatment of wood that are classified conform Directive 1999/45/EG en 67/548/EEG as toxic, carcinogenic, mutagenic or toxic for reproduction with R-phrases: R23 to R28, R45, R46, R60 en R61 are not used in concentrations that require mentioning on the product safety data sheets (see annex). Active substances of products used for conservation who are indicated by R23 to R28 may be used up to 0,1% by weight of the total paint constitution.
- The concentration of substances classified as environmentally hazardous (R50, R50/R53, R51/R53, R52/R53, R52 or R53) according to the criteria in Directive 1999/45/EG and 67/548/EEG is not higher than 2,5% by weight of the product for surface treatment of wood (see annex). The sum of the concentration of those substances is not higher than 5% by weight of the product. Ammonia, akyl ammonia or alkylamine are excepted.

4.2.2. Surface treatment of plastic parts

- Surface treatment of plastic is only allowed when it is verifiable that this does not hinder the recycling of the plastic.
- Chemical substances used in the surface treatment of plastics must not be classified as ecotoxic (R50, R50/R53, R51/R53, R52/R53, R52 or R53), carcinogenic (R45, R49, R340), toxic for reproduction (R60 to R63),

mutagenic (R40, R46) or allergenic by inhalation (R42) according to directive 1999/45/EC (see annex).

- Chemical substances used in the surface treatment of plastic doesn't contain:
    - halogenated organic compounds,
    - phthalates,
    - aziridine and polyaziridines, or
    - creosote.
- Active substances, pigments and additives used in the surface treatment of plastics are not based on:
    - arsenic,
    - lead,
    - boron,
    - tin,
    - cadmium,
    - copper,
    - chrome (VI), or
    - mercury.

4.2.3. Surface treatment of metal parts

- Products used for surface treatments of aluminium and steel don't contain cadmium or chrome VI or their compounds. In exceptional cases, chrome and nickel coating is acceptable for small, exposed parts (screws, bolts, mechanical parts, etc.) where this is necessary due to intense physical wear or to ensure that the parts form a seal. NiCr coating must however fulfill the requirements of PARCOM Recommendation 92/4.
- Chemical ingredients of products for enamel or coat of aluminium or steel who are classified conform Directive 1999/45/EG en 67/548/EEG as toxic, carcinogenic, mutagenic or toxic for reproduction with R-phrases: R45, R46, R60 en R61are not used in concentrations that require mentioning on the product safety data sheets.
- The concentration of substances classified as environmentally hazardous (R50, R50/R53, R51/R53, R52/R53, R52 or R53) according to the criteria in Directive 1999/45/EG and 67/548/EEG is not higher than 2,5% by weight of the enamel and coating of steel and aluminium (see annex). The sum of the concentration of those substances is not higher than 5% by weight of the end product. Ammonia, akyl ammonia or alkylamine are excepted.

4.3. Other chemicals:

4.3.1. Wood preservation products

- If the wood is naturally durable (durability class 1 or 2 according to EN 350-2), it is not treated with wood preservative. If the used wood is not naturally durable than constructive wood protection, impregnation or surface treatment may be used to make the product durable.

- Chemical substances used in the wood preservation products are not classified as carcinogenic (R45, R49, R340), toxic for reproduction (R60 to R63), mutagenic (R40, R46) or allergenic by inhalation (R42) according to directive 1999/45/EC (see annex).
- Product impregnation fulfills Class P8/HC5 or Class P5/HC3 according to EN 335 and EN 351.
- Active substances in wood preservation products are not based on arsenic, chrome, organic tin compounds or creosote oil.

4.3.2. Plastic parts

- No halogenated flame retardants are added during the production process of the plastic materials of secondary materials.
- No substances based on cadmium, lead, mercury and their compounds are added during the production process of the plastic materials of secondary materials.

4.4. Packaging

- Packaging/wrapping doesn't contain chlorinated plastics

Evidence:

The compliance with <u>all</u> the criteria mentioned above can be proved with one of the following labels:

Nordic Swan Labeling

Milieukeur

in case that the tendering company can present one of these labels, any further proof is not necessary. Any other suitable evidence from a recognized body can also be used.

