SAFETY DATA SHEET

1. Identification of the dangerous substance/preparation and the identity of the manufacturer, importer, agent or marketer

Important information *** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***

Product name 51640ASeries

Other means of identification Not available.

Company identification Hewlett-Packard (Israel) Ltd.
Dafna 9 Ra'anana 43662,
Israel

Telephone +972 9 7623222

HP Inc. health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048

HP Inc. Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

2. Identification of the components of the substance/preparation

Substance or Preparation Preparation

Chemical name	Synonyms	CAS number	Percent
Water		7732-18-5	75-85
Hydroxy alkylated lactam		Proprietary	<7.5
2-pyrrolidone		616-45-5	<3
Black Pigment		Proprietary	<5
Isopropyl alcohol		67-63-0	<2.5

Composition comments 2-pyrrolidone: Specific Concentration Limit 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

This ink supply contains an aqueous ink formulation.

Carbon black is present only in a bound form in this preparation.

3. Dangers of the dangerous substance/preparation

Physical hazards Not classified as a physical hazard.

Health hazards Not classified as a health hazard.

Environmental hazards Not classified as an environmental hazard.

GHS classification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

GHS label elements

Symbols None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention	None.
Response	None.
Storage	None.
Disposal	None.
Other hazards	Complete toxicity data are not available for this specific formulation. Potential routes of overexposure to this product are skin and eye contact. Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.
Supplemental information	2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

4. First aid instructions

First aid measures for different exposure routes

Inhalation	Move to fresh air. If symptoms persist, get medical attention.
Skin contact	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
Eye contact	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
Ingestion	If ingestion of a large amount does occur, seek medical attention.
Main symptoms	Contact with skin and eyes may result in irritation.
Personal protection for first-aid responders	Not available.
Notes to physician	Not available.
Special first aid equipment	Not available.

5. Firefighting procedure

Extinguishing media

Suitable extinguishing media	CO2, water, dry chemical, or foam
Extinguishing media which must not be used for safety reasons	None known.
Specific hazards during fire fighting	Not available.
Special fire fighting procedures	Not available.
Protection of fire-fighters	None established.
General fire hazards	Contact with skin and eyes may result in irritation.
Specific methods	None established.

6. Safety precautions

Containment procedures	Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Not available.
Other information	Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations.
Personal precautions	Wear appropriate personal protective equipment.

7. Handling and storage

Precautions for safe handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities Keep out of the reach of children. Keep away from excessive heat or cold.

8. Means of reducing exposure and personal protection

Engineering measures to reduce exposure Use in a well ventilated area.

Occupational exposure limits

Israel. OELs (Labor Inspection Regs. (Occup. & Bio. Monitoring of those Working with Hazardous Materials), Appendix 2, 1990, as amended)

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	

Biological limit values

Israel. BEIs (Work Safety Regulations (Environmental Monitoring and Biological Monitoring of Workers with Harmful Agents))

Components	Value	Determinant	Specimen	Sampling Time
Isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines Exposure limits have not been established for this product.

Personal protective equipment

Respiratory protection Not available.

Hand protection Recommended gloves: Nitrile 4 mil minimum thickness.

Eye protection Not available.

Skin and body protection Use personal protective equipment to minimize exposure to skin and eye.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Not available.

Color Black.

Odor Not available.

pH 7.8 - 8.4

Melting point/freezing point Not available.

Initial boiling point and boiling range 200 °F (93.33 °C)

Decomposition temperature Not available.

Flash point 131.0 - 136.0 °F (55.0 - 57.8 °C) Pensky-Martens Closed Cup

Flammability	Not available.
Auto-ignition temperature	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Oxidizing properties	Not determined
Vapor pressure	Not determined
Density	1.04 g/cm3
Solubility(ies)	
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not determined
Other information	
Bulk density	1 - 1.2 gm/ml
Evaporation rate	Not determined
Percent volatile	3.1 % estimated
Specific gravity	1 - 1.2
Viscosity	> 2 cp
VOC	< 116.6 g/l

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Not available.
Possibility of hazardous reactions	Will not occur.
Incompatibility	Incompatible with strong bases and oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Materials to avoid	Not available.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Contact with skin may result in mild irritation.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Health injuries are not known or expected under normal use.
Toxicological data	Not available.
Acute toxicity	Based on available data, the classification criteria are not met.

Components	**Species**	**Test Results**
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Black Pigment		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg

Skin corrosion/irritation	Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Not classified as an irritant according to, OECD 405. Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Respiratory sensitization Based on available data, the classification criteria are not met.

Skin sensitization Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

ACGIH Carcinogens

Isopropyl alcohol (CAS 67-63-0) A4 Not classifiable as a human carcinogen.

Reproductive toxicity Based on available data, the classification criteria are not met.

2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

Chronic effects Not available.

Other information Complete toxicity data are not available for this specific formulation
Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Environmental information

Aquatic toxicity Not expected to be harmful to aquatic organisms.

Ecotoxicity

Not expected to be harmful to aquatic organisms.

Product		Species	Test Results
51640ASeries			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 750 mg/l, 96 hours

Components		Species	Test Results
2-pyrrolidone (CAS 616-45-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Isopropyl alcohol (CAS 67-63-0)			
Aquatic			
Acute			
Algae	EC50	Algae	> 1000 mg/l, 72 hours
Crustacea	EC50	Daphnia	13299 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	9460 mg/l, 96 hours

Environmental effects Not available.

Persistence and degradability

Biodegradation No data is available on the degradability of this product.

Mobility in soil Not available.

Other information Not available.

13. Dangerous substance disposal methods

Disposal instructions Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Dispose of in compliance with Israeli Ministry of the Environment and local regulations.
HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

Waste from residues / unused products Not available.

Contaminated packaging No special precautions.

Special precautions Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Further information No ignition, sustained combustion, or flashing detected, using the Sustained Combustibility Test prescribed in the UN Manual of Tests and Criteria, Part III subsection 32.5.2. Refer to Dangerous Goods Regulations Section 3.3.1.3.

Not a regulated article under Israeli Transport Services Law and Regulation 1997, United States DOT, IATA, ADR, IMDG or RID.

15. Regulatory information

Israel regulations

Israel. Harmful Chemicals (Hazardous Substances Law, 5753-1993, Annex 1, as amended)

Not listed.

Israel. Toxic Chemicals (Hazardous Substances Law, 5753-1993, Annex 2, as amended)

Not listed.

Regulatory information All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. Other information

Training information Follow training instructions when handling this material.

Recommended use Not available.

Recommended restrictions Not available.

Further information Not available.

Bibliography Not available.

Disclaimer This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs. This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

Revision information

1. Product and Company Identification: Product and Company Identification
Dangers of the dangerous substance/preparation: Supplemental information
Identification of the components of the substance/preparation: Composition comments
Toxicological information: Reproductivity

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds