



Becton, Dickinson and  
Company  
BD, Franklin Lakes, NJ  
07417 USA  
www.bd.com

# SAFETY DATA SHEET

## 1. Identification

### Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
340345	BD® FACSClean	No data available

### Other means of identification

SDS number: 088100018880

### Recommended use and restriction on use

**Recommended use:** Scientific and Industrial laboratory use.

**Restrictions on use:** None known.

### Manufacturer/Importer/Supplier/Distributor Information

#### Manufacturer

Company Name: Becton, Dickinson and Company - BD Biosciences  
Address: 2350 Qume Drive  
95131 San Jose, CA USA  
Telephone: 1 877 232 8995 or 1 800 424 9300  
Fax:  
Contact Person: Technical Services  
E-mail: ResearchApplications@bd.com or ClinicalApplications@bd.com

**Emergency telephone number:** CHEMTREC 1 800 424 9300

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A

#### Environmental Hazards

Acute hazards to the aquatic environment	Category 2
Chronic hazards to the aquatic environment	Category 3

### Label Elements

**Hazard Symbol:**



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**Signal Word:** Warning

**Hazard Statement:** H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H401: Toxic to aquatic life.  
H412: Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:** P264: Wash thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
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 water/...  
P332+P313: If skin irritation occurs: Get medical advice/attention.  
P321: Specific treatment (see on this label).  
P362: Take off contaminated clothing.

**Disposal:** P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Hypochlorous acid, sodium salt (1:1)	No data available.	7681-52-9	1%
Sodium hydroxide (Na(OH))	No data available.	1310-73-2	0.8%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures



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<b>General information:</b>	Causes serious eye irritation. Causes skin irritation.
<b>Ingestion:</b>	DO NOT induce vomiting. Get medical attention immediately.
<b>Inhalation:</b>	Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.
<b>Skin Contact:</b>	Promptly flush contaminated skin with soap or mild detergent and water. Promptly remove clothing if penetrated and flush the skin with water.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Most important symptoms/effects, acute and delayed**

<b>Symptoms:</b>	No data available.
<b>Hazards:</b>	Causes serious eye irritation. Causes skin irritation.

**Indication of immediate medical attention and special treatment needed**

<b>Treatment:</b>	Get medical attention if symptoms occur.
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<b>5. Fire-fighting measures</b>
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<b>General Fire Hazards:</b>	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.
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**Suitable (and unsuitable) extinguishing media**

<b>Suitable extinguishing media:</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media:</b>	Avoid water in straight hose stream; will scatter and spread fire.

<b>Specific hazards arising from the chemical:</b>	Fire or excessive heat may produce hazardous decomposition products.
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**Special protective equipment and precautions for firefighters**

<b>Special fire fighting procedures:</b>	No unusual fire or explosion hazards noted.
<b>Special protective equipment for fire-fighters:</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.



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## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.
<b>Methods and material for containment and cleaning up:</b>	Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
<b>Environmental Precautions:</b>	Avoid release to the environment.

## 7. Handling and storage

<b>Precautions for safe handling:</b>	When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required.
<b>Conditions for safe storage, including any incompatibilities:</b>	Store in a cool, dry place. Keep container tightly closed. Keep from contact with oxidizing materials.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Sodium hydroxide (Na(OH))	Ceiling	2 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	Ceiling	2 mg/m <sup>3</sup>	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Sodium hydroxide (Na(OH)) - Particulate.	AN ESL	2 µg/m <sup>3</sup>	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011)
	ST ESL	20 µg/m <sup>3</sup>	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011)
Sodium hydroxide (Na(OH))	Ceiling	2 mg/m <sup>3</sup>	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (08 2010)
	Ceiling	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values, as amended (12 2010)
	Ceil_Time	2 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	PEL	2 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	IDLH	10 mg/m <sup>3</sup>	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)

<b>Appropriate Engineering Controls</b>	No special requirements under ordinary conditions of use and with adequate ventilation.
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## Individual protection measures, such as personal protective equipment

<b>General information:</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
<b>Eye/face protection:</b>	Wear safety glasses with side shields (or goggles).
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Chemical resistant gloves Suitable gloves can be recommended by the glove supplier. Wash hands after contact.
<b>Other:</b>	Wear a lab coat or similar protective clothing.
<b>Respiratory Protection:</b>	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Aqueous Solution
<b>Color:</b>	Colorless
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.



