

Printing date 04/05/2016 Reviewed on 04/05/2016

#### 1 Identification

· Product identifier

· Trade name: <u>H/C-100</u> · Article number: H/C-100

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Chemical Consultants Inc. 1850 Wild Turkey Circle Corona, CA 92880

USA

+1 (951) 735-5511 ncollins@ccidom.com

- · Information department: Product safety department
- · Emergency telephone number: INFOTRAC 1-800-535-5053

#### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

sodium hydroxide

Tridecylpoly(ethyleneoxy)ethanol

1-octyl-2-pyrrolidone

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P260 Do not breathe dusts or mists.

*P280* Wear protective gloves / eye protection / face protection.

*P264 Wash thoroughly after handling.* 

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

*P321* Specific treatment (see on this label).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

*P363* Wash contaminated clothing before reuse.

*P337+P313* If eye irritation persists: Get medical advice/attention. *P301+P330+P331* If swallowed: Rinse mouth. Do NOT induce vomiting.

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P405 Store locked up.

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

regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3Fire = 1

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

| · Dangerous components: |                                  |        |
|-------------------------|----------------------------------|--------|
| 1310-73-2               | sodium hydroxide                 | 10-20% |
| 78330-21-9              | Tridecylpoly(ethyleneoxy)ethanol | 1-5%   |
| 2687-94-7               | 1-octyl-2-pyrrolidone            | 1-5%   |

#### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.

#### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

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#### · Environmental precautions:

Dilute with plenty of water.

For large spills: Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.

#### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

#### · Components with limit values that require monitoring at the workplace:

#### 1310-73-2 sodium hydroxide

PEL Long-term value: 2 mg/m<sup>3</sup> REL Ceiling limit value: 2 mg/m<sup>3</sup> TLV Ceiling limit value: 2 mg/m<sup>3</sup>

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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#### · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

| 9 Physical and     | 1 chomica | nranornos  |
|--------------------|-----------|------------|
| I II you all all a | i Chemica | properties |

| · Information on basic physical and chemical properties |   |  |
|---|---|--|
| · General Information                                   |   |  |
| · Appearance:   |   |  |
| Form:   | Fluid   |  |
| Color:  | According to product specification            |  |
| · Odor:   | Characteristic                                |  |
| · Odor threshold:                                       | Not determined.                               |  |
| · pH-value at 20 °C (68 °F):                            | 14  |  |
| · Change in condition                                   |   |  |
| Melting point/Melting range:                            | Undetermined.                                 |  |
| Boiling point/Boiling range:                            | 170 °C (338 °F)                               |  |
| · Flash point:  | 102 °C (216 °F)                               |  |
| · Flammability (solid, gaseous):                        | Not applicable.                               |  |
| · Ignition temperature:                                 | 280 °C (536 °F)                               |  |
| · Decomposition temperature:                            | Not determined.                               |  |
| · Auto igniting:  | Product is not selfigniting.                  |  |
| · Danger of explosion:                                  | Product does not present an explosion hazard. |  |
| · Explosion limits:                                     |   |  |
| Lower:  | 1.3 Vol %                                     |  |
| Upper:  | 14.2 Vol %                                    |  |
| · Vapor pressure at 20 °C (68 °F):                      | 23 hPa (17 mm Hg)                             |  |
| · Density at 20 °C (68 °F):                             | 1.215 g/cm³ (10.139 lbs/gal)                  |  |

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|--|------------------------|--------------------|
| · Relative density   | Not determined.        |                    |
| · Vapor density  | Not determined.        |                    |
| · Evaporation rate   | Not determined.        |                    |
| · Solubility in / Miscibility with                         |                        |                    |
| Water:   | Fully miscible.        |                    |
| · Partition coefficient (n-octanol/water): Not determined. |                        |                    |
| · Viscosity:   |                        |                    |
| Dynamic:   | Not determined.        |                    |
| Kinematic:   | Not determined.        |                    |
| · Solvent content:   |                        |                    |
| VOC content:   | 194.0 g/l / 1.62 lb/gl |                    |

## 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Reacts with acids.
- · Hazardous decomposition products: No dangerous decomposition products known.

# 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

| · LD/LC50 values that are relevant for classification: |      |                   |
|--|------|-------------------|
| 1310-73-2 sodium hydroxide                             |      |                   |
| Oral   | LD50 | 2000 mg/kg (rat)  |
| 2687-94-7 1-octyl-2-pyrrolidone                        |      |                   |
| Oral   | LD50 | 2050 mg/kg (rat)  |
| Dermal   | LD50 | >2000 mg/kg (rab) |
| Duimam invitant offeet                                 |      |                   |

- · Primary irritant effect:
- · on the skin: Strong caustic effect on skin and mucous membranes.
- · on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

### 12 Ecological information

- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

- · Uncleaned packagings:
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations

· Recommended cleansing agent: Water, if necessary with cleansing agents.

### 14 Transport information

· UN-Number

· **DOT**, **IMDG**, **IATA** UN1760

· UN proper shipping name

· **DOT**, **IATA** Corrosive liquids, n.o.s. (Sodium hydroxide)

· IMDG CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE)

- · Transport hazard class(es)
- $\cdot DOT$



· Class 8 Corrosive substances

· Label

· IMDG, IATA



· Class 8 Corrosive substances

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• **Label** 8

· Packing group

· DOT, IMDG, IATA II

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Corrosive substances

Danger code (Kemler): 80
EMS Number: F-A,S-B
Segregation groups Alkalis
Stowage Category B

· Stowage Code SW2 Clear of living quarters.

· Transport/Additional information:

 $\cdot DOT$ 

• Quantity limitations On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L

· IMDG

· Limited quantities (LQ) 1L

· Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 1760 CORROSIVE LIQUIDS, N.O.S. (SODIUM HYDROXIDE), 8, II

#### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

· Hazard-determining components of labeling:

sodium hydroxide

Tridecylpoly(ethyleneoxy)ethanol

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· Hazard statements

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· Precautionary statements

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shower.

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and easy to do. Continue rinsing.

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*P363* Wash contaminated clothing before reuse.

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P405 Store locked up.

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

regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

California AOMD rule 1171 compliant when used as a dehazer for the removal of cured inks / stains.

- · Department issuing SDS: Environment protection department.
- · Contact: Mr. Collins
- · Date of preparation / last revision 04/05/2016 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Dam. 1: Serious eye damage/eye irritation – Category 1

-US