

Sustainable Public Procurement-fiche: advanced - 2010

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)

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4) Technical specifications

4.1. Basic materials

4.1.1. General

It is possible to remove the metal and plastic parts from the other materials (wood, metal, plastic) without the use of special tools.

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/>
- The content of formaldehyde of wood based panels that contain formaldehyde-based additives doesn't exceed those values:
 - o Formaldehyde is maximum 8mg/11g dry matter in accordance with EN120, for an individual value,
 - o Formaldehyde is maximum 6,5mg/100g dry matter in accordance with EN120, for mean value during six months.
 - o 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):
 - o 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.
 - o 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.
 - o Halogenated organic binding agents, halogenated organic flame retardants, polychlorinated biphenyls, alkyl phenols, phthalates, aziridine and polyaziridines may not be added to the chemical product.
 - o Pigments and additives based on lead, tin, cadmium, chromium VI, mercury and their compounds may not be added to the chemical product.
 - o The content of alkyl phenol ethoxylates or other alkyl phenol derivatives in the chemical product may not exceed 0.6% by weight.
 - o 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.
 - o The content of aromatic solvents must not exceed 1 % by weight of the chemical product.



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

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- Chemical substances used in the surface treatment products for wood who are 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). Chemical products used for surface treatment must not be classified as toxic (R23 to R28).
- Chemical substances used in the surface treatment products for wood don't contain halogenated organic compounds, phthalates, aziridine and polyaziridins or creosote.
- Active substances, pigments and additives used in the surface treatment products for wood are not based on:
 - arsenic,
 - lead,
 - boron,
 - tin,
 - cadmium,
 - copper,
 - chrome (VI), or
 - mercury
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- 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

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

- Metals must not be coated with cadmium, chrome, nickel, tin or compounds of these. 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.
- 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), carcinogenic (R45, R49, R340), toxic for reproduction (R60 to R63), mutagenic (R40, R46) or allergenic by inhalation (R46) according to directive 1999/45/EC (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.

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.
- Chemical products for wood preservation that do not contain biocides must not be classified as ecotoxic (R50, R50/53, R51/53, R52/53, R52 or R53) or toxic (R23 to R28).
- Agents for wood preservation must not contain more than 5 % by weight of organic solvents. The aromatics content of the solvent must not exceed 5 % by weight
- Chemical substances used in wood preservation products don't contain:
 - halogenated organic compounds,
 - phthalates,
 - aziridine and polyaziridines, or
 - creosote.
- Active substances, pigments and additives used in wood preservation products are not based on:
 - arsenic,
 - lead,
 - boron,
 - tin,
 - cadmium,
 - copper,
 - chrome (VI), or
 - mercury

4.3.2. Plastic parts

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- The types of plastic and fillers that make up the plastic parts must be declared
- No substances based on cadmium, lead, mercury and their compounds or tin organic substances are actively added to the plastic materials. No halogenated organic substances and phthalates are actively added to the plastic materials.

- The plastic parts must be suitable for recycling. This means:
 - o It must be possible to separate the plastic parts from other materials (other plastics, metals and wood) without special tools.
 - o Plastic parts that weigh more than 50 g must be marked for recycling in accordance with ISO 11 469 or an equivalent standard.

4.3.3. Metal parts

- Aluminium must consist of 50% by weight of recycled metal (scrap)
- Other metals must consist of 20% by weight of recycled metal (scrap)

4.3.4. Adhesives

- The adhesive 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.
- Adhesives may contain a maximum of 1% by weight of organic solvent
- The aromatic solvent content may not exceed 5% by weight

4.4. Packaging

- Packaging/wrapping doesn't contain chlorinated plastics

Evidence:

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



Nordic Swan
Labeling

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:





5) Awarding the contract:

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

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.)

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




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



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- 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.