For the criteria under basic materials/wood and wood-based materials compliance can also be proved by the following labels:

FSC-label

PEFC-label

5) Awarding the contract:

	Criterium	*Weight*
1	***Price*** *Calculation (e.g.):* Lowest offered price/ stated price x 0,70	e.g. 70%
2	***Environmental criteria*** (The public authority formulates the points it wants to assign to the below mentioned criteria) *Calculation (e.g.):* Total scored points / maximum number of points x 0,20	e.g. 20%
3	…	e.g. 5 %
4	…	e.g. ….

Environmental criteria

5.1. General

- It is possible to remove the metal and plastic parts from the other materials (wood, metal, plastic) without the use of special tools.
- Maintenance of the tools is possible without the use of ammonia or organic solvents.
- The content of organic solvents in the glue used for the assembly is less or equal to 10% by weight.

5.2. Wood

- The content of the wood raw materials from sustainable forestry is higher than 70%.
- The wood is not impregnated or treated by chemical wood preservatives. Surface treatment, such as painting, staining, oiling, enamelling is allowed.

5.3. Wood based panels

- The content of solvents in the glue used in wood-based panels is less than 10% by weight.
- The content of formaldehyde of wood based panels that contain formaldehyde-based additives doesn't exceed those values:
    - Formaldehyde is maximum 8mg/11g dry matter in accordance with EN120, for an individual value,

  - Formaldehyde is maximum 6,5mg/100g dry matter in accordance with EN120, for mean value during six months.
  - Alternatively the emission of formaldehyde must be less than 0,13mg/m³ air on testing in a climate chamber.
- For wood based panels with more than 10% by weight wood those requirements have to be fulfilled (see annex):
  - Chemical products must not have been classified as carcinogenic (R45, R49, R340), toxic for reproduction (R60 to R63), mutagenic (R40, R46), toxic (R23 till R28) or allergenic by inhalation (R42) under criteria in Directive 1999/45/EG.
  - However, the content of free formaldehyde may be up to 0.3 % by weight, with the exception of adhesives for plywood and bonded wood panels, where the free formaldehyde content may be up to 0.5 % by weight.
  - Halogenated organic binding agents, halogenated organic flame retardants, polychlorinated biphenyls, alkyl phenols, phthalates, aziridine and polyaziridines may not be added to the chemical product.
  - Pigments and additives based on lead, tin, cadmium, chromium VI, mercury and their compounds may not be added to the chemical product.
  - The content of alkyl phenol ethoxylates or other alkyl phenol derivatives in the chemical product may not exceed 0.6% by weight.
  - The total amount of incorporated chemical substances classified by the chemicals supplier as environmentally hazardous according to EU's classification system (18th amendment of Directive 67/548/EEC) must be less than 0.5 g/kg of panel material. The requirements relate to the chemical composition of the products when mixed into the product.
  - The content of aromatic solvents must not exceed 1 % by weight of the chemical product.

5.4. Surface treatment of wood

- Active substances, pigments and additives in products for surface treatment of wood are not based on arsenic, boron, tin or copper.
- Chemical ingredients of products for surface treatment of wood who are classified conform Directive 1999/45/EG en 67/548/EEG as toxic, carcinogenic, mutagenic or toxic for reproduction with R-phrases: R39, R48, are not used in concentrations that require mentioning on the product safety data sheets. Active substances of products used for conservation who are indicated by those risk-phrases or their combinations may be used up to 0,1% by weight of the total paint constitution (see annex).
- Chemical substances used in the surface treatment products for wood who are classified as carcinogenic (R49, R68), toxic for reproduction (R62, R63), mutagenic (R40) or allergenic by inhalation (R42) according to directive 1999/45/EC (see annex).

- Chemical substances used in the surface treatment products for wood don't contain halogenated organic compounds, phthalates, aziridine and polyaziridins or creosote.
- Chemical products for maintenance of wood must not be classified as environmentally hazardous (R50, R50/R53, R51/R53, R52/R53, R52 or R53) according to the criteria in Directive 1999/45/EG (see annex)
- The active substances (biocides) in maintenance products for wood must not be potentially bioaccumulative in accordance with the criteria in Directive 67/548/EG
- Agents for maintenance/surface treatment must not contain more than 5 % by weight of organic solvents. The aromatics content of the solvent must not exceed 5 % by weight
- The content of organic solvents in oil or enamel on wood or wood-based panels isn't more than 150g/L of the usable product.

