Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 1 of 18	

# 1) Product and company identification:

**Product:** In Vitro Reagents **Product Code:** 4CME3

Company: GENERAL BIOLOGICALS CORP.

Address of the company:

#6, INNOVATION FIRST ROAD, HSINCHU SCIENCE PARK, BAOSHAN TOWNSHIP, HSINCHU COUNTY

30076, TAIWAN, R.O.C.

**Telephone Number for emergency of the company:** 886-3-5779221 ext. 254

Fax number of the company: 886-3-5779227 E mail of the company: Sales.group@gbc.com.tw

## 2) Composition/information on ingredients:

2.1) Chemical Characterization: preparation

**2.2) Description:** Kit of components listed below with non-hazardous additions.

#	Components	Physical appearance	96 tests 4CME3
1	Anti-h IgM Plate	Solid in aluminium foil	1 plates
2	Anti-HBc • Peroxidase Solution	Liquid in plastic bottle	1 bottle, 8 mL
3	Anti-HBc IgM Positive Control	Liquid in plastic bottle	1 bottle, 1.5 mL
4	Specimen Diluent	Liquid in plastic bottle	2 bottle, 36 mL
5	HBcAg Reagent	Liquid in plastic bottle	1 bottle, 8 mL
6	Anti-HBc IgM Negative Control	Liquid in plastic bottle	1 bottle, 2.5 mL
7	TMB Substrate Solution A	Liquid in plastic bottle	1 bottle, 12 mL
8	TMB Substrate Solution B	Liquid in plastic bottle	1 bottle, 12 mL
9	Conc. Washing Solution D (20X)	Liquid in plastic bottle	1 bottle, 58 mL
10	2N Sulfuric Acid	Liquid in plastic bottle	1 bottle, 12 mL

## 2.3) Dangerous Components:

Component	CAS No.	S No. Ingredient		S phrases	R phrases
Anti-HBc • Perox	Not found	Human/Animal sourced	13 %	Not found	Not found
idase Solution	Not found	Preparation			
	Nat farm 1	Horse-radish	Т	Not found	Nat fam d
	Not found	Peroxidase	Trace	Not found	Not found

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 2 of 18	

Component	CAS No.	Ingredient	Content	S phrases	R phrases
	1405-41-0	Gentamycin	<0.01 %	45-36/37/39-22	61-36/38-42/43
	54-64-8	Thimerosal	0.01 %	13-28-36-45-60-61	26/27/28-33-50/53
Anti-HBc IgM Positive Control	Not found	Human/Animal sourced Preparation	100 %	Not found	Not found
	1405-41-0	Gentamycin	<0.01 %	45-36/37/39-22	61-36/38-42/43
	54-64-8	Thimerosal	0.01 %	13-28-36-45-60-61	26/27/28-33-50/53
Specimen Diluent	Not found	Human/Animal Sourced Preparation	50%	Not found	Not found
	77-86-1	Tris	< 2 %	26-36	36/37/38
	26628-22-8	Sodium Azide	0.099 %	53-28-45-60-61	28-32-50/53
HBcAg Reagent	Not found	Human/Animal Sourced Preparation	50%	Not found	Not found
	77-86-1	Tris	< 2 %	26-36	36/37/38
	26628-22-8	Sodium Azide	0.099 %	53-28-45-60-61	28-32-50/53
Anti-HBc IgM Negative Control	Not found	Human/Animal sourced Preparation	100 %	Not found	Not found
	1405-41-0	Gentamycin	<0.01 %	45-36/37/39-22	61-36/38-42/43
	54-64-8	Thimerosal	0.01 %	13-28-36-45-60-61	26/27/28-33-50/53
TMB Substrate Solution A	54827-17-7	3,3',5,5'-tetramethyl Benzidine.	< 0.04 %	26-22-36	20/21/22-36/37/38-40
	68-12-2	N,N-dimethyl formamide	0.2 v/v %	Not found	1, 6, 26, 38, 84-94, 100, 116, 118, 119, 122
	67-56-1	Methanol	5 v/v %	7-16-24-45	11-23/25
	7775-14-6	Sodium bisulfite	< 0.01 %	Not found	1, 2, 4-7, 10, 12, 47, 49, 59, 63, 73, 82, 87-94, CK
TMB Substrate Solution B	7124-43-6	Urea ·Hydrogen Peroxide	< 0.05 %	17-27-26-36/37/39	8-34
	1405-41-0	Gentamycin	0.06 %	45-36/37/39-22	61-36/38-42/43

Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 3 of 18	

Component	CAS No.	Ingredient	Content	S phrases	R phrases
2N Sulfuric Acid	7664-93-9	Sulfuric Acid	< 6 v/v %	26-30-45	35

# 2.4) Additional Information

The component 1 to 6 contain materials of human or animal origin which has been inactivated at 56 °C for 1 hour. Since no test method offers complete assurance that infectious agents are absent, these components should be handled as potential infectious.



Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4		
Version	1.1		
Page	Page 4 of 18		

## 3) Hazards Identification:

# 3.1) Hazard description:

Ingredient	Classification	Routes of	Health Hazards	Environmental	Fire/explosive
	& Symbol	Entry		Hazards	Hazards
Human/ Animal Sourced Preparation Potential Biohazard	Biohazard  Fire 0  Reactivity 0  Hazard BIO 1	<ol> <li>Inhalation</li> <li>Skin         contact</li> <li>Eye         contact</li> <li>Ingestion</li> </ol>	Potential biohazard	Potential biohazard should be autoclaved before disposal.	No
Gentamycin Sulfate in Solution Irritation	Harmful or Irritant  Reactivity 0  Hazard	1. Skin contact 2. Eye contact 3. Ingestion	1. May cause skin irritation: redness or itching.  May cause systemic poisoning.  2. May cause eye irritation/sensitization.  May cause systemic poisoning.  3. May be harmful, cause irritation to the mucous membranes.  May cause systemic poisoning.	No (concentration <0.01 %)	No (Aqueous solution)

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 5 of 18	

Ingredient Classification		Routes of	Health Hazards	Environmental	Fire/explosive
	& Symbol	Entry		Hazards	Hazards
Tris Buffer	Irritation	1. Skin	1. May cause irritation to	No	No
	•	contact	skin. Symptoms include	(concentration	(Aqueous
		2. Eye	redness, itching, and	<2 %)	solution)
	Harmful or Irritant	contact	pain.		
	,	3. Ingestion	2. May cause irritation,		
			redness, and pain.		
	ire		3. May be harmful, cause		
			irritation and reddening		
Health Reactivity 0			to the mucous		
Haz	zard		membranes. Symptoms		
			may include nausea,		
			vomiting and diarrhea.		
			Estimated lethal dose:		
			50 gm.		
Thimerosal in	*	1. Skin	1. May be harmful through	Contains	No
Solution	Harmful or	contact	skin contact.	mercury	(Aqueous
Harmful	Irritant	2. Eye	2. May be harmful through	(C <sub>9</sub> H <sub>9</sub> HgNaO <sub>2</sub> S	solution)
		contact	eyes contact.	concentration	
		3. Ingestion	3. Harmful by ingestion,	<0.1 %)	
			ORL Rat LD <sub>50</sub> :		
Fire 0  Health 2  Reactivity 0  Hazard		$75 \text{mg/kg}^{-1}$ .			

Doc. No.	M-E01-B4
Version	1.1
Page	Page 6 of 18

Ingredient	Classification	Routes of	Health Hazards	Environmental	Fire/explosive
	& Symbol	Entry		Hazards	Hazards
Horse-radish	Irritation	1. Skin	1. There is at present no	No	No
peroxidase	•	contact	information or	(concentration	(Aqueous
Solution		2. Eye	indication of hazardous	is very low)	solution)
	Harmful or Irritant	contact	property.		
		3. Ingestion	2. May cause irritation.		
NFP	A Rating		3. May cause allergic		
			reaction to a small		
	Fire 0		percentage of the		
Health	Reactivity		population who exhibit		
1	•		an allergic reaction to		
Н	azard I		enzymes.		
3,3'5,5'-	Harmful or	1. Skin	Harmful, irritation, should	No	No
Tetramethyl	irritation	contact	be handled as a potential	(concentration	(Aqueous
-	*	2. Eye	carcinogen.	<0.1 %)	solution
Benzidine	Harmful or	contact			containing
Solution	Irritant	3. Ingestion			dimethyl
					sulfoxide and
					methyl alcohol)
	Fire 1				
Health	Reactivity				
2	0 Jazard				

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 7 of 18	

Ingredient	Classification	Routes of	Health Hazards	Environmental	Fire/explosive
	& Symbol	Entry		Hazards	Hazards
Methanol	Irritation	1. Inhalation	1. Cause irritation to	No	No
Aqueous	•	2. Skin	respiratory tract.	(Concentration	(Aqueous
Solution		contact	Affects central nervous	<45 v/v %)	solution)
	Harmful or Irritant	3. Eye	system, especially optic		
	Toxic	contact	nerve.		
	$\Box$	4. Ingestion	Cause dizziness,		
			nauseam muscle		
	Toxic or Very Toxic		weakness, narcosis,		
			respiratory failure.		
	Fire		2. Cause irritation to skin.		
	1		3. Cause irritation to eyes.		
Health 1	Reactivity 0		4. Harmful if digested.		
	Hazard		Affects central nervous		
			system, especially optic		
			nerve.		
			Cause dizziness,		
			nauseam muscle		
			weakness, narcosis,		
			respiratory failure.		
			Can produce blindness		
			(100 ml can be total).		

