



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture CH216Series
Registration number -
Synonyms HP Designjet 788 Light Cyan Ink
Issue date 30-Aug-2013
Version number 05
Revision date 24-Nov-2014
Supersedes date 17-Nov-2014

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 Hewlett-Packard, Ltd.
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Bracknell, Berkshire, RG12 1HN
Telephone 44 (0) 879 013 0790

Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomer.inquiries@hp.com
Poison Information Center 0207771 5307

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitization	Category 1	H317 - May cause an allergic skin reaction.
Reproductive toxicity	Category 2	H361f - Suspected of damaging fertility.
Specific target organ toxicity - repeated exposure	Category 1	H372 - Causes damage to organs (liver, respiratory system) through prolonged or repeated exposure.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification Xi;R36/38, R52/53

Hazard summary

Physical hazards Not classified for physical hazards.
Health hazards Irritating to eyes and skin.
Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards Not available.
Main symptoms Not available.

2.2. Label elements

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

Contains: 2-benzyl-2-dimethylamino-4-morpholinobutyrophenone, 2-Phenoxy-ethyl acrylate, Aliphatic Urethane Acrylate, Alkyl Acrylate Ester #1, Alkyl Acrylate Ester #2, Benzophenone, Carboxylic Acids, Esters, Multi-Functional Acrylate Ester, N-vinylcaprolactam, Proprietary initiator

Hazard pictograms



Signal word

Danger

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.
H372 Causes damage to organs (liver, respiratory system) through prolonged or repeated exposure
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice/attention.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
P308 + P313 - IF exposed or concerned: Get medical attention/advice.
P391 - Collect spillage.
P362 - Take off contaminated clothing and wash before reuse.

Storage

P405 - Store locked up.

Disposal

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

Supplemental label information

None.

2.3. Other hazards

Benzophenone is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans).

Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation.

Contains isocyanates. May produce an allergic reaction.

Proprietary initiator - In animal testing, risk of impaired fertility was shown only after repeated ingestion of very high doses of this substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
2-Phenoxy-ethyl acrylate	<40	48145-04-6 256-360-6	-	-	

Classification: **DSD:** R43, N;R51/53
CLP: Skin Sens. 1A;H317, Aquatic Chronic 2;H411

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Carboxylic Acids, Esters	<25	3076-04-8 221-351-8	-	-	
Classification:	DSD:	Xi;R36/37/38, N;R51/53			
	CLP:	Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335, Aquatic Chronic 2;H411			
N-vinylcaprolactam	<25	2235-00-9 218-787-6	-	-	
Classification:	DSD:	Xn;R22, Xi;R36, R43			
	CLP:	Acute Tox. 4;H302, Skin Sens. 1B;H317, Eye Irrit. 2;H319, STOT RE 1;H372			
Aliphatic Urethane Acrylate	<10	Proprietary -	-	-	
Classification:	DSD:	-			
	CLP:	-			
Multi-Functional Acrylate Ester	<5	Proprietary -	-	-	
Classification:	DSD:	Xi;R36, R43, R52/53			
	CLP:	Skin Sens. 1A;H317, Eye Irrit. 2;H319, Aquatic Chronic 3;H412			
Proprietary initiator	<5	Proprietary -	-	-	
Classification:	DSD:	Repr. Cat. 3;R62			
	CLP:	-			
Alkyl Acrylate Ester #1	<2.5	Proprietary -	-	-	
Classification:	DSD:	Xi;R36/38			
	CLP:	Skin Irrit. 2;H315, Eye Irrit. 2;H319			
Alkyl Acrylate Ester #2	<2.5	Proprietary -	-	-	
Classification:	DSD:	R43, N;R51/53			
	CLP:	Skin Sens. 1B;H317, Aquatic Chronic 2;H411			
Benzophenone	<2.5	119-61-9 204-337-6	-	-	
Classification:	DSD:	Xn;R48/22, Xi;R36/38, N;R51/53, R52/53			
	CLP:	Skin Irrit. 2;H315, Eye Irrit. 2;H319, Aquatic Chronic 3;H412			
2-benzyl-2-dimethylamino-4-morpholinobutyrophenone	<1	119313-12-1 404-360-3	-	606-047-00-9	
Classification:	DSD:	N;R50/53			
	CLP:	Repr. 2;H361d, Aquatic Acute 1;H400, Aquatic Chronic 1;H410			

SECTION 4: First aid measures

General information Not available.

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. If irritation persists get medical attention.

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 the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Never give anything by mouth to an unconscious person.
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.

