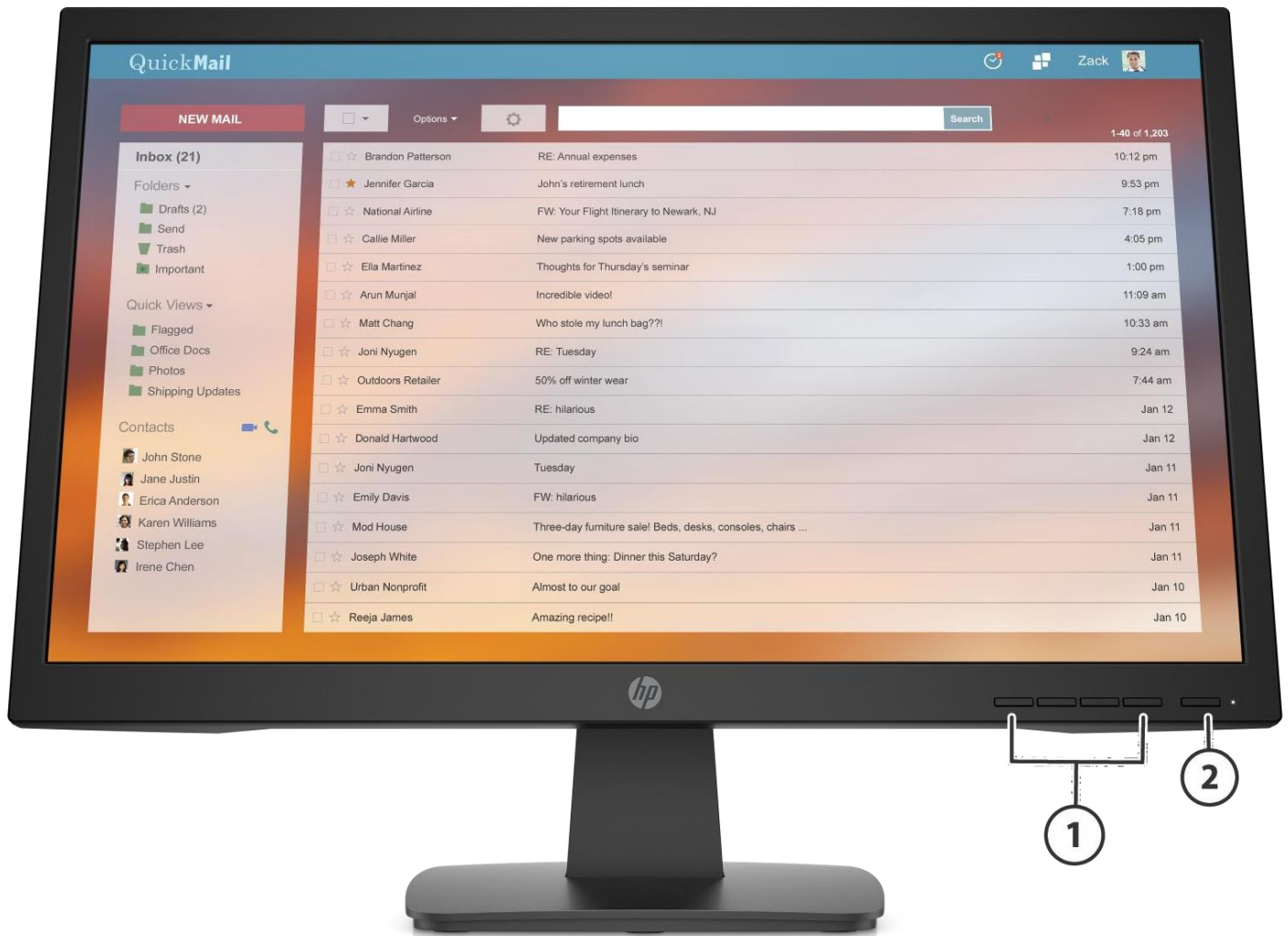# QuickSpecs

Technical Specifications

HP P22va G4 FHD Monitor

Front

1. OSD Buttons
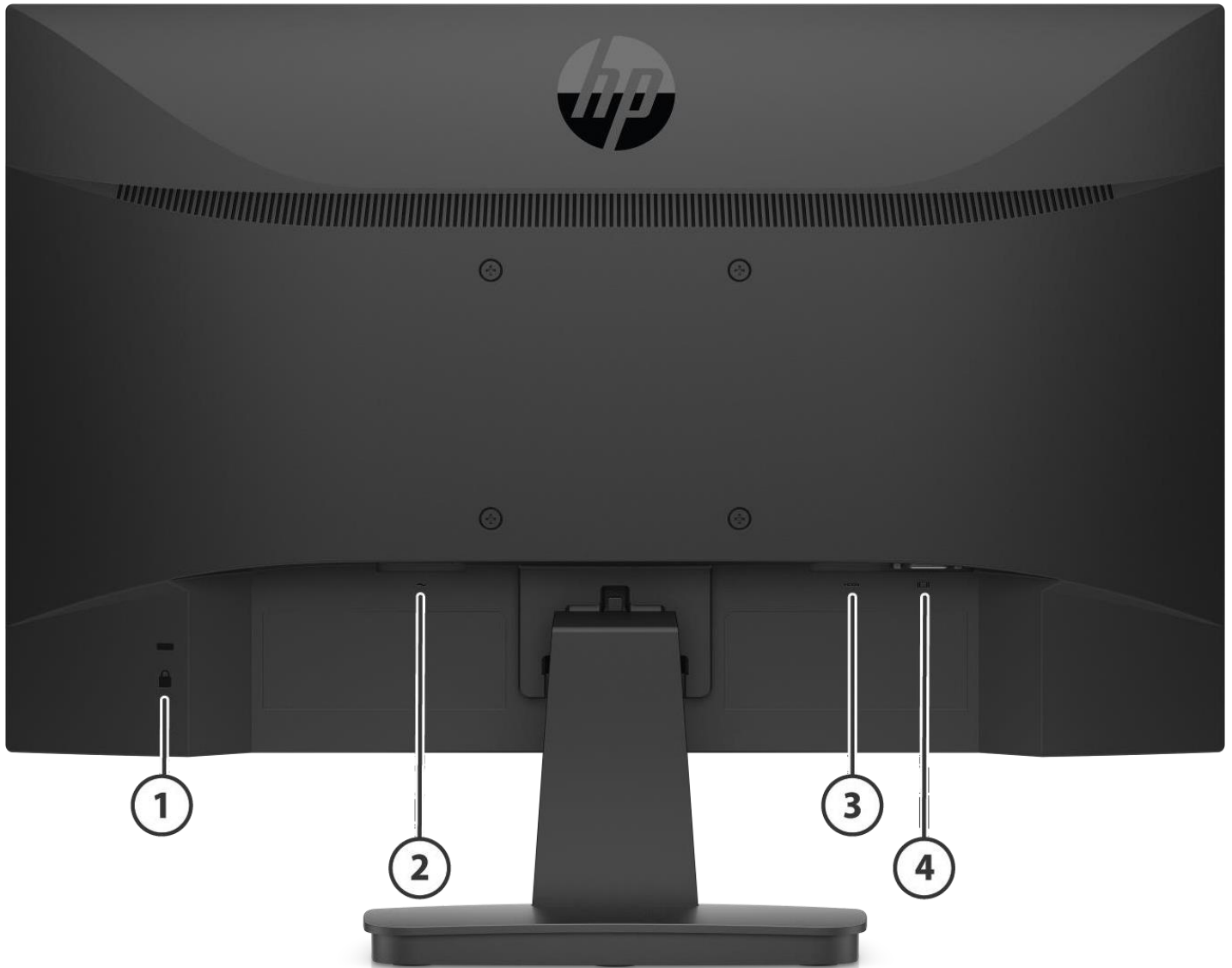2. Power Button (With power light)

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HP P22va G4 FHD Monitor

Back

1. Security Cable Slot
2. Power Connector

3. HDMI Port
4. VGA Connector

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Models: 453D2A

Panel Specifications		
	Display Size (Diagonal)	21.5-inch
	Panel Technology	VA
	Curved	No Curve
	Max Refresh Rate	60 Hz
	Native Resolution	1920 x1080
	Panel Bit Depth	8 bits
	Aspect Ratio	16:9
	Brightness (Typical)	250 nits
	Contrast Ratio (Static)	3000:1
	Dynamic Contrast Ratio	8000000:1
	Flicker Free	Yes
	Pixel Pitch	0.0831x0.241
	Pixels Per Inch (PPI)	105 PPI
	Backlight Lamp Life (to half brightness - in hours)	30000
	Backlight Type	Edge-lit
	Screen Treatment	Anti-glare
	Hardness	3H
	Haze	25%
	Response Time - Typical	7ms GtG (with overdrive)
	Horizontal Viewing Angle (typical CR>10)	178°
	Vertical Viewing Angle (typical CR>10)	178°
	Panel Active Area Metric (W X H)	478.65 x 260.28 mm
	Panel Active Area Imperial (W X H)	188.4 x 102.47

