SAFETY DATA SHEET

Section 1. Identification of the chemical and information on the person placing the chemical on the market

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. Chemical identification

C5057Series

Other means of identification None.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Inkjet printing

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

HP Computing and Printing d.o.o., Omladinskih Brigada 90b, Belgrade
Serbia 11070

HP Europe B.V.
PO Box 667
1180 AR Amstelveen
The Netherlands

Telephone +31 20 721 3400

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
(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

1.4 Emergency telephone number 1-760-710-0048

Section 2. Hazards identification

2.1. Classification of the substance or mixture

Physical hazards	Not classified.	
Health hazards	Reproductive toxicity (fertility, the unborn child)	Category 1B
Environmental hazards	Not classified.	

2.2. Label elements

Hazard pictograms

Signal word Danger

Hazard statements

H360 May damage fertility or the unborn child.

Precautionary statements

Prevention

P280 Wear protective gloves/protective clothing/eye protection.
P202 Do not handle until all safety precautions have been read and understood.
P201 Obtain special instructions before use.

Response

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. 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.

Supplemental information None.

Section 3. Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water	65-85	7732-18-5 231-791-2	-	-	
Classification: -					
2-pyrrolidone	<7.5	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
Classification: Eye Irrit. 2;H319, Repr. 1B;H360					
succinic acid	<7.5	110-15-6 203-740-4	01-2119896114-34-XXXX	-	
Classification: Eye Dam. 1;H318					
Disodium 3,3'-[carbonylbis[imino(3-methoxy-4,1-phenylene)azo]]bis[benzenesulphonate]	<2.5	10114-86-0 -	-	-	
Classification: Aquatic Chronic 3;H412					
zinc dinonylnaphthalene sulfonate	<1	28016-00-4 248-778-2	-	-	
Classification: Skin Irrit. 2;H315, Eye Dam. 1;H318					

Composition comments This ink supply contains an aqueous ink formulation.

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.

Section 4. First aid measures

4.1. Description of first aid measures

Inhalation Remove to fresh air. If symptoms persist, get medical attention.

Skin contact Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

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.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

General information Not available.

Section 5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

Special fire fighting procedures Not available.

Specific methods None established.

General fire hazards Not available.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate personal protective equipment.

For emergency responders Not available.

6.2. Environmental precautions Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material 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.

6.4. Reference to other sections Not available.

Section 7. Handling and storage

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

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

7.3. Specific end use(s) Not available.

Section 8. Exposure controls and personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs)

Components	Type	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Consumers	Dermal	0.67 mg/kg bw/d	Systemic long term
		Inhalation	1.985 mg/m3	Systemic long term
		Oral	0.67 mg/kg bw/d	Systemic long term
	Workers	Dermal	4.2 mg/kg bw/d	Systemic long term
		Inhalation	29.62 mg/m3	Systemic long term
succinic acid (CAS 110-15-6)	Consumers	Dermal	67 mg/kg	Systemic short term
		Dermal	43 mg/kg	Systemic long term
		Inhalation	10 mg/m3	Local long term
		Inhalation	10 mg/m3	Local short term
		Inhalation	10 mg/m3	Systemic long term
		Inhalation	10 mg/m3	Systemic short term
		Oral	67 mg/kg	Systemic short term
	Workers	Dermal	71 mg/kg	Systemic long term
		Dermal	67 mg/kg	Systemic short term
		Inhalation	10 mg/m3	Local long term
		Inhalation	10 mg/m3	Local short term
		Inhalation	10 mg/m3	Systemic long term
		Inhalation	10 mg/m3	Systemic short term

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Not applicable	Freshwater	0.5 mg/l	
		Intermittent	0.5 mg/l	Releases
		Marine water	0.05 mg/l	
		Sediment	0.4205 mg/kg	Freshwater

Components	Type	Route	Value	Form
		Soil	0.0612 mg/kg	
		STP	10 mg/l	Sewage Treatment Plant
succinic acid (CAS 110-15-6)	Not applicable	Freshwater	0.1 mg/l	
		Intermittent	1 mg/l	Releases
		Marine water	0.01 mg/l	
		Sediment	0.079 mg/kg	Freshwater
		Sediment	0.0079 mg/kg	Marine water
		Soil	0.0177 mg/kg	
		STP	3 mg/l	Sewage Treatment Plant

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

8.2. Exposure controls

Appropriate engineering controls Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

General information Not available.

