



SAFETY DATA SHEET

1. Identification of the chemical and information about the manufacturer or supplier

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. ***

1.1 Identification of the chemical products

1.1.1 Technical name 51645 Series

Other means of identification None.

1.1.2 Recommended use of the chemical and restrictions on use

Recommended use Inkjet printing

Limitations on use None known.

1.2 Manufacturer/Importer/Supplier/Distributor information

1.2.1 Manufacturer

HP Inc. Limited Liability Company
Highway Leningradskoe, House 16A, Building 3,
125171, Moscow
Russian Federation

Telephone 8 (499) 921-32-50

HP Inc. health effects line

(Toll-free within the US) 1-800-457-4209

(Direct) 1-760-710-0048

HP Inc. Customer Care Line

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Email: hpcustomer.inquiries@hp.com

2. Hazard(s) identification

2.1. Hazard identification of chemical product as a whole (classification according to GOST 12.1.007-76 and GHS)

Classification according to GOST 12.1.007-76 Not available.

GHS classification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

2.2 Labeling elements in compliance with GOST 31340-2013

2.2.1 Signal word None.

2.2.2 Symbols None.

2.2.3 Hazard statement Not available.

Precautionary statement

Prevention Not available.

Response Not available.

Storage Not available.

Disposal Not available.

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.

3. Composition/information on ingredients**3.1 Information on product as a whole**

3.1.1 Chemical name (IUPAC) 51645 Series

3.1.2 Chemical formula Not available.

3.1.3 General description of the composition (taking into account the brand assortment; preparation method) Not available.

3.2 Components

Components	Concentration by weight (%)	Hygienic standards in the working area			CAS-No.	EC No.
		MAC, mg/m ³	TSEL, mg/m ³	Hazard classification		
Water	75-85	None.	None.		7732-18-5	231-791-2
2-pyrrolidone	<3	10 Aerosol.	None.	4	616-45-5	210-483-1
Isopropyl alcohol	<2.5	50 Vapor.	10 Vapor.	3	67-63-0	200-661-7
1,2-Benzisothiazolin-3-one	<0.05	None.	None.		2634-33-5	220-120-9

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.

4. First-aid measures**4.1. Observed symptoms**

4.1.1 In case of exposure via inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

4.1.2 In contact with skin Contact with skin may result in mild irritation.

4.1.3 In contact with eyes Contact with eyes may result in mild irritation.

4.1.4 In case of exposure via ingestion Health injuries are not known or expected under normal use.

4.2 First-aid measures to be provided to victims

4.2.1 In case of exposure via inhalation Move to fresh air. If symptoms persist, get medical attention.

4.2.2 In contact with skin Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

4.2.3 In contact with eyes 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.

4.2.4 In case of exposure via ingestion If ingestion of a large amount does occur, seek medical attention.

4.2.5 Contraindications Not available.

5. Fire-fighting and explosion safety measures and means

5.1 General characteristics of fire-explosion properties Contact with skin and eyes may result in irritation.

5.2 Fire-explosion indicators Not available.

5.3 Combustion and/or thermal destruction products and hazards arising from these Not available.

5.4 Recommended extinguishing media CO₂, water, dry chemical, or foam

5.5 Forbidden extinguishing media	None known.
5.6 Special protective equipment for firefighters	None established.
5.7 Specific extinguishing methods	None established.

6. Accident and emergency prevention and response measures and their consequences

6.1 Measures to prevent harmful effects on people, environment, buildings, constructions, etc. in case of accidents and emergencies

6.1.1 General required actions in case of an accident or emergency Wear appropriate personal protective equipment.

6.1.2 Personal protection equipment in case of the accident Not available.

6.2 Procedures for the elimination of accidents and emergencies

6.2.1 Procedures in case of leaks, spills, splashes 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.

6.2.2 Actions in case of fire Not available.

Methods and materials for containment and cleaning up 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.

7. Storage and handling requirements of chemicals during loading and unloading

7.1 Safety precautions when handling chemical products

7.1.1 Technical safety measures Not available.

7.1.2 Environmental protection measures Not available.

7.1.3 Recommended safe handling and transportation advice Avoid contact with skin, eyes and clothing.

7.2 Chemical storage requirements

7.2.1 Terms and conditions for safe storage Not available.

7.2.2 Packaging Not available.

7.3 Safety measures and storage requirements at domestic use Keep out of the reach of children. Keep away from excessive heat or cold.

8. Equipment for monitoring exposure and personal protective equipment

8.1 Parameters of the working area that require monitoring

Occupational exposure limits

Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended

Components	Type	Value	Form
2-pyrrolidone (CAS 616-45-5)	Ceiling	10 mg/m3	Aerosol.
Isopropyl alcohol (CAS 67-63-0)	Ceiling	50 mg/m3	Vapor.
	TWA	10 mg/m3	Vapor.

