

TGL-39-04
-Video media players/recorders-

At present, video media players/recorders are familiar and wide-spread used electronic equipment. Due to the market demand increase consistently effect to resource and energy consumption in production process. Furthermore, hazardous substances such as Mercury, Cadmium and Lead, in their components might affect as contaminants expose to environment in case of improper management at disposal stage.

To develop Green Label Criteria for video media players/recorders is aimed to mitigate impact to environment in such means include hazardous substances control, resource and energy conservation and promote reuse and recycling in order to reduce environmental burden from its disposal.

Category definition

These criteria shall apply to mains powered electronic equipment designed to reproduce video-audio signals recorded in data storage media video cassette tape, VCD, DVD, etc. in connection with other visual display units and sound speaker units such as TVs. The combination of two video media players such as audio-DVD player combinations, DVD-VCR player combinations, etc. also included. Portable Video Media Players are excluded.

Green Label Requirements

To be authorized to carry the Green Label, a product must meet quality requirements and environmental requirements listed below:

Quality and Environmental requirements

- 1 Energy efficiency
 - 1.1 Standby power consumption of the applied product shall comply with the following requirements.

Product Category	Value
VCR (see noted)	≤ 1 W
DVD recorder (recording and playing)	≤ 2 W
VCD & DVD player (only playing) (see noted)	≤ 1 W
VCR-DVD Combination	≤ 4 W
Audio-DVD Combination	≤ 2 W

Note: VCR ,VCD and DVD players, manufacturers may add an additional 1 watt to the 1 watt specification or products with an illuminated

- 1.2 The power consumption of the applied product in on-mode not exceeded 15W. Exempted from this are audio-DVD combination units.

Note: For VCR, VCD and DVD players, manufacturers may add an additional 1 Watt to the 1-Watt specification for products with an illuminated or backlit display (e.g. clock) or other electronic status indicator (e.g. recording status or video mode indicator).

2 Control of Hazardous Substances

- 2.1 Halogenated plastics such as PVC shall not be used for the case parts weighing 25g or more, and also halogenated compounds shall not be used as additives in the plastic parts. Exempted from this are the fluorogranic additives with less than 0.5 weight percents. (e.g. anti-dripping)
- 2.2 PBBs (polybrominated biphenyls), PBDEs (polybromodiphenyl ethers), or short-chain chlorinated paraffins (C= 10~13) whose chlorine concentration is 50% or more shall not be used as flame retardant for plastic parts of the case weighing 25g or more.3.2.3 Provided that the product is equipped with a battery, it shall be guaranteed over 5 years lifespan. In addition, the content of lead, cadmium, and mercury contained in the batteries shall comply with the following requirements.
- 2.3 Provided that the product is equipped with a battery, it shall be guaranteed over 5 years lifespan. In addition, the content of lead, cadmium, and mercury contained in the batteries shall comply with the following requirements.

Substance	lead (Pb)	cadmium (Cd)	mercury (Hg)
Content [mg/kg]	≤ 15	≤ 5	≤ 5

3 Recycling and Reuse

- 3.1 Plastic case parts weighing 25g or more shall be made of maximum four different materials in easily separable way. At the same time, each plastic case part weighing 25g or more shall be made of a single homo / copolymer or polymer blends (polymer alloys).

- 3.2 Labels, markings and stickers shall be made of the same material as the plastic parts to which they are affixed or shall be compatible (the degree of compatibility ≤ 3) according to the table below, if they are difficult to separate.

		Additive											
		PE	PVC	PS	PC	PP	PA	POM	SAN	ABS	PBTP	PETP	PMMA
Matrix material	PE	1	4	4	4	1	4	4	4	4	4	4	4
	PVC	4	1	4	4	4	4	4	1	2	4	4	1
	PS	4	4	1	4	4	4	4	4	4	4	4	4
	PC	4	3	4	1	4	4	4	1	1	1	1	1
	PP	3	4	4	4	1	4	4	4	4	4	4	4
	PA	4	4	3	4	4	1	4	4	4	3	3	4
	POM	4	4	4	4	4	4	1	4	4	3	4	4
	SAN	4	1	4	1	4	4	4	1	1	4	4	1
	ABS	4	2	4	1	4	4	3	4	1	3	3	1
	PBTP	4	4	4	1	4	3	4	4	3	1	4	4
	PETP	4	4	3	1	4	3	4	4	3	4	1	4
PMMA	4	1	3	1	4	4	3	1	1	4	4	1	

Note 1) 1 : compatible 2 : compatible with limitations
3 : compatible only in small amounts 4 : not compatible
Note 2) This table is translated from VDI 2243 Part I

- 3.3 Plastic parts weighing 25g or more and covering a flat surface of 200mm² or more shall be visibly marked in accordance with ISO 11469.

- 3.4 Lead, cadmium and mercury shall not be intentionally added into plastic parts weighing 25g or more except for electrical and electronic components and wires.

4 Packaging

4.1 Packaging materials;

- (1) Shall not contain PVC and halogenated plastics.
- (2) CFCs and Huffs shall not be used as a foaming agent.

4.2 Shock-absorbing materials;

- (1) Shall not contain PVC and halogenated plastics.
- (2) CFCs and Huffs shall not be used as a foaming agent.
- (3) If paper is used for shock-absorbing materials, it shall be made of 100% recycled pulp.

5 Safety and Quality

- ##### 5.1 The applied product shall satisfy electromagnetic compatibility (EMC) not to cause radio interference.

6 Information to Consumers

6.1 The following information shall be provided either on the spackage, product or in the user's manual in such a way to be clearly visible for consumers.

- (1) Information that the applied product should be switched off using the off-switch, as this will reduce energy consumption.
- (2) Information that the applied product consumes electricity during stand-by, and how this could be minimized.
- (3) Information on the guarantee of minimum lifespan and the availability of spare parts
- (4) Information on how the consumers make use of take-back offer, if available