NOTE: Performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

Color Gamut Coverage		
	NTSC	Yes, with 72%

Color Management		
	Calibrated Color Presets	Warm, Neutral, Cool, Native, Low Blue Light, Night, Reading, Custom RGB
	Color Space/ Subsampling Support	RGB 4:4:4, YCBCR 4:4:4, YCBCR 4:2:2
	Rgb Channel Adjust	Yes, Gain
	Default Color Temperature	Neutral (6500K)
	Factory Color Calibrated	Yes (Color Temperature)
	Factory Color Presets	Warm - 5000K, Neutral - 6500K, Cool - 9300K

Monitor Specifications		
	Bezel Type	Narrow
	Color Of Stand	Black
	Color Of Head	Black
	Tilt	from -5 to +20°
	VESA Mounting	100 mm x 100 mm
	Security Lock Ready	Standard Security Lock Slot
	Detachable Stand	Yes
	Warranty (number of years)	AMS: 3-3-0 APJ: 3-3-3/3-3-0(JP) EMEA: 3-3-0
	Low Blue Light Mode	Yes

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On Screen Display (OSD)	**Native Resolution**	FHD (1920 x 1080)*
		*HDMI 1.4 required to drive panel at its native resolution. The video card of the connected PC must be capable of supporting 1920x1080 at 60 Hz with 6-bit color using one HDMI.
	Maximum Resolution	1920 x 1080@60 Hz
	Preset Graphic Modes/Supported Resolutions	640 x 480 @ 60Hz
		720 x 400 @ 70 Hz
		800 x 600 @ 60 Hz
		1024 x 768 @ 60 Hz
		1280 x 720 @ 60 Hz
		1280 x 800 @ 60 Hz
		1280 x 1024 @ 60 Hz
		1440 x 900 @ 60 Hz
		1600 x 900 @ 60 Hz
		1600 x 1200 @ 60 Hz (Digital inputs only)
		1680 x 1050 @ 60 Hz
		1920 x 1080 @ 60 Hz
	Minimum Vertical Scan Rate	50 Hz
	Maximum Vertical Scan Rate	60 Hz
	Minimum Horizontal Scan Rate	30.0 kHz
	Maximum Horizontal Scan Rate	80.0 kHz
	Maximum pixel clock	170 MHz
	User Programmable Modes	Yes, 10
	User-Assignable Function Buttons	Yes, 3 (6 options)
	Languages	10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese)
Connector Types	**HDMI**	1 HDMI 1.4
	HDCP	Yes, HDMI
	VGA	1 VGA
Special Features	**SWITCH**	Menu/OK, Minus("-"))/Brightness, Plus ("+"),/Color/Auto-Adjustment, Next Input, Power
	User Presets	11
Power & Operating Specs	**Power Supply**	External
	Power Source	100~240 VAC 50/60 Hz
	Power Consumption - Maximum	20 W
	Energy Saving/Stand By Mode	0.5 W
	Power Consumption - Typical	18.5 W
	Power cable lenght	1.8 m
Energy Star Data	**Operational Mode at 100 VAC**	12.53 W
	Operational Mode at 115 VAC	12.6 W
	Operational Mode at 230 VAC	12.88 W
EU Energy Efficiency Class (EC1062)	**On-mode Power Consumption**	14.4 W
	Annual Power Consumption	21 kWh
	Energy Efficiency Class	A+
Operating Conditions	**Operating Temperature - Celsius**	5° – 35°C
	Operating Temperature - Fahrenheit	41° – 95°F
	Non-operating Temperature - Celsius	–34° – 60°C
	Non-operating Temperature - Fahrenheit	–29° – 140°C

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	Operating Humidity	20 – 80%
	Non-operating Humidity	5 – 95%
	Operating Altitude	0 – 5,000 m (16,400 ft.)
	Non-operating Altitude	0 – 12.192 m (40,000 ft.)
Environmental Features and Certifications	**Arsenic-Free Display Glass**	Yes
	Low Halogen	Yes GSE HP-00011-01B, table 2 defines low-halogen (BFR, CFR, PVC) **NOTE:** External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
	Agency Approvals and Certifications	WW application CB/CE/cTUVus/FCC/ICES/VCCI/CCC/CEL/CECP/BSMI/Energy star/Australian-New Zealand MEPS/KCC/KC/E-standby/ISO 9241-307/BIS/UAE/EAC/CEC/NOM/Ukraine certificates/NRCS of South Africa/ South Africa energy/ Eup Lot 6 and 26/ Eup Lot 5/ Vietnam MEPS/ Low blue light/ WEEE
	Microsoft WHQL Certification	Win 10
	ENERGY STAR® Certified	Yes, ENERY STAR® 8
	EPEAT® Registered **Regions need to verify by country**	EPEAT® *Based on US EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. Status varies by country. Visit http://www.epeat.net for more information.
	China Energy Label	CEL Grade 1
	TCO Certified	Yes
	SmartWay Transport Partnership - NA only	Yes (NA sku)
Recycled Plastics	**Contains Recycled Plastics**	ABS 35%
	Recyclable Packaging (Box, packing materials)	100% fiber packaging, EPS cushion, EPE+HDPE bag and HDPE bags

