

LA Flex® reagent cartridge

MSDS no. DEDM0012

Section 1. Chemical product and company identification

- Product Trade Name** : LA Flex® reagent cartridge
- Product code** : DF16 K3016
- Synonyms** : Lactic Acid Flex® reagent cartridge
Dimension® clinical chemistry system Flex® reagent cartridge LA
Dimension Vista™ System Flex® reagent cartridge LA
- 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)
- Product Information** : 800-441-9250
- Material uses** : Diagnostic agents.

Section 2. Hazards identification

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

Potential acute health effects

Routes of entry

- Eyes** : Irritating to eyes.
- Skin** : Severely irritating to the skin. May cause sensitization by skin contact.
- Inhalation** : Severely irritating to the respiratory system.
- Ingestion** : Toxic if swallowed.
- 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 |
|--|-------------------|--------------------|
| glycerin | 56-81-5 | 40 |
| hydrazine, sulfate (2:1) | 13464-80-7 | 26 |
| 1,3-propanediol, 2-amino-2-(hydroxymethyl)- | 77-86-1 | 18 |
| ammonium hydrogen sulfate | 7783-20-2 | 18 |
| poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- | 25322-68-3 | 8 |
| neomycin sulfate | 1405-10-3 | <0.001 |

Section 4. First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention.
- Skin contact** : Get medical attention immediately. 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. Move exposed person to fresh air. Loosen tight clothing such as a collar, tie, belt or waistband. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Section 5. Fire fighting measures

- Flammability of the product** : Non-flammable.
- Fire-fighting media and instructions** : In case of fire, use water spray (fog), foam or dry chemical.
- 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. Avoid contact with eyes, skin and 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

glycerin

Exposure limits

OSHA (United States, 1994). Notes: Total

TWA: 15 mg/m³

OSHA (United States, 1989). Notes: Respirable

TWA: 5 mg/m³

OSHA PEL (United States, 8/1997).

TWA: 5 mg/m³ 8 hour/hours. Form: Respirable fraction

TWA: 15 mg/m³ 8 hour/hours. Form: Total dust

OSHA PEL 1989 (United States, 3/1989).

TWA: 5 mg/m³ 8 hour/hours. Form: Respirable fraction

TWA: 10 mg/m³ 8 hour/hours. Form: Total dust

ACGIH (United States).

TWA: 10 mg/m³

ACGIH TLV (United States, 1/2005). Notes: Inhalable fraction. See

Appendix C, paragraph A. Inhalable Particulate Mass TLVs

(IPM–TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.

TWA: 10 mg/m³ 8 hour/hours. Form: Mist

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

| | |
|-----------------------------------|---|
| Physical state | : Liquid and solid |
| pH | : Basic. |
| Boiling/condensation point | : The lowest known value is 100°C (212°F) (water). Weighted average: 132.57°C (270.6°F) |
| Melting/freezing point | : May start to solidify at 19.85°C (67.7°F) based on data for: glycerin. Weighted average: 3.4°C (38.1°F) |
| Critical temperature | : The lowest known value is 452°C (845.6°F) (glycerin). |
| Specific gravity | : Weighted average: 1.31 (Water = 1) |
| Vapor pressure | : The highest known value is 2e-005 kPa (0.0002 mm Hg) (at 20°C) (glycerin). |
| Vapor density | : The highest known value is 3.1 (Air = 1) (glycerin). |
| Viscosity | : Dynamic: The highest known value is 954 cP (glycerin) |
| Ionicity (in water) | : Amphoteric. (water). |

Section 10. Stability and reactivity

| | |
|---|--------------------------|
| Stability and reactivity | : The product is stable. |
| Hazardous decomposition products | : None identified. |
| Hazardous polymerization | : Will not occur. |

Section 11. Toxicological information

Toxicity data

| Ingredient name | Test | Result | Route | Species |
|---|-------------|---------------|--------------|----------------|
| glycerin | LD50 | 12600 mg/kg | Oral | Rat |
| | LD50 | 4090 mg/kg | Oral | Mouse |
| | LD50 | 7750 mg/kg | Oral | Guinea pig |
| | LD50 | >10000 mg/kg | Dermal | Rabbit |
| | LD50 | 200 mg/kg | Oral | Rat |
| hydrazine, sulfate (2:1) | LD50 | 5900 mg/kg | Oral | Rat |
| 1,3-propanediol, 2-amino-2-(hydroxymethyl)- | LDLo | 1000 mg/kg | Oral | Rabbit |