8.2 Measures to ensure the content of harmful substances in the working area below the exposure level concentration Exposure limits have not been established for this product.

Appropriate engineering controls Use in a well ventilated area.

8.3 Worker personal protective equipment

8.3.1 General recommendations	Not available.
8.3.2 Respiratory protection	Not available.
8.3.3 Protective equipment	
Eye/face protection	Not available.
Hand protection	Recommended gloves: Nitrile 4 mil minimum thickness.
Other	Use personal protective equipment to minimize exposure to skin and eye.
Thermal hazards	Not available.
8.3.4 Personal protection equipment in case of domestic use	Not applicable.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

9.1 Physical appearance

Physical state	Liquid.
Form	Not available.
Color	Black.

Odor Not available.

Odor threshold Not available.

9.2 Parameters characterizing basic properties of the product

pH	7.8 - 8.4
Melting point/freezing point	Not available.
Initial boiling point and boiling range	200 °F (93.33 °C)
Flash point	131.0 - 136.0 °F (55.0 - 57.8 °C) Pensky-Martens Closed Cup
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not determined
Density	1.04 g/cm ³
Viscosity	> 2 cp
Solubility(ies)	
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not determined
Other data	
Bulk density	1 - 1.2 gm/ml
Evaporation rate	Not determined
Oxidizing properties	Not determined
Relative density	1 - 1.2 g/cm ³
Specific gravity	1 - 1.2
VOC	< 116.6 g/l
Other information	No ignition, sustained combustion or flashing detected using the Sustained Combustibility Test (method in US 49CFR173, Appendix H). 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.

10. Stability and reactivity

10.1 Chemical stability Stable under recommended storage conditions.

Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
10.2 Reactivity	Not available.
10.3 Conditions to avoid	Not available.
Possibility of hazardous reactions	Will not occur.
Incompatible materials	Incompatible with strong bases and oxidizing agents.

11. Toxicological information

11.1 General exposure characteristics	Not available.	
11.2 Routes of exposure	Not available.	
11.3 Affected/target organs, tissues and systems of humans		
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.	
11.4 Information on health hazards in case of direct exposure to the product and its effect		
Effect on upper respiratory tract irritation	Not available.	
Respiratory or skin sensitization	Not available.	
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met.	
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.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
11.5 Information on long-term hazardous health effects		
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.	
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).	
Mutagenicity	Based on available data, the classification criteria are not met.	
Cumulativeness	Not available.	
Chronic effects	Not available.	
11.6 Acute toxicity data	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
Further 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 impact information

Aquatic toxicity	Not expected to be harmful to aquatic organisms.
12.1 General description of the impact on the environment	Not available.

12.2 Routes of exposure to environment Not available.

12.3 The most important characteristics of the environmental impact

12.3.1 Hygienic standards Not available.

12.3.2 Ecotoxicity

Product		Species	Test Results
51645 Series			
Aquatic			
<i>Acute</i>			
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	> 750 mg/l, 96 hours

Components		Species	Test Results
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2-pyrrolidone (CAS 616-45-5)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>)	13.21 mg/l, 48 hours

Isopropyl alcohol (CAS 67-63-0)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	> 1000 mg/l, 72 hours
Crustacea	EC50	Daphnia	13299 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	9460 mg/l, 96 hours

12.3.3 Biomigration and transformation of the environment due to the biodegradation or other processes

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-pyrrolidone	-0.85
Isopropyl alcohol	0.05

Mobility in soil Not available.

Other adverse effects Not available.

13. Recommendations for waste (residues) disposal

13.1 Safety precautions when handling the waste generated during use, storage, transportation Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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>.

13.2 Information on the location and disposal methods, recycling or disposal of product waste, including packaging Not available.

13.3 Recommendation on the waste disposal generated during its domestic use No special precautions.

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

Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

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.

No ignition, sustained combustion or flashing detected using the sustained combustibility test (method in US CFR173, Appendix H).

15. National and international regulatory information**15.1 National legislation**

15.1.1 Laws of the Russian Federation Not available.

15.1.2 Information about the documentation, regulatory requirements for the protection of human health and environment

Sanitary-Epidemiological Rules, 1.2.2353-08, Chemical substances, mixtures and products which are carcinogenic factors, 21 April 2008

Not listed.

15.2 International Conventions and Agreements

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.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information**16.1 Information on revision of the SDS**

Issue date 21-Jun-2013

Revision date 10-Mar-2021

Version # 16

Previous SDS number Not applicable.

Revision information 1. Product and Company Identification: Alternate Trade Names
3. Composition / Information on Ingredients: Disclosure Overrides
HazReg Data: Pacific Rim
GHS: Classification

16.2 List of references used in compiling the safety data sheet

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.

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