

T4 Flex® reagent cartridge

MSDS no. DEDM0021

Section 1. Chemical product and company identification

- Product Trade Name** : T4 Flex® reagent cartridge
- Product code** : DF65 K6065
- Synonyms** : Thyroxine Flex® reagent cartridge
Dimension® clinical chemistry system Flex® reagent cartridge T4
Dimension Vista™ System Flex® reagent cartridge T4
- 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.
- Emergency overview** : Warning!
CAUSES SEVERE RESPIRATORY TRACT IRRITATION.
CAUSES EYE AND SKIN IRRITATION.
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
BLOOD, KIDNEYS, LUNGS, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.
MAY BE HARMFUL IF SWALLOWED.

Potential acute health effects

Routes of entry

- Eyes** : Irritating to eyes.
- Skin** : Irritating to skin.
- Inhalation** : Severely irritating to the respiratory system.
- Ingestion** : Harmful 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
mannitol, d-	69-65-8	20
sodium chloride	7647-14-5	6
poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	25322-68-3	5
1,3-propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	1185-53-1	3
sodium hydroxide	1310-73-2	2
sodium azide	26628-22-8	<0.1

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** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : 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. Get medical attention.

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 transfer the spilled material and absorbent to 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.

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Product name

poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-

Exposure limits

AIHA WEEL (United States, 1/2005).

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

OSHA PEL (United States, 8/1997).

TWA: 2 mg/m³ 8 hour/hours. Form: All forms

ACGIH TLV (United States, 1/2005).

CEIL: 2 mg/m³ Form: All forms

sodium hydroxide

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state	: Liquid.
pH	: Basic.
Boiling/condensation point	: The lowest known value is 100°C (212°F) (water).
Melting/freezing point	: May start to solidify at 0°C (32°F) based on data for: water.
Specific gravity	: Weighted average: 1.07 (Water = 1)
Vapor pressure	: The highest known value is 2.4 kPa (18 mm Hg) (at 20°C) (water).
Ionicity (in water)	: Amphoteric. (water).

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, metals and moisture . Contact with acids and acidic solutions may cause generation of very irritating, flammable hydrazoic acid gas.
Hazardous decomposition products	: These products are halogenated compounds, hydrogen chloride.
Hazardous polymerization	: Will not occur.

Section 11. Toxicological information

Toxicity data

Ingredient name	Test	Result	Route	Species
mannitol, d-	LD50	13500 mg/kg	Oral	Rat
	LD50	>22000 mg/kg	Oral	Mouse
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

Chronic Effects

CARCINOGENIC EFFECTS: No known significant effects or critical hazards.

MUTAGENIC EFFECTS: No known significant effects or critical hazards.

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

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.
Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

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 Solution	8	III		- No additional remark.
IATA-DGR Class	1824	SODIUM HYDROXIDE, SOLUTION (sodium hydroxide)	8	III		-

Section 15. Regulatory information

United States

HCS Classification : Irritating 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: sodium chloride; sodium hydroxide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: sodium chloride: Immediate (acute) health hazard, Delayed (chronic) health hazard; sodium hydroxide: Immediate (acute) 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.

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State regulations : Pennsylvania RTK, sodium hydroxide: (environmental hazard, generic environmental hazard)
Massachusetts RTK: sodium hydroxide
New Jersey: sodium hydroxide

Canada

WHMIS (Canada) : Not a WHMIS controlled material.
CEPA DSL: water; mannitol, d-; sodium chloride; poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-; 1,3-propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride; , sodium hydroxide

Section 16. Other information

Label requirements



Irritant
R36/38- Irritating to eyes and skin.
S24- Avoid contact with skin.
S37/39- Wear suitable gloves and eye/face protection.

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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.