

Dimension® system ACP Flex® reagent cartridge

MSDS no. DEDM0004

Section 1. Chemical product and company identification

Product Trade Name	: Dimension® system ACP Flex® reagent cartridge
Product code	: DF11
Synonyms	: Acid Phosphatase reagent cartridge Dimension® clinical chemistry system Flex® reagent cartridge ACP
Manufactured/ Supplied	: Dade Behring Inc. Corporate Headquarters 1717 Deerfield Road Deerfield, IL 60015-0778 1-847-267-5300 Dade Behring Canada Inc. 1200 Courtneypark Drive East Mississauga, Ontario, Canada L5T-1P2 (905) 564-7333 (800) 264-0083
In Case of Emergency	: Transportation: (800) 424-9300 (CHEMTREC) Medical: (800) 228-5635 ext. 284 (Prosar)
Material uses	: Diagnostic agents.

Section 2. Hazards identification

Physical state	: Liquid. and Solid.
Emergency overview	: Warning CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED. MAY CAUSE SEVERE ALLERGIC SKIN REACTION. CAUSES RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: LUNGS, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.

Potential acute health effects

Routes of entry

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin. May cause sensitization by skin contact.
Inhalation	: Irritating to respiratory system.
Ingestion	: Toxic if swallowed. May cause burns to mouth, throat and stomach.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Reproduction toxicity	: No known significant effects or critical hazards.

See toxicological information (section 11)

Section 3. Composition, Information on Ingredients

Name	CAS number	% by weight
poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	25322-68-3	5.45
sodium hydroxide	1310-73-2	4
2-chloracetamide	79-07-2	1.36

Section 4. First aid measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Chemical burns must be treated promptly by a physician.
- Skin contact** : Get medical attention immediately. Chemical burns must be treated promptly by a physician. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Get medical attention immediately. Chemical burns must be treated promptly by a physician. Loosen tight clothing such as a collar, tie, belt or waistband. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel.

Section 5. Fire fighting measures

- Flammability of the product** : Non-flammable.
- Products of combustion** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.), halogenated compounds, phosphates, hydrogen chloride. Some metallic oxides.
- Fire-fighting media and instructions** : In case of fire, use water spray (fog), foam or dry chemical.
- No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : Absorb with an inert material and place in an appropriate waste disposal container.

Section 7. Handling and storage

- Handling** : Do not ingest. Do not get in eyes or on skin or clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure controls, personal protection

- Engineering controls** : Good general ventilation should be sufficient to control airborne levels.
- Personal protection**
- Eyes** : Safety glasses.
- Skin** : Additional body garments should be used to avoid exposed skin surfaces (e.g. sleevelets, apron, disposable suit etc.), based on the task being performed.
- Respiratory** : A respirator is not needed under normal and intended conditions of product use.
- Hands** : Chemical-resistant gloves.

Product name

sodium hydroxide

Exposure limits

OSHA PEL (United States, 8/1997).
TWA: 2 mg/m³ 8 hour/hours.
OSHA PEL 1989 (United States, 3/1989).
CEIL: 2 mg/m³
ACGIH TLV (United States, 1/2006).
CEIL: 2 mg/m³

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state : Liquid. and Solid.
pH : Basic.
Specific gravity : Weighted average: 1.44 (Water = 1)

Section 10. Stability and reactivity

Stability and reactivity : The product is stable.
Incompatibility with various substances : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, acids and alkalis.
Hazardous decomposition products : These products are halogenated compounds, hydrogen chloride.

Section 11. Toxicological information

Toxicity data

Ingredient name	Test	Result	Route	Species
poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	LD50	600 mg/kg	Oral	Rat
	LD50	1054 mg/kg	Oral	Rat
	LD50	27500 mg/kg	Oral	Rat
	LD50	>20000 mg/kg	Dermal	Rabbit
sodium hydroxide	LDLo	500 mg/kg	Oral	Rabbit
	LDLo	1.57 mg/kg	Oral	human
2-chloracetamide	LD50	138 mg/kg	Oral	Rat
	LD50	122 mg/kg	Oral	Rabbit
	LD50	31 mg/kg	Oral	Dog

Chronic Effects

CARCINOGENIC EFFECTS: Classified None. by NIOSH
MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. [2-chloracetamide].
Contains material which causes damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea.

Section 12. Ecological information

Ecotoxicity data

Ingredient name	Species	Period	Result
poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	Oncorhynchus mykiss (LC50)	96 hour/hours	>20000 mg/l

Products of degradation : These products are carbon oxides (CO, CO₂) and water, nitrogen oxides (NO, NO₂ etc.), halogenated compounds, phosphates. Some metallic oxides.



Toxicity of the products of biodegradation : The products of degradation are as toxic as the product itself.

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	1824	Sodium Hydroxide Solutions (sodium hydroxide)	8	III		- No additional remark.
IATA-DGR Class	1824	Sodium hydroxide solution (sodium hydroxide)	8	III		-

Section 15. Regulatory information

United States

HCS Classification

: Toxic material
Corrosive material
Sensitizing material
Target organ effects

U.S. Federal regulations

: SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: citric acid; sodium hydroxide; 2-chloracetamide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: citric acid: Immediate (acute) health hazard; sodium hydroxide: Immediate (acute) health hazard; 2-chloracetamide: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: sodium hydroxide
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations

: Pennsylvania RTK: sodium hydroxide: (environmental hazard, generic environmental hazard)
Minnesota: poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-
Massachusetts RTK: sodium hydroxide
New Jersey: sodium hydroxide

Canada

WHMIS (Canada)

: Not a WHMIS controlled material.
CEPA DSL: citric acid; mannitol, d-; poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-; sodium hydroxide; 1(3h)-isobenzofuranone, 3-[4-hydroxy-2-methyl-5-(1-methylethyl)phenyl]-3-[2-methyl-5-(1-methylethyl)-4-(phosphonooxy)phenyl]-, sodium salt; 2-chloracetamide

Section 16. Other information

Label requirements



Corrosive

R34- Causes burns.

R43- May cause sensitization by skin contact.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.