



# SAFETY DATA SHEET

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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** CR291Series  
**Registration number** -  
**Synonyms** None.  
**Issue date** 27-May-2016  
**Version number** 01

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

**Identified uses** Inkjet printing  
**Uses advised against** None known.

**Company identification** HP Inc. UK Limited  
Cain Rd., Amen Corner, Pt 2nd Floor (Bldg BRA03)  
Bracknell  
United Kingdom RG12 1HN  
  
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

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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 as amended

**Health hazards**  
Acute toxicity, oral Category 1

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Ethylene glycol, Glycerin, Proprietary Component, Proprietary Component, Proprietary Component  
**Hazard pictograms** None.  
**Signal word** None.  
**Hazard statements** The mixture does not meet the criteria for classification.

#### Precautionary statements

**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Supplemental label information** None.

**2.3. Other hazards** None known.

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## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Glycerin	20-40	56-81-5 200-289-5	-	-	
<b>Classification:</b>	Eye Irrit. 2;H319				
Proprietary Component	< 30	Proprietary	-	-	
<b>Classification:</b>	-				
Proprietary Component	< 30	Proprietary	-	-	
<b>Classification:</b>	-				
Proprietary Component	< 30	Proprietary	-	-	
<b>Classification:</b>	-				
Ethylene glycol	2.5 - 10	107-21-1 203-473-3	01-2119456816-28-XXXX	603-027-00-1	#
<b>Classification:</b>	Acute Tox. 4;H302, STOT RE 2;H373				

**SECTION 4: First aid measures**

**General information** Not available.

**4.1. Description of first aid measures**

<b>Inhalation</b>	Move to fresh air. If symptoms persist, get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
<b>Eye contact</b>	Do not rub eyes. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Ingestion</b>	Rinse mouth out with water. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**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**

Treat symptomatically. Symptoms may be delayed.

**SECTION 5: Firefighting measures**

**General fire hazards** Not available.

**5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	CO2, water, dry chemical, or foam
<b>Unsuitable extinguishing media</b>	None known.

**5.2. Special hazards arising from the substance or mixture**

Not available.

**5.3. Advice for firefighters**

<b>Special protective equipment for firefighters</b>	Not available.
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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** Ensure adequate ventilation. Wear appropriate personal protective equipment. Avoid inhalation of vapors and contact with skin and eyes.

**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**

Wipe up with adsorbent material (e.g. cloth, fleece).

**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. Provide good ventilation. Wear personal protective equipment.  
Avoid inhalation of vapors and contact with skin and eyes.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep away from heat, sparks and flame. Keep away from excessive heat or cold.  
Store in closed original container in a dry place.

**7.3. Specific end use(s)**

Not available.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits**

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m <sup>3</sup>	
		40 ppm	
	TWA	26 mg/m <sup>3</sup>	Mist.
		26 mg/m <sup>3</sup>	
		10 ppm	
		10 ppm	Mist.

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m <sup>3</sup>
		40 ppm
	TWA	52 mg/m <sup>3</sup>
20 ppm		

**Biological limit values**

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

**Recommended monitoring procedures**

Not available.

**Derived no-effect level (DNEL)**

Components	Type	Route	Value	Form
Ethylene glycol (CAS 107-21-1)	Consumers	Dermal	53 mg/kg	Systemic long term
		Inhalation	7 mg/m <sup>3</sup>	Local long term
	Workers	Dermal	106 mg/kg	Systemic long term
		Inhalation	35 mg/m <sup>3</sup>	Local long term

**Predicted no effect concentrations (PNECs)**

Components	Type	Route	Value	Form
Ethylene glycol (CAS 107-21-1)	Not applicable	Freshwater	10 mg/l	
		Intermittant	10 mg/l	Releases
		Marine water	1 mg/l	
		Sediment	37 mg/kg	Freshwater
		Sediment	3.7 mg/kg	Marine water

Components	Type	Route	Value	Form
		Soil	1.53 mg/kg	
		STP	199.5 mg/l	Sewage Treatment Plant