		Metric	**Imperial**
Unit Product/Package Specifications	**Product Dimensions** (Unpacked with stand) (W x D x H)	50.43 x 18.10 x 36.71 cm	19.85 x 7.13 x 14.45 in
	Product Dimensions (Packed) (W x D x H)	56.7 x 12 x 38.7 cm	22.32 x 4.72 x 15.23in
	Display Head Dimensions (Unpacked without stand) (W x D x H)	50.43 x 4.40 x 30.02 cm	19.85 x 1.73 x 11.82 in
	Base Area Footprint (w x d mm)	188.95 x 181 mm	7.44 x 7.13 in
	Bezel Measurements	Top: 11.97 mm Left: 11.97 mm Right: 11.97 mm Bottom: 26.29 mm	Top: 0.47 in Left: 0.47 in Right: 0.47 in Bottom: 1.04 in
	Product Weight (Unpacked with stand)	2.85 kg	6.27lb
	Product Weight (Packed)	3.41kg	7.52lb
	Product Weight (Head Only)	2.24kg	4.94lb
Pallet Information	**Pallet Dimensions** (L x W x H)	Pallet:	Pallet:

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		1150 x1170 x1907 mm (40' ft) Silpsheet: 1150 x 1170 x 2143 mm (40' ft)	45.28 x46.06 x75.08 inch (40' ft) Silpsheet: 45.28 x46.06 x84.37 inch (40' ft)
	Pallet Total Weight	Pallet: 377.426kg (40' ft) Slip Sheet: 428.389 kg (40' ft)	Pallet: 832.07 lb (40' ft) Slip Sheet: 944.43 lb (40' ft)
	Pallet Layers	5 layers – pallet 6 layers – slip sheet	
	Pallet Product per Layer	20 sets per pallet (slip sheet & pallet)	
	Total Products per Pallet	100 sets – 40' pallet 120 sets – 40' slip sheet	
	Container Load, 20-Foot	1000 sets (pallet) 1200 sets (slip sheet)	
	Container Load, 40-Foot	2000 sets (pallet) 2400 sets (slip sheet)	
	Container Load, 40-Foot HighQ	2400 sets (pallet) 2800 sets (slip sheet)	
What's in the box?	AC power cord (1.8m) 5.9 ft (except SG, EU) HDMI cable (1.8m) 5.9 ft Doc kit		
User Guide and Warranty Languages	**User Guide Languages**	English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish.	
	Warranty Languages	English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish.	

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Environmental Data

Eco-Label Certifications & declarations	This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks: • IT ECO declaration • US ENERGY STAR® • US Federal Energy Management Program (FEMP) • EPEAT⊡ Silver registered in the United States. See http://www.epeat.net for registration status in your country. • TCO Certified • China Energy Conservation Program (CECP) • China State Environmental Protection Administration (SEPA) • Taiwan Green Mark • Korea Eco-label • Japan PC Green label*
Sustainable Impact Specifications	• 35% post-consumer recycled plastic • Low halogen • Outside Box and corrugated cushions are 100% sustainably sourced and recyclable • Recycled Plastic cushions
System Configuration	The configuration used for the Energy Consumption and Declared Noise Emissions data for the Notebook model is based on a "Typically Configured Notebook".

Energy Consumption (in accordance with US ENERGY STAR® test method)	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 50Hz**
Normal Operation (Sort idle)	12.60 W	12.88 W	12.52 W
Normal Operation (Long idle)	N/A	N/A	N/A
Sleep	0.18 W	0.22 W	0.18 W
Off	0.16 W	0.20 W	0.16 W

NOTE:
Energy efficiency data listed is for an ENERGY STAR® compliant product if offered within the model family. HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. If a model family does not offer ENERGY STAR® compliant configurations, then energy efficiency data listed is for a typically configured PC featuring a hard disk drive, a high efficiency power supply, and a Microsoft Windows® operating system.

