



SAFETY DATA SHEET

1. Identification

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. ***
GHS product identifier	51645 Series
Version #	11
Issue date	02-Nov-2016
Revision date	03-Jul-2020
Supersedes date	24-Apr-2020
Recommended use	Inkjet printing
Recommended Restrictions	Not available.
Manufacturer	

HP Deutschland GmbH
Schickardstrasse 32
71034 Böblingen
Germany

HP Inc. health effect line	
(Toll-free within US)	1-800-457-4209
(Direct)	1-760-710-0048
HP Inc. Customer Care Line	
(Toll-free within the US)	1-800-474-6836
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Email:	hpcustomer.inquiries@hp.com

2. Hazards identification

GHS classification	
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.

GHS label elements	
Signal word	None.
Hazard symbols	None.

Precautionary statement	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.

Other hazards which do not result in classification 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.
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3. Composition/information on ingredients

Components	CAS #	Percent
Water	7732-18-5	75-85
2-pyrrolidone	616-45-5	<3
Isopropyl alcohol	67-63-0	<2.5
1,2-Benzisothiazolin-3-one	2634-33-5	<0.05

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

First aid procedures

Inhalation	Move to fresh air. If symptoms persist, get medical attention.
Skin	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
Eye	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.

Most important symptoms and effects, both acute and delayed Contact with skin and eyes may result in irritation.

Notes to physician Not available.

5. Fire-fighting measures

Suitable extinguishing media	CO2, water, dry chemical, or foam
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not available.
Protective equipment and precautions for firefighters	None established.
General fire hazards	Contact with skin and eyes may result in irritation.
Specific methods	None established.

6. Accidental release measures

Personal precautions	Wear appropriate personal protective equipment.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods for containment	Not available.
Methods for cleaning up	Not available.

7. Handling and storage

Handling	Avoid contact with skin, eyes and clothing.
Storage	Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
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Isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
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* - For sampling details, please see the source document.

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

Recommended monitoring procedures Not available.

Engineering controls Use in a well ventilated area.

Personal protective equipment

Eye/face protection Not available.

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

Respiratory protection Not available.

Hand protection Recommended gloves: Nitrile 4 mil minimum thickness.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Color Black.

Form Not available.

Odor Not available.

Odor threshold Not available.

pH 7.8 - 8.4

Melting point/Freezing point Not available.

Boiling point 200 °F (93.33 °C)

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

Evaporation rate Not determined

Flammability (solid, gas) Not available.

Flammability limits in air, lower, % by volume Not available.

Flammability limits in air, upper, % by volume Not available.

Vapor pressure Not determined

Vapor density Not available.

Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not determined

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity > 2 cp

Specific gravity 1 - 1.2

VOC (Weight %) < 116.6 g/l

Bulk density 1 - 1.2 gm/ml

Percent volatile 3.1 % estimated

Other data

Oxidizing properties Not determined

10. Stability and reactivity

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions Will not occur.

Conditions to avoid Not available.

Incompatible materials 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.

11. Toxicological information

Toxicological data

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Acute toxicity	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.	
Respiratory sensitizer	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met.	
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.	
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.	
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. Ecological information

Ecotoxicological data

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
2-pyrrolidone (CAS 616-45-5)		
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
Persistence / degradability	No data is available on the degradability of this product.	
Bioaccumulation		

Bioaccumulative potential**Octanol/water partition coefficient log Kow**

2-pyrrolidone	-0.85
Isopropyl alcohol	0.05

Aquatic toxicity Not expected to be harmful to aquatic organisms.

13. Disposal considerations

Disposal methods 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>.

Contaminated packaging 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. Regulatory information

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

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.

SDS sections updated 1. Product and Company Identification: Product and Company Identification
Hazards identification: Supplemental information
Composition/information on ingredients: 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