**Exposure guidelines**

**Iceland OELs: Skin designation**  
Ethylene glycol (CAS 107-21-1) Can be absorbed through the skin.

**8.2. Exposure controls**

**Appropriate engineering controls** Provide adequate ventilation.

**Individual protection measures, such as personal protective equipment**

**General information** Avoid contact with the skin and the eyes. Wear suitable protective equipment.

**Eye/face protection** Wear safety glasses; chemical goggles (if splashing is possible).

**Skin protection**

- **Hand protection** Wear appropriate chemical resistant gloves.
- **Other** Wear suitable protective clothing and eye/face protection. Remove and wash contaminated clothing before re-use.

**Respiratory protection** Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection.

**Thermal hazards** Not available.

**Hygiene measures** When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

**Environmental exposure controls** Not available.

## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state** Not available.

**Form** Not available.

**Color** Black.

**Odor** Odorless

**Odor threshold** Not available.

**pH** 6.8 - 7.7

**Initial boiling point and boiling range** Not available.

**Flash point** 230.0 °F (110.0 °C)

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** Not available.

#### Solubility(ies)

**Solubility (water)** Not available.

**Solubility (other)** Not available.

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

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Explosive properties** Not available.

**Oxidizing properties** Not available.

**9.2. Other information** No relevant additional information available.

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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>	None known.
<b>10.4. Conditions to avoid</b>	Not available.
<b>10.5. Incompatible materials</b>	oxidizing agents
<b>10.6. Hazardous decomposition products</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Carbon monoxide and carbon dioxide.

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## SECTION 11: Toxicological information

**General information** Complete toxicity data are not available for this specific formulation

### 11.1. Information on toxicological effects

Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	9530 mg/kg
<i>Oral</i>		
LD50	Cat	1650 mg/kg
	Dog	5500 mg/kg
	Guinea pig	8.2 g/kg
	Mouse	14.6 g/kg
	Rat	5.89 g/kg
<i>Other</i>		
LD50	Mouse	5.8 g/kg
	Rat	2800 mg/kg
<b>Skin corrosion/irritation</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Not available.	
<b>Respiratory sensitization</b>	Not available.	
<b>Skin sensitization</b>	Not available.	
<b>Germ cell mutagenicity</b>	Not available.	
<b>Carcinogenicity</b>	Proprietary component 1 is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans).	
<b>Reproductive toxicity</b>	Not available.	
<b>Specific target organ toxicity - single exposure</b>	Not available.	
<b>Specific target organ toxicity - repeated exposure</b>	Not available.	
<b>Aspiration hazard</b>	Not available.	
<b>Other information</b>	Not available.	

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## SECTION 12: Ecological information

**12.1. Toxicity** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 8050 mg/l, 96 hours

Components	Species	Test Results
Glycerin (CAS 56-81-5)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)
		51000 - 57000 mg/l, 96 hours
<b>12.2. Persistence and degradability</b>	Not available.	
<b>12.3. Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol/water (log Kow)</b>		
Ethylene glycol		-1.36
Glycerin		-1.76
<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>	This product has not been tested for ecological effects.	

## SECTION 13: Disposal considerations

### 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 in compliance with federal, state, and local regulations.

## SECTION 14: Transport information

### DOT

<b>UN number</b>	UN1760
<b>UN proper shipping name</b>	Corrosive liquids, n.o.s. (Sodium Hydroxide)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packaging group</b>	III
<b>Special precautions for user</b>	Not available.
<b>Transport hazard class(es)</b>	
<b>Label(s)</b>	8
<b>Special provisions</b>	IB3, T7, TP1, TP28
<b>Packaging exceptions</b>	154
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

### IATA

<b>UN number</b>	UN1760
<b>UN proper shipping name</b>	Corrosive liquids, n.o.s. (Sodium Hydroxide)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Not available.