Heat Dissipation*	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 50Hz**
Normal Operation (Short idle)	43 BTU/hr	44 BTU/hr	43 BTU/hr
Normal Operation (Long idle)	N/A	N/A	N/A
Sleep	1 BTU/hr	1 BTU/hr	1 BTU/hr
Off	1 BTU/hr	1 BTU/hr	1 BTU/hr

***NOTE:** Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

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Declared Noise Emissions (in accordance with ISO 7779 and ISO 9296)	Sound Power (L$_{WAd}$, bels)	Sound Pressure (L$_{pAm}$, decibels)
Typically Configured – Idle	N/A	N/A
Fixed Disk – Random writes	N/A	N/A
Optical Drive – Sequential reads	N/A	N/A

Longevity and Upgrading	This product can be upgraded, possibly extending its useful life by several years. Upgradeable features and/or components contained in the spare parts are available throughout the warranty period and or for up to "5" years after the end of production.
Additional Information	- This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC. - This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive – 2002/96/EC. - This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986). - This product is in compliance with the IEEE 1680 (EPEAT) standard at the Silver level, see www.epeat.net - Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043. - This product is 98.4% recycle-able when properly disposed of at end of life.

Packaging Materials			
	External:	PAPER/paperboard	430 g
	Internal:	PLASTIC/EPE (Expanded Polyethylene)	13 g
		PLASTIC/polystyrene Expanded	154 g
		PLASTIC/Polyethylene high density	5 g
	The plastic packaging material contains at least 0% recycled content.		
	The corrugated paper packaging materials contains at least 90% recycled content.		

RoHS Compliance	HP Inc. complies fully with materials regulations. We were among the first companies to extend the restrictions in the European Union (EU) Restriction of Hazardous Substances (RoHS) Directive to our products worldwide through the HP GSE. HP has contributed to the development of related legislation in Europe, as well as China, India, and Vietnam. We believe the RoHS directive and similar laws play an important role in promoting industry-wide elimination of substances of concern. We have supported the inclusion of additional substances—including PVC, BFRs, and certain phthalates—in future RoHS legislation that pertains to electrical and electronics products. We met our voluntary objective to achieve worldwide compliance with the new EU RoHS requirements for virtually all relevant products by July 2013, and we will continue to extend the scope of the commitment to include further restricted substances as regulations continue to evolve. To obtain a copy of the HP RoHS Compliance Statement, see HP RoHS position statement.
Material Usage	This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html): - Asbestos - Certain Azo Colorants - Certain Brominated Flame Retardants – may not be used as flame retardants in plastics

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	• Cadmium • Chlorinated Hydrocarbons • Chlorinated Paraffins • Bis(2-Ethylhexyl) phthalate (DEHP) • Benzyl butyl phthalate (BBP) • Dibutyl phthalate (DBP) • Diisobutyl phthalate (DIBP) • Formaldehyde • Halogenated Diphenyl Methanes • Lead carbonates and sulfates • Lead and Lead compounds • Mercuric Oxide Batteries • Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user. • Ozone Depleting Substances • Polybrominated Biphenyls (PBBs) • Polybrominated Biphenyl Ethers (PBBEs) • Polybrominated Biphenyl Oxides (PBBOs) • Polychlorinated Biphenyl (PCB) • Polychlorinated Terphenyls (PCT) • Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications. • Radioactive Substances • Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)
Packaging Usage	HP follows these guidelines to decrease the environmental impact of product packaging: • Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials. • Eliminate the use of ozone-depleting substances (ODS) in packaging materials. • Design packaging materials for ease of disassembly. • Maximize the use of post-consumer recycled content materials in packaging materials. • Use readily recyclable packaging materials such as paper and corrugated materials. • Reduce size and weight of packages to improve transportation fuel efficiency. • Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.
End-of-life Management and Recycling	HP offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: http://www.hp.com/go/reuse-recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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HP, Inc. Corporate Environmental Information	For more information about HP's commitment to the environment: Global Citizenship Report http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html Eco-label certifications http://www8.hp.com/us/en/hp-information/environment/ecolabels.html ISO 14001 certificates: http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c04755842 and http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf
footnotes	• Recycled plastic content percentage is based on the definition set in the IEEE 1680.1-2018 standard. • 100% outer box packaging and corrugated cushions made from sustainably sourced certified and recycled fibers. • Plastic cushions are made from >90% recycled plastic.

Technical Specifications

Summary

Change Log			
June 8, 2021	V1 to V2	Add	Environmental Data
August 4, 2021	V2 to V3	Update	EMEA Warranty
April 13, 2023	V3 to V4	Updated	Color Management section
	V4 to V5		