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| | | | | |
|--|------|--------------|--------|-------------------|
| ammonium hydrogen sulfate | LD50 | 2840 mg/kg | Oral | Rat |
| | LD50 | 640 mg/kg | Oral | Mouse |
| | LD50 | 640 mg/kg | Oral | Mouse |
| | LDLo | 3500 mg/kg | Oral | Domestic animals. |
| 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 |
| neomycin sulfate | LD50 | >8000 mg/kg | Oral | Mouse |
| | LDLo | 12600 mg/kg | Oral | Human/30 min |

Chronic Effects

CARCINOGENIC EFFECTS: Classified 2 (Suspected for humans.) by European Union [hydrazine, sulfate (2:1)].

MUTAGENIC EFFECTS

: Mutagenic for bacteria and/or yeast. Mutagenic for bacteria and/or yeast. [glycerin].

Contains material which causes damage to the following organs: kidneys, lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea.

Section 12. Ecological information**Ecotoxicity data**

| Ingredient name | Species | Period | Result |
|--|----------------------------|---------------|---------------|
| glycerin | Oncorhynchus mykiss (LC50) | 96 hour/hours | 54000 mg/l |
| ammonium hydrogen sulfate | Oncorhynchus mykiss (LC50) | 96 hour/hours | 6.6 mg/l |
| | Pimephales promelas (LC50) | 96 hour/hours | >20 mg/l |
| | Daphnia magna (LC50) | 96 hour/hours | >20 mg/l |
| | Oncorhynchus mykiss (LC50) | 96 hour/hours | 36.7 mg/l |
| | Oncorhynchus mykiss (LC50) | 96 hour/hours | 39.2 mg/l |
| | Oncorhynchus mykiss (LC50) | 96 hour/hours | >20000 mg/l |
| 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.), sulfur oxides (SO₂, SO₃ etc.), phosphates.

Toxicity of the products of biodegradation : The products of degradation are less toxic than 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 | Not regulated. | - | - | - | | - |
| IATA-DGR Class | Not regulated. | - | - | - | | - |

Section 15. Regulatory information

United States

- HCS Classification** : Toxic material
Irritating 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: ammonium hydrogen sulfate; glycerin
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: hydrazine, sulfate (2:1): Immediate (acute) health hazard; ammonium hydrogen sulfate: Immediate (acute) health hazard; glycerin: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: sodium phosphate, dibasic
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: glycerin

SARA 313

| | <u>Product name</u> | <u>CAS number</u> | <u>Concentration</u> |
|--|-----------------------------|-------------------|----------------------|
| Form R - Reporting requirements | : ammonium hydrogen sulfate | 7783-20-2 | 18 |
| Supplier notification | : ammonium hydrogen sulfate | 7783-20-2 | 18 |

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

- State regulations** : Rhode Island RTK hazardous substances: ammonium hydrogen sulfate; glycerin
Pennsylvania RTK: ammonium hydrogen sulfate: (environmental hazard, generic environmental hazard); glycerin: (generic environmental hazard); sodium phosphate, dibasic: (environmental hazard, generic environmental hazard)
Minnesota: poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-; glycerin
Massachusetts RTK: ammonium hydrogen sulfate; glycerin; sodium phosphate, dibasic
New Jersey: ammonium hydrogen sulfate; sodium phosphate, dibasic
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| <u>P65 Ingredient name</u> | <u>Cancer</u> | <u>Reproductive</u> | <u>No significant risk level</u> | <u>Max acceptable dosage</u> |
|----------------------------|---------------|---------------------|----------------------------------|------------------------------|
| Neomycin sulfate | No. | Yes. | No. | No. |

Canada

- WHMIS (Canada)** : Not a WHMIS controlled material.
CEPA DSL: water; 1,3-propanediol, 2-amino-2-(hydroxymethyl)-; adenosine 5'-(trihydrogen diphosphate), p'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-d-ribofuranosylpyridinium, inner salt; mannitol, d-; poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-; hydrazine, sulfate (2:1); ammonium hydrogen sulfate; glycerin; albumins, blood serum
Canadian NPRI: ammonium hydrogen sulfate

Section 16. Other information

Label requirements

:



Toxic, Dangerous for the environment.

R45- May cause cancer.

R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.

R36- Irritating to eyes.

R43- May cause sensitization by skin contact.

R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S53- Avoid exposure - obtain special instructions before use.

S36/37- Wear suitable protective clothing and gloves.

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

S57- Use appropriate containment to avoid environmental contamination.

S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

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Version

: 1.03

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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.