5.5. Plastic parts

- At least 90% of the total amount of polyolefins (as polypropylene, polyethylene) used in the tool have to be from post consumer recycled materials. Polyolefins in robes are excepted from this requirement
- The plastic parts must be suitable for recycling. This means:
    - It must be possible to separate the plastic parts from other materials (other plastics, metals and wood) without special tools.
    - Plastic parts that weigh more than 50 g must be marked for recycling in accordance with ISO 11 469 or an equivalent standard.
- No substances based on arsenic or chrome VI and their compounds are added during the production process of the plastic materials of secondary materials.
- No halogenated organic substances and phthalates are actively added to the plastic materials.
- The plastic parts are not surface threatened.

5.6. Metal parts

- The content of organic solvents in the coat or enamel for surface treatment of aluminium or in the enamel for the surface treatment of steel isn't more than 150g/L of the usable product
- Products used for surface treatments of metals don't contain nickel, lead or tin or their compounds. In exceptional cases, chrome and nickel coating is acceptable for small, exposed parts (screws, bolts, mechanical parts, etc.) where this is necessary due to intense physical wear or to ensure that the parts form a seal. NiCr coating must however fulfil the requirements of PARCOM Recommendation 92/4.
- Chemical ingredients of products for enamel or coat of aluminium or steel who are classified conform Directive 1999/45/EG en 67/548/EEG as toxic, carcinogenic, mutagenic, toxic for reproduction or allergenic by inhalation with R-phrases: R23 to R28, R39, R40 R42, R46, R48, R49, R62, R63 or R68 are not used in concentrations that require mentioning on the product safety

data sheets. Active substances of products used for conservation who are indicated by R23 to R28, R39 or R48 or their combinations may be used up to 0,1% by weight of the total paint constitution (see annex).

- Halogenated organic compounds are not used for the degreasing or surface treatment of metals.
- Chemical substances used in the surface treatment of metals are not classified as ecotoxic (R50, R50/R53, R51/R53, R52/R53, R52 or R53)(see annex).
- Chemical substances used in the surface treatment of metals doesn't contain:
    - halogenated organic compounds,
    - phthalates,
    - aziridine and polyaziridines, or
    - creosote.
- Active substances, pigments and additives used in the surface treatment of plastics are not based on:
    - arsenic,
    - lead,
    - boron,
    - tin,
    - cadmium,
    - copper,
    - chrome (VI), or
    - mercury.

5.7 Parts of rubber

- If the used rubber is not from postconsumer recycled material than no more than 2% sulfur is used as vulcanization product.
- In the production process of rubber these products are not used:
    - Pigments:
        - cadmiumchloride
        - cadmiumhydroxide
        - cadmiumsulfaat
        - o-Dinanisidine + zouten
        - o-Tolidine + zouten
        - zinkchromaat
    - Blowing agents
        - di-itrosopentamethyleentetramine (DNPT)
    - Stabiliser
        - N-nitrosodifenyamine (NDPA)
    - Accelerators
        - tetramethylthiurammonosulfide (TMTM)
        - tetramethylthiuramdisulfide (TMTD)
        - tetraethylthiuramdisulfide (TETD)
        - dipentamethyleenthiuramdisulfide (Thiuram)
        - dipentamethyleenthiuramtetrasulfide/hexasulfide (DPTTS)
        - 2-(Morfolinothio)benzothiazole (MBS)

- zinkdimethyldithiocarbamaat (ZDMC)
- zinkdiethyldithiocarbamaat (ZDEC)
- zinkpentamethyleendithiocarbamaat (ZPD)
- koperdimethyldithiocarbamaat
- bismuthdimethyldithiocarbaamt (BDMC)
- telluriumdietyldithiocarbamaat (TDEC)
- piperidinepentamethyleendithiocarbamaat (PPD)
- 4,4'-Dithiodimorfoline (DTDM)

If the rubber consists of postconsumer recycled material then those products are not added in the recycling process.

