



SAFETY DATA SHEET

1. Identification

Product identifier CR290Series
Other means of identification Not available.
Recommended use Inkjet printing
Recommended restrictions None known.
Company identification HP
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United States
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2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Acute toxicity, oral Category 1
Specific target organ toxicity, single exposure Category 1 (central nervous system, heart, kidney, respiratory system)
Specific target organ toxicity, repeated exposure Category 1 (central nervous system, heart, respiratory system)
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements
Hazard symbol None.
Signal word None.
Hazard statement Not available.
Precautionary statement
Prevention Not available.
Response Not available.
Storage Not available.
Disposal Not available.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Glycerin		56-81-5	20-40
Proprietary Component		Proprietary	< 30
Proprietary Component		Proprietary	< 30
Proprietary Component		Proprietary	< 30

Chemical name	Common name and synonyms	CAS number	%
Ethylene glycol		107-21-1	2.5 - 10

4. 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. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Ingestion	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.
Most important symptoms/effects, acute and delayed	Not available.
Indication of immediate medical attention and special treatment needed	Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

Suitable extinguishing media	CO2, water, dry chemical, or foam
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Not available.
Fire-fighting equipment/instructions	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Wear appropriate personal protective equipment. Avoid inhalation of vapors and contact with skin and eyes.
Methods and materials for containment and cleaning up	Wipe up with adsorbent material (e.g. cloth, fleece).
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

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.
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.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation.
Individual protection measures, such as personal 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.
General hygiene considerations	When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance

Physical state	Not available.
Color	Black.
Odor	Odorless
Odor threshold	Not available.
pH	6.8 - 7.7
Melting point/freezing point	Not available.
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.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None known.
Conditions to avoid	Not available.
Incompatible materials	oxidizing agents

Hazardous decomposition products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Carbon monoxide and carbon dioxide.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects**Acute toxicity**

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not available.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Not available.

Germ cell mutagenicity Not available.

Carcinogenicity Proprietary component 1 is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans).

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Components	Species	Test Results
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Ethylene glycol (CAS 107-21-1)

Acute*Dermal*

LD50 Rabbit 9530 mg/kg

Oral

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

Other

LD50 Mouse 5.8 g/kg

Rat 2800 mg/kg

12. Ecological information**Ecotoxicity**

Components	Species	Test Results
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Ethylene glycol (CAS 107-21-1)

Aquatic

Fish LC50 Fathead minnow (*Pimephales promelas*) 8050 mg/l, 96 hours

Glycerin (CAS 56-81-5)

Aquatic

Fish LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss) 51000 - 57000 mg/l, 96 hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Ethylene glycol	-1.36
Glycerin	-1.76

Mobility in soil Not available.

Other adverse effects Not available.

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.

14. Transport information**DOT**

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

IATA

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

IMDG

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

ADR

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

DOT



IATA; IMDG



ADR

15. Regulatory information

US federal regulations All ingredients are listed or exempt.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethylene glycol (CAS 107-21-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Yes

Hazardous chemical

Other federal regulations

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Ethylene glycol (CAS 107-21-1)

Glycerin (CAS 56-81-5)

US. New Jersey Worker and Community Right-to-Know Act

Ethylene glycol (CAS 107-21-1)

Glycerin (CAS 56-81-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethylene glycol (CAS 107-21-1)

Glycerin (CAS 56-81-5)

US. Rhode Island RTK

Ethylene glycol (CAS 107-21-1)

US. California Proposition 65

Not Listed.

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

16. Other information, including date of preparation or last revision

Issue date 19-Aug-2015

Version # 01

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

Manufacturer information HP
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Direct 1-650-857-5020

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