




# SAFETY DATA SHEET

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

<b>Important information</b>	*** 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. ***	
<b>1.1. Chemical identification</b>	C4990Series	
<b>Other means of identification</b>	None.	
<b>1.2. Relevant identified uses of the substance or mixture and uses advised against</b>		
<b>Identified uses</b>	Inkjet printing	
<b>Uses advised against</b>	None known.	
<b>1.3. Details of the supplier of the safety data sheet</b>	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	
<b>Telephone</b>	+31 20 721 3400	
<b>HP Inc. health effect line</b>		
<b>(Toll-free within US)</b>	1-800-457-4209	
<b>(Direct)</b>	1-760-710-0048	
<b>HP Inc. Customer Care Line</b>		
<b>(Toll-free within the US)</b>	1-800-474-6836	
<b>(Direct)</b>	1-208-323-2551	
<b>Email:</b>	hpcustomer.inquiries@hp.com	
<b>1.4 Emergency telephone number</b>	1-760-710-0048	

## Section 2. Hazards identification

<b>2.1. Classification of the substance or mixture</b>		
<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Reproductive toxicity (fertility, the unborn child)	Category 1B
<b>Environmental hazards</b>	Not classified.	
<b>2.2. Label elements</b>		
<b>Hazard pictograms</b>		
<b>Signal word</b>	Danger	
<b>Hazard statements</b>		
H360	May damage fertility or the unborn child.	
<b>Precautionary statements</b>		
<b>Prevention</b>		
P280	Wear protective gloves/protective clothing/eye protection.	
P201	Obtain special instructions before use.	
P202	Do not handle until all safety precautions have been read and understood.	
<b>Response</b>		
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**

Contains 1,2-Benzisothiazolin-3-one and 2,4,7,9-Tetramethyl-5-decyne-4,7-diol. May produce an allergic reaction.

**Section 3. Composition/information on ingredients****3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water	80-90	7732-18-5 231-791-2	-	-	
<b>Classification:</b>	-				
2-pyrrolidone	<10	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
<b>Classification:</b>	Eye Irrit. 2;H319, Repr. 1B;H360				
Substituted naphthalenesulfonate salt	<5	388616-20-4	-	-	
<b>Classification:</b>	-				
Trimethylolpropane	<5	77-99-6 201-074-9	01-2119486799-10-XXXX	-	
<b>Classification:</b>	Repr. 2;H361				
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	<1	126-86-3 204-809-1	01-2119954390-39-XXXX	-	
<b>Classification:</b>	Eye Dam. 1;H318, Aquatic Chronic 3;H412				
1,2-Benzisothiazolin-3-one	<0.05	2634-33-5 220-120-9	01-2120761540-60-XXXX	613-088-00-6	
<b>Classification:</b>	-				

**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**

Move 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**

CO2, water, dry chemical, or 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

Serbia. OELs. Yugoslav Standard JUS Z.B0.001, 1991; Reg. No. 15/01-149/52 of 23 May 1991 on maximum allowable concentration of airborne toxic gases, vapors & aerosols in working premises

Components	Type	Value
Trimethylolpropane (CAS 77-99-6)	MAC	50 mg/m <sup>3</sup>

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/m <sup>3</sup>	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/m <sup>3</sup>	Systemic long term

#### Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Not applicable	Freshwater	0.5 mg/l	Releases
		Intermittent	0.5 mg/l	
		Marine water	0.05 mg/l	Freshwater
		Sediment	0.4205 mg/kg	
		Soil	0.0612 mg/kg	
		STP	10 mg/l	

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

### 8.2. Exposure controls

<b>Appropriate engineering controls</b>	Use in a well ventilated area. Provide adequate ventilation.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>General information</b>	Not available.
<b>Eye/face protection</b>	Not available.
<b>Skin protection</b>	
- Hand protection	Not available.
- Other	Use personal protective equipment to minimize exposure to skin and eye.
<b>Respiratory protection</b>	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
<b>Thermal hazards</b>	Not available.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental exposure controls</b>	Not available.

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## Section 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Black.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	7.5 - 8
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not determined
<b>Flash point</b>	> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not determined
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	>= 1 (air = 1.0)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not determined

### 9.2. Other information

<b>VOC</b>	< 86 g/l
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## Section 10. Stability and reactivity

<b>10.1. Reactivity</b>	Not available.
<b>10.2. Chemical stability</b>	Stable under recommended storage conditions.
<b>10.3. Possibility of hazardous reactions</b>	Will not occur.
<b>10.4. Conditions to avoid</b>	Not available.
<b>10.5. Incompatible materials</b>	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
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2-pyrrolidone (CAS 616-45-5)

#### Acute

##### Oral

LD50	Rat	> 5000 mg/kg
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**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**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

## Section 12. Ecotoxicological information

**12.1. Toxicity** Information given is based on data on the components and the ecotoxicology of similar products

**Aquatic toxicity** LC50/96h/Fathead minnows =>750mg/l  
EC50/48h/daphnia => 100mg/l, OECD 202  
EC50/72h/algae => 100 mg/l , OECD 201

Components	Species	Test Results
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2-pyrrolidone (CAS 616-45-5)

#### **Aquatic**

Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
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Trimethylolpropane (CAS 77-99-6)

#### **Aquatic**

Crustacea	EC50	Daphnia	102, 48 Hours
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Fish	LC50	Fish	1000, 96 Hours
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**12.2. Persistence and degradability** Not available.

<b>12.3. Bioaccumulative potential</b>	Not available.
<b>Partition coefficient n-octanol/water (log Kow)</b>	
2-pyrrolidone	-0.85
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	Not available.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>12.6. Other adverse effects</b>	Not available.

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## Section 13. Disposal

### 13.1. Waste treatment methods

<b>Residual waste</b>	Not available.
<b>Contaminated packaging</b>	Not available.
<b>EU waste code</b>	Not available.
<b>Disposal methods/information</b>	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

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## Section 14. Transport information

### DOT

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

### IATA

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

### IMDG

<b>UN number</b>	Not available.
<b>UN proper shipping name</b>	Not Regulated
<b>Transport hazard class(es)</b>	
<b>Class</b>	Not available.
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>Transport hazard class(es)</b>	
<b>Marine pollutant</b>	No
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Not available.

### ADR

<b>UN number</b>	Not available.
<b>UN proper shipping name</b>	Not Regulated
<b>Transport hazard class(es)</b>	
<b>Class</b>	Not available.
<b>Subsidiary risk</b>	-
<b>Hazard No. (ADR)</b>	Not available.
<b>Tunnel restriction code</b>	Not available.
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	No
<b>Special precautions for user</b>	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.

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**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.

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**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**

H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H360 May damage fertility or the unborn child.  
H361 Suspected of damaging fertility or the unborn child by skin contact.  
H412 Harmful to aquatic life with long lasting effects.

**Revision information**

1. Product and Company Identification: EU Poison Center  
3. Composition / Information on Ingredients: Disclosure Overrides  
HazReg Data: North America

**Training information**

Follow training instructions when handling this material.

## Disclaimer

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.

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## Explanation of abbreviations

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