### IMDG

<b>UN number</b>	UN1760
<b>UN proper shipping name</b>	Corrosive liquids, n.o.s. (Sodium Hydroxide)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III

**Environmental hazards**

<b>Marine pollutant</b>	No.
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Not available.

**ADR**

<b>Proper shipping name</b>	Corrosive liquids, n.o.s. (Sodium Hydroxide)
<b>Hazard class</b>	8
<b>UN number</b>	1760
<b>Packing group</b>	III
<b>Packaging exceptions</b>	154

**DOT****IATA; IMDG****ADR**

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**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

#### **Authorizations**

**Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorization**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

#### **Other EU regulations**

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Ethylene glycol (CAS 107-21-1)

**Directive 94/33/EC on the protection of young people at work**

Not regulated.

#### **Other regulations**

Contains components not listed in: Japan, Canada, European Union, and Philippines.

#### **National regulations**

Not available.

#### **15.2. Chemical safety assessment**

See attached SUMI or GEIS document, if applicable.

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### **SECTION 16: Other information**

#### **References**

Not available.

#### **Information on evaluation method leading to the classification of mixture**

Not available.

#### **Issue date**

27-May-2016

#### **Revision information**

1. Product and Company Identification: Alternate Trade Names  
Composition / Information on Ingredients: Ingredients

#### **Training information**

Not available.

#### **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.

#### **Manufacturer information**

HP Inc.  
1501 Page Mill Road  
Palo Alto, CA 94304-1112 US  
Direct 1-650-857-5020



## 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
<b>List of abbreviations</b>	Not available.

# Safe Use of Mixture Information (SUMI)

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## Water Based Ink: WB01 \*English\*

### Disclaimer

*This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product SDS, the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.*

*The REACH registration number(s), where applicable, completes an extended product SDS.*

### Operational conditions

<b>Maximum duration</b>	Up to 8 hours per day
<b>Frequency of exposure</b>	< 240 days per year
<b>Process conditions</b>	Covers use at ambient temperatures. Adequate ventilation should be provide for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides guidelines to ensure acceptable air quality in the workspace. Avoid direct contact. Regular cleaning of equipment and work area. Supervision in place to check that Risk Management Measures are in place are being correctly used and Operational Conditions followed.

### Risk management measures

<b>Conditions and measures related to Personal Protection Equipment, hygiene and health evaluation</b>	<p>Wear safety glasses with side shields (or goggles), if splashing is possible. Wear appropriate chemical resistant gloves: see section 8 of the SDS. Wear appropriate chemical resistant clothing. In case of inadequate ventilation wear respiratory protection. Eye wash fountain and emergency showers are recommended. Avoid breathing mist/vapours. Avoid contact with skin, eyes and clothing. Training of workers in relation to proper use and maintenance of all Personal protection equipment (PPE) must be ensured.</p> <div style="display: flex; justify-content: space-around; align-items: center;">     </div>
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### Good practice advice

Use personal protective equipment as required.  
Wash hands before breaks and after work.  
Keep good industrial hygiene and safety practice.  
Use only with adequate ventilation.  
Do no eat, drink or smoke when using this product.  
Wash contaminated clothing before reuse.  
Store at room temperature.



### Environmental measures

Do not allow this material to drain into sewers/water supplies.  
Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.  
Ensure collection and disposal with appropriately licenced waste contractor.

### Use descriptors

- IS-Use at industrial sites
- PW-Widespread use by professional workers
- SU7-Printing and reproduction media
- PC18-Inks and Toners
- PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
- PROC2-Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
- PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
- PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
- PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities
- ERC5-Use at industrial site leading to inclusion into/onto article
- ERC8c-Widespread use leading to inclusion into/onto article (indoor)

### Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture is provided.  
Most of the water based inks are "not classified".  
The classification of the mixture is based on the individuel ingredients and their concentration within the mixture.  
All ingredients contributing to the classification are stated in Section 3 of the SDS.  
Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.  
The product may contain sensitizing ingredients that may cause allergic reaction to certain people.  
Section 2 of the SDS states these ingredients where applicable.