



SAFETY DATA SHEET

1. Identification of the dangerous substance/preparation and the identity of the manufacturer, importer, agent or marketer

Identification of the substance/preparation CH116Series
Use of the substance/preparation Inkjet printing
Issue date 28-Aug-2013
Revision date 09-Aug-2015
Version # 06
Synonym(s) HP Designjet 788 Cyan Ink
CAS # Mixture
Company identification HP PPS Israel Ltd.
9 Dafna Street, 3rd Floor (West Wing)
Ra'anana, Israel 43662
Telephone +972 9 7623222

HP 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

2. Dangers of the dangerous substance/preparation

Classification Xi;R36/38, R52/53
Physical hazards Not classified as a physical hazard.
Health hazards Irritating to eyes and skin.
Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements

Signal word Danger



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

Precautionary statement

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

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

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

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

3. Identification of the components of the substance/preparation

Components	CAS #	Percent
2-Phenoxy-ethyl acrylate	48145-04-6	<40
Carboxylic Acids, Esters	3076-04-8	<25
N-vinylcaprolactam	2235-00-9	<25
Aliphatic Urethane Acrylate	Proprietary	<10
Multi-Functional Acrylate Ester	Proprietary	<5
Proprietary initiator	Proprietary*	<5
Alkyl Acrylate Ester #1	Proprietary	<2.5
Alkyl Acrylate Ester #2	Proprietary*	<2.5
Benzophenone	119-61-9	<2.5
2-benzyl-2-dimethylamino-4-morpholinobutyrophenone	119313-12-1	<1

Substance or Preparation Preparation

4. First aid instructions

First aid measures for different exposure routes

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.

Notes to physician Not available.

Special first aid equipment Not available.

5. Firefighting procedure

Flash point	> 230.0 °F (> 110.0 °C) Closed Cup
Fire fighting equipment/instructions	Avoid runoff into storm sewers and ditches which lead to waterways.
Extinguishing media	
Suitable extinguishing media	Dry powder. Carbon dioxide (CO2). Water may be ineffective.

Extinguishing media which must not be used for safety reasons	Water may be ineffective. Do not use a solid water stream as it may scatter and spread fire.
Unusual fire & explosion hazards	None known.
Specific hazards during fire fighting	Not available.
Special fire fighting procedures	Avoid runoff into storm sewers and ditches which lead to waterways.
Protection of fire-fighters	Not available.

6. Safety precautions

Personal precautions	Wear appropriate personal protective equipment. Do not touch or walk through spilled material.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
Other information	Soak up with inert absorbent material. Dispose of in compliance with federal, state, and local regulations.

7. Handling and storage

Handling	Avoid contact with skin, eyes and clothing.
Storage	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.
Storage	
Special recommendations	Not available.
Safe packaging materials	Not available.

8. Means of reducing exposure and personal protection

Engineering measures to reduce exposure	Not available.
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
Personal protective equipment	
Respiratory protection	Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection	Wear appropriate chemical resistant gloves.
Eye protection	Wear safety glasses; chemical goggles (if splashing is possible). Eye wash fountain and emergency showers are recommended.
Skin and body protection	Wear appropriate chemical resistant clothing.
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.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Cyan
Odor	Characteristic.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Decomposition temperature	Not available.
Flash point	> 230.0 °F (> 110.0 °C) Closed Cup

Flammability	Not available.
Auto-ignition temperature	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Oxidizing properties	Not available.
Vapor pressure	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Other information	
Chemical family	Acrylate/Polymer/Pigment Blend
VOC (Weight %)	< 95 g/L

10. Stability and reactivity

Conditions to avoid	Exposure to sunlight.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Reactivity	Not available.
Chemical stability	Stable under normal storage conditions.
Possibility of hazardous reactions	Hazardous polymerization can occur with decreased inhibitor content.
Incompatibility	Incompatible with strong bases and oxidizing agents. alkaline metals
Materials to avoid	Not available.

11. Toxicological information

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 or skin sensitization	
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	May cause sensitization by skin contact.
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.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
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.
Further information	Complete toxicity data are not available for this specific formulation

Components	Species	Test Results
Benzophenone (CAS 119-61-9)		
Acute		
<i>Oral</i>		
LD50	Mouse	2895 mg/kg
<i>Other</i>		
LD50	Mouse	727 mg/kg

12. Environmental information

Ecotoxicity

Components	Species	Test Results
Benzophenone (CAS 119-61-9)		
Aquatic		
Fish	LC50 Fathead minnow (<i>Pimephales promelas</i>)	9.64 - 12.31 mg/l, 96 hours

Environmental effects Not available.

Persistence and degradability

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.

Mobility in soil Not available.

13. Dangerous substance disposal methods

Disposal instructions	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. Dispose of in compliance with Israeli Ministry of the Environment and local regulations.
Waste from residues / unused products	Not available.
Contaminated packaging	Not available.
Special precautions	Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

DOT supplemental information 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.

IATA supplemental information When shipping ≤ 5L inner packaging, Special Provision A197 may apply.

IMDG

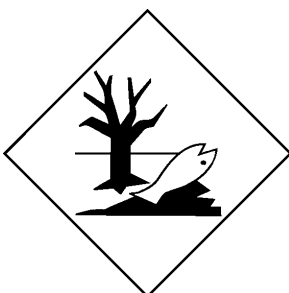
UN number	UN3082
UN proper shipping name	Environmentally Hazardous Substance, Liquid, N.O.S. (Acrylates), MARINE POLLUTANT
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes

EmS	F-A, S-F
Special precautions for user	Not available.
IMDG supplemental information	When shipping \leq 5L containers, IMDG 2.10.2.7 may apply.
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 supplemental information	When shipping \leq 5L containers, ADR 375 may apply.
IATA; IMDG	



ADR

Marine pollutant



15. Regulatory information

Israel regulations

Israel. Harmful Chemicals (Hazardous Substances Law, 5753-1993, Annex 1, as amended)

Not listed.

Israel. Toxic Chemicals (Hazardous Substances Law, 5753-1993, Annex 2, as amended)

Not listed.

Regulatory information

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

Labeling

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

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.

16. Other information

Recommended use

Not available.

Recommended restrictions

Not available.

Further information

Not available.

Bibliography

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.

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

R21/22 Harmful in contact with skin and 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.
R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.
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.
Suspected of damaging fertility.

Prepared by

HP

This data sheet contains changes from the previous version in section(s):

1. Product and Company Identification: Alternate Trade Names
Other information: Disclaimer

Issue date

28-Aug-2013

Revision date

09-Aug-2015

Version #

06

Manufacturer information

HP
1501 Page Mill Road
Palo Alto, CA 94304-1112 US
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