



## Benefit™ Phosphate-free liquid chlorinated cleaner

Version Number: 2

Preparation date: 2018-08-08

### 1. IDENTIFICATION

**Product name:** Benefit™  
Phosphate-free liquid chlorinated cleaner

**Product Code:** 57729010, 57729150, 57729330, 100931326

**SDS #:** MS0800009

**Recommended use:**

- Alkaline Liquid Cleaner
- Food Processing
- This product is intended to be diluted prior to use
- Industrial/Institutional

**Uses advised against:** Uses other than those identified are not recommended

<b>Manufacturer, importer, supplier:</b> US Headquarters Diversey, Inc. 2415 Cascade Pointe Blvd. Charlotte, NC 28208 Phone: 1-888-352-2249 SDS Internet Address: <a href="https://sds.diversey.com">https://sds.diversey.com</a>	Canadian Headquarters Sealed Air - Canada 3755 Laird Road Units 8-11 Mississauga, Ontario L5L 0B3 Phone: 1-800-668-7171
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**Emergency telephone number:** 1-800-851-7145; 1-651-917-6133 (Int'l)

### 2. HAZARDS IDENTIFICATION

#### Classification for the undiluted product

Skin corrosion/irritation	Category 1A
Serious eye damage/eye irritation	Category 1
Metal Corrosion:	Category 1



**Signal Word:** Danger.

#### Hazard and Precautionary Statements

##### **CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. MAY BE CORROSIVE TO METALS.**

Causes burns/ serious damage to mouth, throat and stomach. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Keep only in original container. Do not breathe spray. Wash affected areas thoroughly after handling. Wear chemical-splash goggles, chemical-resistant gloves and protective footwear. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Center (1-800-851-7145) or physician. Absorb spillage to prevent material damage. Store in corrosive-resistant container with a resistant inner liner. Dispose of unused content as chemical waste. Dispose of in accordance with all federal, state and local applicable regulations. SUPPLEMENTAL INFORMATION: Mix only with water. DO NOT MIX WITH ANY OTHER PRODUCT OR CHEMICAL. Can react to release

hazardous gases. May vigorously react with acids resulting in spattering and excessive heat.

**Health hazards not otherwise classified (HHNOC)** - Not applicable

**Physical hazards not otherwise classified (PHNOC)** - Not applicable

**Classification for the diluted product @ 1:64**

This product, when diluted as stated on the label, is not classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS) and Canadian Hazardous Products Regulations (HPR) (WHMIS 2015-GHS).

**Hazard and Precautionary Statements**

None required.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Classified Ingredients**

Ingredient(s)	CAS #	Weight %
Sodium hydroxide	1310-73-2	10 - 20%
Sodium polyacrylate	9003-04-7	3 - < 5%
Sodium hypochlorite	7681-52-9	3 - < 5%
Sodium chloride	7647-14-5	1 - < 3%

\*Exact percentages are being withheld as trade secret information

**4. FIRST AID MEASURES**

**Undiluted Product:**

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes.

**Skin:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Ingestion:** IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water.

**Most Important Symptoms/Effects:** No information available.

**Immediate medical attention and special treatment needed** Not applicable.

**Aggravated Medical Conditions:** Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects.

**Diluted Product:**

**Eyes:** Rinse with plenty of water.

**Skin:** No specific first aid measures are required

**Inhalation:** No specific first aid measures are required

**Ingestion:** IF SWALLOWED: Call a Poison Center (1-800-851-7145) or doctor/physician if you feel unwell.

**5. FIRE-FIGHTING MEASURES**

**Specific methods:**

No special methods required

**Suitable extinguishing media:**

The product is not flammable. Extinguish fire using agent suitable for surrounding fire.

**Specific hazards:**

Corrosive material (See sections 8 and 10).

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Extinguishing media which must not be used for safety reasons:** No information available.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:**

Put on appropriate personal protective equipment (see Section 8.).

**Environmental precautions and clean-up methods:**

Clean-up methods - large spillage. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Use a water rinse for final clean-up.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. All precautions for handling the product must be used in handling the empty container and residue. Product residue may remain on/in empty containers. Absorb spillage to prevent material damage. Mix only with water. DO NOT MIX WITH ACIDS, TOILET BOWL CLEANERS, AMMONIA, OR ANY OTHER CHEMICAL. Can react to release chlorine gas. Do not mix with any other product or chemical. Can react to release hazardous gases. May vigorously react with acids resulting in spattering and excessive heat. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage:** Keep tightly closed in a dry, cool and well-ventilated place. Store in corrosive-resistant container with a resistant inner liner.

