### **Sustainable Public Procurement-fiche: advanced**

(Version 20090603)

#### 1) Subject matter

Environmental friendly cartridge toners that are part of a recycling and refilling system.

"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>, , courement 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

#### a) General

Used cartridges or toner powder containers shall be collected, cleaned, checked/repaired and refilled with new toner powder.

#### b) Toner

- The toners are, according to Directive 67/548/EEC or EU Directive 1999/45/EC, not classified as follows:

carcinogenic with risk-phrase R40, R45 or R49 teratogenic with risk-phrase R60, R61, R62 or R63 mutagenic with risk-phrase R46 or R68 very toxic with risk-phrase R26 or R27

A minimum of 75% by weight of the remanufactured toner cartridge shall consist of recycled parts.



#### Evidence:

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









Nordic Swan NF Environnement Blaue Engel Österreichische Ümweltzeichen

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.

#### 5) Awarding the contract:

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

#### Environmental criteria

#### a) General

- Printing modules and containers must be sealed to prevent the toner dust from escaping during handling or storage.

#### b) Plastic parts of the printing module

- Replacement cartridge parts may not contain chlorinated plastics
- New parts added to the printing modules by the applicant by way of addition or exchange must not contain any halogenated polymers.



- New plastic replacement components by way of addition or exchange must not contain any PBDEs (polybrominated diphenyl ethers) or PBBs (polybrominated biphenyls) as flame retardants.
- New plastic replacement components that weigh more than 25 grams must be marked according to ISO 11469:2000 and in compliance with ISO 1043, Parts 1 to 4.
- New replacement components don't contain cadmium.

#### c) Toner powder

- The total content of the heavy metals lead, cadmium, mercury and chromium VI doesn't exceed 100 ppm in the toner powder.
- The toner powder doesn't contain any materials containing mercury, cadmium, lead, nickel or chromium VI compounds as constituent parts and manufacture-related contamination with heavy metals, e.g. cobalt and nickel, is kept as low as technically possible and economically reasonable
- The content of the toner powder of primary unsulphonated aromatic amines soluble in 1M hydrochloric acid and expressed as aniline doesn't exceed 500 mg/kg and there is no more than 10 mg/kg Benzidine, β-Naphthylamine and 4-aminobiphenyl in the toner powder.
- The toner powder doesn't contain azo colourants (dyes or colour pigments) that can release carcinogenic aromatic amines appearing on the list of aromatic amines in 2002/61/EC.
- According to Directive 67/548/EEC or EU Directive 1999/45/EC, the toner powder doesn't require labeling with the following risk-phrases:
  - o toxic (R23, R24, R25 or R48) (see annex)
  - o very toxic (R28, R39)
  - o allergenic
  - o carcinogenic (R49)
  - o mutagenic (R68)
  - o sensitive by inhalation (R42)
  - o may cause harm to breastfed babies (R64)

The toner powder is, according to Directive 67/548/EEC or EU Directive 1999/45/EC, not classified as dangerous for the environment (R-phrases R50, R53, R50/53, R52/53, R51/53 or R59) (see annex)

#### d) Packaging

- The product packaging doesn't contain PVC or other chlorinated plastics
- The product packaging doesn't contain any halogenated polymer
- Packaging is composed of materials that can be separated and are made from renewable or recyclable materials.





### 6) Performance clauses:

- A take-back-system must be in place. Clear information about this system has to be given to the customers.

## **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.

Risk of explosion by shock, friction, fire or other sources of ignition.
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.

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.)

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.

<u>R17</u>: 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.

R25: TOXIC IT SWAIIOWED.

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.

<u>R28</u>: 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.



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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.

<u>R39</u>: 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.)

<u>R48</u>: 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.

<u>R53</u>: May cause long-term adverse effects in the aquatic environment.

R54: Toxic to flora.

R55: Toxic to fauna.

<u>R56</u>: Toxic to soil organisms.

R57: Toxic to bees.

<u>R58</u>: May cause long-term adverse effects in the environment.

<u>R59</u>: 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.
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.



R14/15:

#### **COMBINATIONS OF R-PHRASES:**

K14/13.	Reacts violently with water, indefating extremely framinable 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.

Reacts violently with water, liberating extremely flammable gases.



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.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Harmful: danger of serious damage to health by prolonged exposure in contact with skin.

Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.

Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

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

Harmful: danger of serious damage to health by prolonged exposure if swallowed.



R48/20:

R48/21:

R48/22:

R48/20/21:

R48/20/22:

R48/21/22:

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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.

 $R68/20/21/22:\ Harmful:\ possible\ risk\ of\ irreversible\ effects\ through\ inhalation,\ in\ contact\ with\ skin\ and\ if\ swallowed.$ 

