



SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material name Ch136A
Product use Inkjet printing.
Company identification Hewlett-Packard Korea
HPK House, 23-6
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Korea
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Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-503-494-7199
HP Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomerinquiries@hp.com
Poison Information Centre telephone number

Revision date 02-28-2009
Synonym(s) ColorSpan 0901147-002
Chemical family Acrylate/Polymer/Pigment Blend
CAS # Mixture

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight
Acrylic Acid, Monoalkyl, Alkylaryl Ester	3076-04-8	10-30
Multifunctional Acrylate	84170-74-1	10-30
N-vinylcaprolactam	2235-00-9	10-30
Substituted Phosphine Oxide	75980-60-8	1-5
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone	119313-12-1	0-1
Composition comments	Not applicable	

3. HAZARDS IDENTIFICATION

Classification (EU) Xi, R36/38, R52/53
Health hazards Irritating to eyes and skin.
Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Physical hazards Not classified as a physical hazard.
Potential health effects
Eyes Irritating to eyes.
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone
Not applicable
Acrylic Acid, Monoalkyl, Alkylaryl Ester
Not applicable
Multifunctional Acrylate
Not applicable
N-vinylcaprolactam
Not applicable
Substituted Phosphine Oxide
Not applicable



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Skin

Avoid contact with skin.
Contact causes skin irritation.
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone
Not applicable
Acrylic Acid, Monoalkyl, Alkylaryl Ester
Not applicable
Multifunctional Acrylate
Not applicable
N-vinylcaprolactam
Not applicable
Substituted Phosphine Oxide
Not applicable

Inhalation

Avoid breathing vapours or mists of this product. Inhalation of vapours or mists of the product may be irritating to the respiratory system.
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone
Not applicable
Acrylic Acid, Monoalkyl, Alkylaryl Ester
Not applicable
Multifunctional Acrylate
Not applicable
N-vinylcaprolactam
Not applicable
Substituted Phosphine Oxide
Not applicable

Ingestion

Ingestion is not expected to be a primary route of exposure for this product under normal use conditions. Harmful if swallowed.
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone
Not applicable
Acrylic Acid, Monoalkyl, Alkylaryl Ester
Not applicable
Multifunctional Acrylate
Not applicable
N-vinylcaprolactam
Not applicable
Substituted Phosphine Oxide
Not applicable

Main symptoms

Not applicable

Emergency Overview

Causes severe irritation of eyes, skin and mucous membranes.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone
Not applicable
Acrylic Acid, Monoalkyl, Alkylaryl Ester
Not applicable
Multifunctional Acrylate
Not applicable
N-vinylcaprolactam
Not applicable
Substituted Phosphine Oxide
Not applicable

Specific hazards

Not applicable



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Other information

Not applicable
2-Benzoyl-2-Dimethylamino-4-Morpholinobutyrophenone
Not applicable
Acrylic Acid, Monoalkyl, Alkylaryl Ester
Not applicable
Multifunctional Acrylate
Not applicable
N-vinylcaprolactam
Not applicable
Substituted Phosphine Oxide
Not applicable

4. FIRST AID MEASURES

Inhalation	Move person to fresh air immediately. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Skin contact	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Wash clothing separately before reuse. If irritation persists get medical attention.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.
Ingestion	Rinse mouth out with water. Give several glasses of water. If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Medical conditions aggravated by exposure	Not applicable
Notes to physician	Not applicable
General advice	Not applicable

5. FIRE-FIGHTING MEASURES

Flash point and method	> 95 °C (> 203 °F) closed cup;
Suitable extinguishing media	Dry chemical, foam, carbon dioxide. Do not use water. Use water to cool fire-exposed containers and to protect personnel.
Extinguishing media which must not be used for safety reasons	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards	Not applicable
Specific methods	Use a water spray to cool fully closed containers.
Special protective equipment for fire-fighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire fighting equipment/instructions	Move containers from fire area if you can do it without risk. Avoid runoff into storm sewers and ditches which lead to waterways.
Unusual fire & explosion hazards	Burning may produce thick, irritating smoke.
Hazardous combustion products	Carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin Avoid inhalation of vapors or mists. Do not touch or walk through spilled material. Ensure adequate ventilation. Use personal protective equipment to minimize exposure to skin and eye. In the case of vapour formation use a respirator with an approved filter.
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Environmental precautions	Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Containment procedures	Not applicable