SECTION 5: Firefighting measures

General fire hazards	Not available.
5.1. Extinguishing media	
Suitable extinguishing media	Dry powder. Carbon dioxide (CO2). Water may be ineffective.
Unsuitable extinguishing media	Water.
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	Avoid runoff into storm sewers and ditches which lead to waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Wear appropriate personal protective equipment. Do not touch or walk through spilled material.
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. See also section 13 Disposal considerations.
6.3. Methods and material for containment and cleaning up	Not available.
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 away from excessive heat or cold. Do not store in direct sunlight. Do not handle or store near an open flame, heat or other sources of ignition. Opaque, high density polyethylene (HDPE) containers are recommended for shipping and storage.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/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 level (DNEL)

Components	Type	Route	Value	Form
2-Phenoxy-ethyl acrylate (CAS 48145-04-6)	Industry	Dermal	1.5 mg/kg/day	
		Inhalation	10 mg/m3	
N-vinylcaprolactam (CAS 2235-00-9)	Not applicable	Dermal	0.7 mg/kg bw/d	
		Inhalation	0.17 mg/m3	

Predicted no effect concentrations (PNECs)	Not available.
Exposure guidelines	Exposure limits have not been established for this product.
8.2. Exposure controls	
Appropriate engineering controls	Not available.
Individual protection measures, such as personal protective equipment	
General information	Not available.
Eye/face protection	Wear safety glasses; chemical goggles (if splashing is possible). Eye wash fountain and emergency showers are recommended.
Skin protection	
- Hand protection	Not available.
- Other	Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.
Respiratory protection	Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.
Thermal hazards	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Do not get this material in your eyes, on your skin, or on your clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Launder contaminated clothing before reuse. Keep away from food and drink.
Environmental exposure controls	Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Color	Cyan
Odor	Characteristic.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 230.0 °F (> 110.0 °C) Closed Cup
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.
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	
Chemical family	Acrylate/Polymer/Pigment Blend
VOC (Weight %)	< 95 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Stable under normal storage conditions.
10.3. Possibility of hazardous reactions	Hazardous polymerization can occur with decreased inhibitor content.
10.4. Conditions to avoid	Exposure to sunlight.
10.5. Incompatible materials	Incompatible with strong bases and oxidizing agents. alkaline metals
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.

11.1. Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitization Based on available data, the classification criteria are not met.

Skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzophenone (CAS 119-61-9) 2B Possibly carcinogenic to humans.

Reproductive toxicity Suspected of damaging fertility.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Causes damage to organs (liver, respiratory system) through prolonged or repeated exposure.

Aspiration hazard Based on available data, the classification criteria are not met.

Components	Species	Test Results
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Benzophenone (CAS 119-61-9)

Acute

Oral

LD50	Mouse	2895 mg/kg
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Other

LD50	Mouse	727 mg/kg
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Mixture versus substance information Not available.

Other information Complete toxicity data are not available for this specific formulation

SECTION 12: Ecological information

Aquatic toxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This product has not been tested for ecological effects.

12.1. Toxicity

Components	Species	Test Results
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Benzophenone (CAS 119-61-9)

Aquatic

Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 9.64 - 12.31 mg/l, 96 hours
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12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

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 considerations

13.1. Waste treatment methods

Residual waste Not available.
Contaminated packaging Not available.
EU waste code Not available.
Disposal methods/information Do not dispose of together with general office waste.
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 an appropriately licensed waste contractor.

SECTION 14: Transport information

DOT

UN number UN3082
UN proper shipping name Environmentally Hazardous Substance, Liquid, N.O.S. (Acrylates)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Special precautions for user DOT Classification only applies to shipments within the US and Puerto Rico.

IATA

UN number UN3082
UN proper shipping name Environmentally Hazardous Substance, Liquid, N.O.S. (Acrylates)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards Yes
Special precautions for user Not available.

IMDG

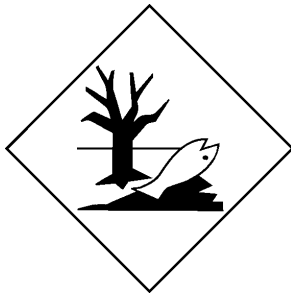
UN number UN3082
UN proper shipping name Environmentally Hazardous Substance, Liquid, N.O.S. (Acrylates), MARINE POLLUTANT
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Not available.

General information DOT Classification only applies to shipments within the US and Puerto Rico.

DOT; IATA; IMDG



Marine pollutant



ADR

Proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Acrylates)
Hazard class	9
UN number	3082
Packing group	III
Marine pollutant	Yes



ADR

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.

Labeling

Symbol(s)



Irritant

R-phrases(s)

R36/38 Irritating to eyes and skin.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S24/25 Avoid contact with skin and eyes.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

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

Proprietary initiator (CAS Proprietary)

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

Not regulated.

Other regulations

The components of this product are reported in the following inventories: USA, European Union, Canada, New Zealand, Japan, Philippines, China, Australia, Korea.

Other information

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).

Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).

National regulations

Not available.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information

References

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R22 Harmful if swallowed.
R36 Irritating to eyes.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.
R63 Possible risk of harm to the unborn child.

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Revision information

None.

Training information

Not available.

Disclaimer

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Issue date

30-Aug-2013

Manufacturer information

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Product Information 1-800-925-0563

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

List of abbreviations

Not available.

Safety phrase(s)

S24/25 Avoid contact with skin and eyes.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.