**Aerosol Level (if applicable):** Not applicable.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines:

Ingredient(s)	CAS #	ACGIH	OSHA
Sodium hydroxide	1310-73-2	2 mg/m <sup>3</sup> (Ceiling)	2 mg/m <sup>3</sup> (TWA)

### Undiluted Product:

#### Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels.

#### Personal Protective Equipment

<b>Eye protection:</b>	Chemical-splash goggles.
<b>Hand protection:</b>	Chemical-resistant gloves.
<b>Skin and body protection:</b>	Protective footwear. If major exposure is possible, wear suitable protective clothing and footwear.
<b>Respiratory protection:</b>	No personal protective equipment required under normal use conditions.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice.

### Diluted Product:

#### Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels.

<b>Eye protection:</b>	No personal protective equipment required under normal use conditions.
<b>Hand protection:</b>	No personal protective equipment required under normal use conditions.
<b>Skin and body protection:</b>	No personal protective equipment required under normal use conditions.
<b>Respiratory protection:</b>	No personal protective equipment required under normal use conditions.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid

**Evaporation Rate:** No information available

**Odor threshold:** No information available.

**Melting point/range:** Not determined

**Autoignition temperature:** No information available

**Solubility in other solvents:** No information available

**Density:** 10.51 lbs/gal 1.26 Kg/L

**Bulk density:** No information available

**Flash point (°F):** > 200 °F > 93.3 °C

**Viscosity:** No information available

**VOC:** 0 % \*

**Flammability (Solid or Gas):** Not applicable

**Sustained combustion:** Not applicable

**Explosion limits:** - upper: Not determined - lower: Not determined  
@ 1:64

**Color:** Clear, Pale, Yellow Green

**Odor:** Chlorine

**Boiling point/range:** Not determined

**Decomposition temperature:** Not determined

**Solubility:** No information available

**Relative Density (relative to water):** 1.26

**Vapor density:** No information available

**Vapor pressure:** No information available.

**Partition coefficient (n-octanol/water):** No information available

**Elemental Phosphorus:** 0.00 % by wt.

**pH:** 14.0

**Corrosion to metals:** Corrosive

**Dilution pH:** 12.9

**Dilution Flash Point (°F):** > 200 °F > 93.4 °C

**VOC % by wt. at use dilution** 0

\* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not Applicable

Benefit™

Phosphate-free liquid chlorinated cleaner

<b>Stability:</b>	The product is stable
<b>Possibility of hazardous reactions:</b>	May vigorously react with acids resulting in spattering and excessive heat.
<b>Hazardous decomposition products:</b>	None reasonably foreseeable.
<b>Materials to avoid:</b>	Acids. Ammonia. Strong acids. Do not mix with any other product or chemical unless specified in the use directions.
<b>Conditions to avoid:</b>	No information available.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

Eye contact, Skin contact, Inhalation, Ingestion

### Delayed, immediate, or chronic effects and symptoms from short and long-term exposure

**Skin contact:** Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed).

**Eye contact:** Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.

**Ingestion:** Causes burns/ serious damage to mouth, throat and stomach. Symptoms may include stomach pain and nausea.

**Inhalation:** May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.

**Sensitization:** No known effects.

**Target Organs (SE):** None known

**Target Organs (RE):** None known

### Numerical measures of toxicity

**ATE - Oral (mg/kg):** 2600

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available.

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products (undiluted product):** This product, as sold, if discarded or disposed, is a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

**Waste from residues / unused products (diluted product):** This product, when diluted as stated on this SDS, is a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

**RCRA Hazard Class (undiluted product):** D002 Corrosive Waste

**RCRA Hazard Class (diluted product):** D002 Corrosive Waste

**Contaminated Packaging:** Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

**DOT (Ground) Bill of Lading Description:** UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (sodium hydroxide, sodium hypochlorite), 8, II

**IMDG (Ocean) Bill of Lading Description:** UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (sodium hydroxide, sodium hypochlorite), 8, II, MARINE POLLUTANT

## 15. REGULATORY INFORMATION

### International Inventories at CAS# Level

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL).