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists of this product. Use with adequate ventilation. Wear personal protective equipment.
Storage	Keep containers tightly closed in a cool, well-ventilated place. Store away from strong oxidizers. Do not store near acids. Keep away from heat, sparks, and flame. Keep away from direct sunlight. Keep out of the reach of children.
Further information	Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	Not applicable
Control parameters	Not applicable
Personal protective equipment	
Respiratory protection	Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection	Not applicable
Eye protection	Wear safety glasses; chemical goggles (if splashing is possible). Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
Skin and body protection	Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.
General	Not applicable
Hygiene measures	Do not get this material in contact with skin. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Launder contaminated clothing before reuse.
Additional exposure data	Not applicable
Environmental exposure controls	Not applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Not applicable
Physical state	Liquid.
Form	Liquid.
Color	Magenta
Odor	Characteristic.
Odour threshold	Not available.
pH	Not available.
Boiling point	> 100 °C (> 212 °F) (@ 760mmHg)
Melting point	Not available.
Freezing point	Not available.
Flash point	> 95 °C (> 203 °F) closed cup;
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.



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Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	> 1
Relative density	Not available.
Solubility (water)	< 0.1 g/g
Partition coefficient (n-octanol/water)	Not available.
Evaporation rate	< 0.05 BuAc
Flammability	Not available.
Specific gravity	1.02 - 1.1
VOC	< 95 g/l
Viscosity	10 - 30 cP

10. STABILITY AND REACTIVITY

Stability	Stable at normal conditions.
Materials to avoid	Strong acids, alkalies and oxidizing agents.
Conditions to avoid	Heat, flames and sparks. Exposure to sunlight.
Incompatibility	Strong acids, alkalies and oxidizing agents.
Hazardous decomposition products	Carbon monoxide and carbon dioxide.
Hazardous polymerization	Hazardous polymerisation may occur.

11. TOXICOLOGICAL INFORMATION

Routes of exposure	Not applicable
Acute toxicity	Not applicable
Local effects	Not applicable
Sensitization	Not applicable
Chronic toxicity	Prolonged exposure causes local irritation of skin and mucous membranes, especially to the eyes.
Synergistic materials	Not applicable
Carcinogenicity	Not applicable
Mutagenicity	Not applicable
Teratogenicity	None known.
Reproductivity	Not applicable
Inhalation toxicity	Not applicable
Oral toxicity	Not applicable
Dermal toxicity	Not applicable
Eye irritation	Not applicable
Toxicological information	Not applicable
Subchronic toxicity	Not applicable
Component analysis - LD50	Not applicable
Epidemiology	Not applicable
Neurotoxicity	Not applicable
Symptoms and target organs	Not applicable
Human experience	Not applicable



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Pre-existing conditions aggravated by exposure

Not applicable

Further information

Complete toxicity data are not available for this specific formulation.

12. ECOLOGICAL INFORMATION

Aquatic toxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Environmental effects	Not applicable
Mobility	Not applicable
Persistence and degradability	Not applicable
Bioaccumulation	Not applicable
Ecotoxicity	Not applicable
Other adverse effects	Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Do not allow this material to drain into sewers/water supplies. Dispose of in compliance with federal, state, and local regulations.
Waste from residues / unused products	Not applicable
Contaminated packaging	Not applicable

14. TRANSPORT INFORMATION

ADR

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

General	not regulated
Further information	Not applicable

15. REGULATORY INFORMATION

International regulations	Not applicable
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16. OTHER INFORMATION

Manufacturer	Hewlett-Packard 11311 K-Tel Drive Minnetonka, MN 55343 US Product Information 1-800-925-0563
List of relevant R phrases	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. 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.
Recommended use	Not applicable
Recommended restrictions	Not applicable
Further information	Not applicable



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Other information

Not applicable

Bibliography

Not applicable

Disclaimer

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Issue date

02-28-2009

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