- Those heavy metals or their compounds are not added in the production process of the rubber: cadmium, lead, chrome VI, mercury or arsenic.
  If the used rubber consists of postconsumer recycled material then those heavy metals are not added in the recycling process.

5.8. Packaging

- The packaging is composed of one recyclable material (cardboard, paper, polyethylene, polypropylene, polystyrene) or if it is composed of different materials these have to be separatable by hand in the different recyclable fractions (cardboard, paper, polyethylene, polypropylene, polystyrene)

6) Performance clauses:

- The supplier maintains access to spare parts for at least 15 years after the delivery of the tool. If this is not possible the supplier has to guarantee an alternative solution.
- By normal use and maintenance a life time of 10 years has to be guaranteed for the construction materials of the tool (this is not required for wearing components.

References

[Information of the public authority that used these clauses in a procurement case]

Annex R-PHRASES:

(R-phrases are mentioned on product labels and in product safety datasheets. It can be a useful tool for verification-procedures.)

R1:	Explosive when dry.
R2:	Risk of explosion by shock, friction, fire or other sources of ignition.
R3:	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R4:	Forms very sensitive explosive metallic compounds.
R5:	Heating may cause an explosion.
R6:	Explosive with or without contact with air.
R7:	May cause fire.
R8:	Contact with combustible material may cause fire.
R9:	Explosive when mixed with combustible material.
R10:	Flammable
R11:	Highly flammable
R12:	Extremely flammable
R13 (obsolet):	*Extremely flammable liquid gas* *(This R-phrase is no longer designated by the version of the GefStoffV published on 26.10.93.)*
R14:	Reacts violently with water.
R15:	Contact with water liberates extremely flammable gases.
Merck R15.1	*Contact with acid liberates extremely flammable gases.*
R16:	Explosive when mixed with oxidizing substances.
R17:	Spontaneously flammable in air.
R18:	In use, may form flammable/explosive vapour-air mixture.
R19:	May form explosive peroxides.
R20:	Harmful by inhalation.
R21:	Harmful in contact with skin.
R22:	Harmful if swallowed.
R23:	Toxic by inhalation.
Riedel-de Haen R23K:	*Also toxic by inhalation.*
R24:	Toxic in contact with skin.
Riedel-de Haen R24K:	*Also toxic in contact with skin.*
R25:	Toxic if swallowed.
Riedel-de Haen R25K:	*Also toxic if swallowed.*
R26:	Very toxic by inhalation.
Riedel-de Haen R26K:	*Also very toxic by inhalation.*
R27:	Very toxic in contact with skin
Riedel-de Haen R27A:	*Very toxic in contact with eyes.*
Riedel-de Haen R27K:	*Also very toxic in contact with skin.*
Riedel-de Haen R27AK:	*Also very toxic in contact with eyes.*

R28:	Very toxic if swallowed.
Riedel-de Haen R28K:	*Also very toxic if swallowed.*
R29:	Contact with water liberates toxic gas.
R30:	Can become highly flammable in use.
R31:	Contact with acids liberates toxic gas.
Merck R31.1	*Contact with alkalies liberates toxic gas.*
R32:	Contact with acids liberates very toxic gas.
R33:	Danger of cumulative effects.
R34:	Causes burns.
R35:	Causes severe burns.
R36:	Irritating to eyes.
Riedel-de Haen R36A:	*Lacrimating*
R37:	Irritating to respiratory system.
R38:	Irritating to skin.
R39:	Danger of very serious irreversible effects.
R40:	Possible risk of cancer. *CAUTION: Until 2001 this R-phrase was used for possible mutagenic or teratogenic risks as well. These risks are now labelled with R68!*
R41:	Risk of serious damage to eyes.
R42:	May cause sensitization by inhalation.
R43:	May cause sensitization by skin contact.
R44:	Risk of explosion if heated under confinement.
R45:	May cause cancer.
R46:	May cause heritable genetic damage.
R47(obsolet):	*May cause deformities.* *(This R-phrase is no longer designated by the version of the GefStoffV published on 26.10.93.)*
R48:	Danger of serious damage to health by prolonged exposure.
R49:	May cause cancer by inhalation.
R50:	Very toxic to aquatic organisms.
R51:	Toxic to aquatic organisms.
R52:	Harmful to aquatic organisms.
R53:	May cause long-term adverse effects in the aquatic environment.
R54:	Toxic to flora.
R55:	Toxic to fauna.
R56:	Toxic to soil organisms.
R57:	Toxic to bees.
R58:	May cause long-term adverse effects in the environment.
R59:	Dangerous for the ozone layer.
R60:	May impair fertility.
R61:	May cause harm to the unborn child.
R62:	Possible risk of impaired fertility.
R63:	Possible risk of harm to the unborn child.
R64:	May cause harm to breastfed babies.
R65:	Harmful: may cause lung damage if swallowed.
R66:	Repeated exposure may cause skin dryness or cracking.
R67:	Vapours may cause drowsiness and dizziness.
R68:	Possible risks of irreversible effects.