Eye/face protection Not available.

Skin protection

- Hand protection Not available.

- Other Use personal protective equipment to minimize exposure to skin and eye.

Respiratory protection Not available.

Thermal hazards Not available.

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

Environmental exposure controls Not available.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Form Not available.

Color Yellow

Odor Not available.

Odor threshold Not available.

pH 3.8 - 4.2

Melting point/freezing point Not available.

Initial boiling point and boiling range Not determined

Flash point > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup

Evaporation rate Not determined

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Vapor pressure Not determined

Vapor density >= 1 (air = 1.0)

Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity >= 2 cp

Explosive properties Not available.

Oxidizing properties Not determined

9.2. Other information

VOC	< 157 g/l estimated

Section 10. Stability and reactivity

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

Section 11. Toxicological information

General information Not available.

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.

Symptoms Not available.

11.1. Information on toxicological effects

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Non irritant in rabbit (OECD 404)

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

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.

Reproductive toxicity May damage fertility or the unborn child.

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.

Mixture versus substance information 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.

Section 12. Ecotoxicological information

12.1. Toxicity

Aquatic toxicity Static acute toxicity (trout), survival (100 mg/L) = 100%
Static acute toxicity (trout), survival (10 mg/L) = 100%

Product		Species	Test Results
C5057Series			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	434 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
succinic acid (CAS 110-15-6)			
Aquatic			
Fish	LC50	Fish	101, 96 Hours

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow)

2-pyrrolidone	-0.85
succinic acid	-0.59

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

Section 13. Disposal

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Not available.

EU waste code Not available.

Disposal methods/information Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14. Transport information

DOT

- **UN number** Not available.
- **UN proper shipping name** Not Regulated
- **Transport hazard class(es)**
  - **Class** Not available.
  - **Subsidiary risk** -
- **Packing group** Not available.
- **Environmental hazards**
  - **Marine pollutant** No
- **Special precautions for user** Not available.

IATA

- **UN number** Not available.
- **UN proper shipping name** Not Regulated
- **Transport hazard class(es)**
  - **Class** Not available.
  - **Subsidiary risk** -
- **Packing group** Not available.
- **Environmental hazards** No
- **Special precautions for user** Not available.

IMDG

- **UN number** Not available.
- **UN proper shipping name** Not Regulated
- **Transport hazard class(es)**
  - **Class** Not available.
  - **Subsidiary risk** -
- **Packing group** Not available.

Transport hazard class(es)

Marine pollutant No

EmS Not available.

Special precautions for user Not available.

ADR

UN number Not available.

UN proper shipping name Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk -

Hazard No. (ADR) Not available.

Tunnel restriction code Not available.

Packing group Not available.

Environmental hazards No

Special precautions for user Not available.

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

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions and prohibitions on manufacture, placing on the market and use of chemicals (Regulation 90/2013, Annex 1, Part 1, as amended)

Not listed.

Other information This Safety Data Sheet complies with the requirements of Regulation (EU) 2015/830. Classification according to Regulation (EC) No 1272/2008 as amended.

Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further rectifications and amendments).

International regulations 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.

15.2. Chemical safety assessment See attached SUMI or GEIS document, if applicable.

Section 16. Other information

References Regulation (EC) No. 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency (REACH).

Regulation (EU) 2015/830 of May 28, 2015 amending Regulation (EC) No. 1907/2006.

Regulation (EC) No. 1272/2008 of December 16, 2008 on classification, labeling and packaging of substances and mixtures, and amendments (CLP).

Information on evaluation method leading to the classification of mixture The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Revision information

1. Product and Company Identification: EU Poison Center

Training information

Follow training instructions when handling this material.

Disclaimer

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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.

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