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<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	Product is not reactive under normal conditions and recommended use.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Material is stable under normal conditions.
<b>Conditions to avoid:</b>	Avoid exposure to high temperatures or direct sunlight.
<b>Incompatible Materials:</b>	Water reactive material. Metals. Avoid contact with oxidizers or reducing agents. Avoid contact with acids.
<b>Hazardous Decomposition Products:</b>	Contact with acids liberates toxic gas. Stable; however, may decompose if heated.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	No data available.
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#### **Dermal**

**Product:** No data available.

#### **Inhalation**

**Product:** ATEmix: 525 mg/l

#### **Repeated dose toxicity**

**Product:** No data available.

#### **Specified substance(s):**

Hypochlorous acid, sodium salt (1:1)  
LOAEL (Rat(Female), Oral, 90 d): > 24.9 mg/kg Oral Experimental result, Key study  
LOAEL (Mouse(Female, Male), Oral, 90 d): > 34.4 mg/kg Oral Experimental result, Key study  
LOAEL (Rat(Female, Male), Inhalation): <= 3 mg/m<sup>3</sup> Inhalation Read-across from supporting substance (structural analogue or surrogate), Supporting study  
LOAEL (Rat(Male), Oral, 90 d): > 16.7 mg/kg Oral Experimental result, Key study  
NOAEL (Rat(Female), Oral, 90 d): >= 24.9 mg/kg Oral Experimental result, Key study

#### **Skin Corrosion/Irritation**

**Product:** No data available.

#### **Specified substance(s):**

Hypochlorous acid, sodium salt (1:1)  
in vivo (Rabbit): Irritating Experimental result, Supporting study

Sodium hydroxide (Na(OH))  
in vivo (Rabbit): Irritating Experimental result, Weight of Evidence study  
in vivo (Rabbit): Slightly irritating Experimental result, Weight of Evidence study

#### **Serious Eye Damage/Eye Irritation**

**Product:** No data available.

#### **Specified substance(s):**

Sodium hydroxide (Na(OH))  
in vivo (Rabbit, 1 d): Mild irritant OECD GHS  
in vivo (Rabbit, 2 d): Mild irritant OECD GHS  
in vivo (Rabbit, 3 d): Mild irritant OECD GHS  
in vivo (Rabbit, 4 d): Mild irritant OECD GHS

#### **Respiratory or Skin Sensitization**

**Product:** No data available.



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**Specified substance(s):**

Hypochlorous acid,  
sodium salt (1:1)

Skin sensitization:, in vivo (Guinea pig): Non sensitising

**Carcinogenicity**

**Product:**

No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:**

No data available.

**In vivo**

**Product:**

No data available.

**Reproductive toxicity**

**Product:**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:**

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:**

No data available.

**Aspiration Hazard**

**Product:**

No data available.

**Other effects:**

No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:**

Toxic to aquatic organisms.





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**Aquatic Invertebrates**

**Product:** Toxic to aquatic organisms.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** Substantial amounts of the product may lead to a local change in acidity in small water systems which may have adverse effects on aquatic organisms.

**Aquatic Invertebrates**

**Product:** Aquatic plants and animals may be adversely affected if they have direct contact with this material.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** The subject product is expected to biodegrade and is not expected to persist for long periods in an aquatic environment.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

Hypochlorous acid, sodium salt (1:1) No data available.

Sodium hydroxide (Na(OH)) No data available.

**Other adverse effects:** None known.

**13. Disposal considerations**

**General information:** This material and its container must be disposed of as hazardous waste. Dispose of waste and residues in accordance with local authority requirements.



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**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

#### 14. Transport information

<b>DOTUN Number:</b>	Not regulated.
<b>UN Proper Shipping Name:</b>	Not regulated.
<b>Transport Hazard Class(es)</b>	
Class:	Not regulated.
Label(s):	Not regulated.
<b>Packing Group:</b>	Not regulated.
<b>Marine Pollutant:</b>	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
<b>Special precautions for user:</b>	Not regulated.

#### IMDG

<b>UN Number:</b>	Not regulated.
<b>UN Proper Shipping Name:</b>	Not regulated.
<b>Transport Hazard Class(es)</b>	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
EmS No.:	Not regulated.
<b>Packing Group:</b>	Not regulated.
<b>Environmental Hazards</b>	
Marine Pollutant:	Not regulated.
<b>Special precautions for user:</b>	Not regulated.

#### IATA

<b>UN Number:</b>	Not regulated.
<b>Proper Shipping Name:</b>	Not regulated.
<b>Transport Hazard Class(es):</b>	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
<b>Packing Group:</b>	Not regulated.
<b>Environmental Hazards</b>	
Marine pollutant:	Not regulated.
<b>Special precautions for user:</b>	Not regulated.

#### 15. Regulatory information

##### US Federal Regulations



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

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Hypochlorous acid, sodium salt (1:1)	100 lbs.
Sodium hydroxide (Na(OH))	1000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate (Acute) Health Hazards  
Skin Corrosion or Irritation  
Serious eye damage or eye irritation

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
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**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Hypochlorous acid, sodium salt (1:1)	Reportable quantity: 100 lbs.
Sodium hydroxide (Na(OH))	Reportable quantity: 1000 lbs.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

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

<u>Chemical Identity</u>
Hypochlorous acid, sodium salt (1:1)



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**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

<b>16. Other information, including date of preparation or last revision</b>
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**Issue Date:** 05/06/2020

**Version #:** 3.2

**Revision Information:**

**Source of information:** European Chemicals Agency (ECHA): Information on Chemicals.

**Further Information:** No data available.

**Disclaimer:**  
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