COMBINATIONS OF R-PHRASES:

R14/15:	Reacts violently with water, liberating extremely flammable gases.
R15/29:	Contact with water liberates toxic, extremely flammable gas.
R20/21:	Harmful by inhalation and in contact with skin.
R21/22:	Harmful in contact with skin and if swallowed.
R20/22:	Harmful by inhalation and if swallowed.
R20/21/22:	Harmful by inhalation, in contact with skin and if swallowed.
R21/22:	Harmful in contact with skin and if swallowed.
R23/24:	Toxic by inhalation and in contact with skin.
R24/25:	Toxic in contact with skin and if swallowed.
R23/25:	Toxic by inhalation and if swallowed.
R23/24/25:	Toxic by inhalation, in contact with skin and if swallowed.
R24/25:	Toxic in contact with skin and if swallowed.
R26/27:	Very toxic by inhalation and in contact with skin.
R27/28:	Very toxic in contact with skin and if swallowed.
R26/28:	Very toxic by inhalation and if swallowed.
R26/27/28:	Very toxic by inhalation, in contact with skin and if swallowed.
R36/37:	Irritating to eyes and respiratory system.
R37/38:	Irritating to respiratory system and skin.
R36/38:	Irritating to eyes and skin.
R36/37/38:	Irritating to eyes, respiratory system and skin.
R39/23:	Toxic: danger of very serious irreversible effects through inhalation.
R39/24:	Toxic: danger of very serious irreversible effects in contact with skin.
R39/25:	Toxic: danger of very serious irreversible effects if swallowed.
R39/23/24:	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin.
R39/23/25:	Toxic: danger of very serious irreversible effects through inhalation and if swallowed.
R39/24/25:	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed.
R39/23/24/25:	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R39/26:	Very toxic: danger of very serious irreversible effects through inhalation.
R39/27:	Very toxic: danger of very serious irreversible effects in contact with skin.
R39/28:	Very toxic: danger of very serious irreversible effects if swallowed.
R39/26/27:	Very toxic: danger of very serious irreversible effects through inhalation and in contact with skin.
R39/26/28:	Very toxic: danger of very serious irreversible effects through inhalation and if swallowed.
R39/27/28:	Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.
R39/26/27/28:	Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R42/43:	May cause sensitization by inhalation and skin contact.
R48/20:	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/21:	Harmful: danger of serious damage to health by prolonged exposure in contact with skin.
R48/22:	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R48/20/21:	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R48/20/22:	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R48/21/22:	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R48/20/21/22:	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R48/23:	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R48/24:	Toxic: danger of serious damage to health by prolonged exposure in contact with skin.
R48/25:	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R48/23/24:	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R48/23/25:	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R48/24/25:	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R48/23/24/25:	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R50/53:	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R68/20:	Harmful: possible risk of irreversible effects through inhalation.
R68/21:	Harmful: possible risk of irreversible effects in contact with skin.
R68/22:	Harmful: possible risk of irreversible effects if swallowed.
R68/20/21:	Harmful: possible risk of irreversible effects through inhalation and in contact with skin.
R68/20/22:	Harmful: possible risk of irreversible effects through inhalation and if swallowed.
R68/21/22:	Harmful: possible risk of irreversible effects in contact with skin and if swallowed.
R68/20/21/22:	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.