### RIGHT TO KNOW (RTK)

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
Sodium hydroxide	1310-73-2	X	X	X	X
Sodium polyacrylate	9003-04-7	-	-	-	-
Sodium hypochlorite	7681-52-9	X	X	X	X
Sodium chloride	7647-14-5	-	-	-	-

### CERCLA/ SARA

Ingredient(s)	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Sodium hydroxide	1310-73-2	10 - 20%	1000		
Sodium hypochlorite	7681-52-9	3 - < 5%	100		

### Canadian Regulations

## 16. OTHER INFORMATION

### NFPA (National Fire Protection Association)

Rating Scale: (Low Hazard) 0 - 4 (Extreme Hazard)

Health 3  
Flammability 0  
Instability 0

### Diluted Product:

Health 0  
Flammability 0  
Instability 0

Version Number: 2  
Preparation date: 2018-08-08

Reason for revision: Not applicable  
Prepared by: NAPRAC  
Additional advice: • Does not contain an added fragrance

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**Benefit**<sup>TM/MC</sup>

**VC62**

## Phosphate-Free Liquid Chlorinated Cleaner

### Description

Benefit detergent is a heavy duty, liquid chlorinated cleaner designed for circulation, pressure spray and foam cleaning of dairy, meat and food processing equipment.

### Effective

- Removes protein films
- Good hard water control, free-rinsing, leaves no hard water films

### Cost-Effective

- Minimizes acid cleaning cycles in most clean-in-place (CIP) operations
- Low concentrations can be used to obtain excellent cleaning results

### Easy-to-Use

- Can be fed and controlled automatically in CIP systems

### Low Foaming

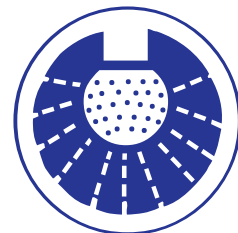
- Low foaming, improves rinsing, prevents pump cavitation and ensures full pipeline circuits

### Phosphate-Free

- Reduces phosphorus in effluent
- Acceptable for use in areas that restrict phosphates

### Discussion

Benefit detergent is a versatile non-phosphated, low foaming chlorinated cleaner for use in dairy, meat and food processing plants. Its primary use is in automated CIP systems to clean product equipment and lines. Excellent cleaning results are obtained in these systems using low concentrations. This product is excellent for CIP cleaning of bakery liquid fermentation systems. It can be used effectively in high pressure and foam cleaning systems with the use of foam additives.



**Diverflow**



**Benefit**<sup>TM/MC</sup>

**VC62**

## Phosphate-Free Liquid Chlorinated Cleaner

### Use Instructions

**CIP and Spray Cleaning:** Cold process pipelines, tanks, bulk tanks and product lines.

1. Rinse equipment immediately after use.
2. Circulate solution using 1.6–8 mL/L (0.33–1 U.S. fl. oz./U.S. gal.) at 60–66°C (140–150°F) for 15–20 minutes.
3. Rinse with potable water.
4. Sanitize with the appropriate Diversey sanitizer.

### High Temperature Short Time (HTST) Circulation Cleaning:

**NOTE:** Check gasket condition first, changing procedures can destroy old, poor condition gaskets.

1. Rinse unit immediately after use with cool water until discharge runs clear.
2. Circulate a Diversey CIP acid as directed for 30 minutes.
3. Rinse with warm water until all acid solution has been rinsed from unit.

4. Circulate solution using 8–12 mL/L (1–1.5 fl. oz./U.S. gal.) at 77–79°C (170–175°F) for 40–60 minutes.
5. Rinse with cool water until all Benefit solution has been rinsed out of unit and unit has cooled down.
6. Acid rinse using 1 mL/L (0.1 fl. oz./U.S. gal.) of a Diversey acid cleaner.
7. Sanitize unit just before production with the appropriate Diversey sanitizer.

### For Canadian Use Only:

#### Egg Washing

1. Use 2 mL–12 mL/L of water (0.33–2 U.S. fl. oz. / U.S. gal.) to maintain a pH of 10.5 at temperatures between 40–50°C (100–120°F).
2. Eggs destined for human consumption should be rinsed thoroughly with potable water after use of this product.

### Technical data

Certification	Acceptable for use in food processing facilities. NSF Nonfood Compounds Program Listed.
Color/Form	Clear pale yellow/green liquid
Specific Gravity	1.26
% Available Chlorine	3.0 (as packaged)
% P	0.0
pH (1%)	12.4
% Total Alkalinity (as Na <sub>2</sub> O)	12.75

The above data is typical of normal production and should not be taken as a specification.

### Safe handling and storage information

Store in original closed containers, away from extreme temperatures. Full guidance on the handling and disposal of this product is provided in a separate Safety Data Sheet.

### Product compatibility

Benefit detergent when applied at the recommended concentration and temperature, is suitable for use on the grades of stainless steel commonly found in the processed food industry. It is unsuitable for use on soft metals such as aluminum and galvanized materials. Always rinse surfaces thoroughly after use. In the event of uncertainty it is advisable to evaluate individual materials before any prolonged use.

### Test Kit

Alkaline Test Kit #409879 or 409239

### Precautionary Statement

Refer to current Safety Data Sheet.