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 8 of 18	

Ingredient	Classification	Routes of	Health Hazards	Environmental	Fire/explosive
	& Symbol	Entry		Hazards	Hazards
NN-dimethyl	•	1. Inhalation	1. Irritation, nausea,	No	No
formamide		2. Skin	vomiting,	(concentration	(Aqueous
	Harmful or Irritant	contact	headache, dizziness.	<0.2 v/v%)	solution)
		3. Eye	2. Irritation, allergic		
	Fire	contact	reactions, blisters, rash,		
	2	4. Ingestion	itching, nausea,		
Health	Reactivity		vomiting, diarrhea, chest		
I	Hazard		pain, headache,		
			drowsiness, blood		
			disorders.		
			3. Irritation, blurred vision		
			4. Nausea, vomiting,		
			diarrhea, stomach pain,		
			drowsiness.		
Urea •		1. Skin	1. Harmful through skin	No	No
Hydrogen		contact	contact.	(concentration	(Aqueous
peroxide	Oxidizing	2. Eye	2. Harmful through eyes	< 0.1%)	solution)
Aqueous	Oxidizing	contact	contact.		
Solution		3. Ingestion	3. Harmful by ingestion,		
(< 0.1%)		4. Inhalation	4. Harmful by inhalation		
	Fire 0 Reactivity 3* Hazard Oxy				

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 9 of 18	

Ingredient (	Classification	Routes of	Health Hazards	Environmental	Fire/explosive
		Entry		Hazards	Hazards
Dilute		1. Inhalation	1. May cause severe irritation of	No	No
Sulfuric		2. Skin	the respiratory tract with sore	(concentration	(Aqueous
Acid	Corrosive	contact	throat, coughing, ahortness of	< 6 v/v %)	solution)
Aqueous		3. Eye contact	breath and delayed lung		
Solution		4. Ingestion	edema. May causes chemical		
(<6 v/v %)		5. Cancer	burns to the respiratory tract.		
Corrosive		hazard.	Inhalation may be fatal as a		
			result of spasm, inflammation,		
			edema of the larynx and		
Fire 0			bronchi, chemical pneumonitis		
Health	Reactivity		and pulmonary edema.		
2 Hazai	rd		Aspiration may lead to		
COF 3	3		pulmonary edema. May cause		
			systemic effects.		
			2. Causes skim burns. Continued		
			contact can cause tissue		
			necrosis. May cause skin rash,		
			and cold and clammy skin		
			with cyanosis or pale color.		
			3. Cause eye burns. May cause		
			chemical conjunctivitis and		
			corneal damage.		
			4. May cause severe and		
			permanent damage to the		
			digestive tract. Causes		
			gastrointestinal tract burns.		
			May cause systemic toxicity		
			with acidosis. May cause		
			perforation of the digestive		
			tract.		
			5. Mutation.		

Doc. N	lame
--------	------

Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4
Version	1.1
Page	Page 10 of 18

# 3.2) Classification System:

The classification is according to GLOBALLY HARMONISED SYSTEM FOR THE CLASSIFICATION AND LABELLING OF CHEMICALS (May 2001) and NFPA hazard labels.

## 4) First-aid Measures:

General Information	No special measures required.		
Inhalation	Supply fresh air. Seek medical advice in case of complaints.		
Ingestion	Rinse mouth thoroughly with water. Seek medical advice in case of complaints.		
Contact with eyes	Wash with copious amounts of water. Seek medical advice in case of complaints.		
Contact with skin	Wash thoroughly with water. Seek medical advice in case of complaints.		
Protection of First-aids	Wearing of protective gloves and avoiding the generation of aerosols.		

## 5) Fire Fighting Measures:

Suitable extinguishing agents: CO<sub>2</sub>, powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

**Special Protective Equipment:** No special measures required.

**Specific Hazards:** 

Components	Specific Hazards
1. Anti-h IgM Plate	CO.
2. Anti-HBc • Peroxidase Solution	CO, NO <sub>x</sub> , SO <sub>x</sub> , Hg.
3. Anti-HBc IgM Negative Control	$CO, NO_x, SO_x, N_2.$
4. Anti-HBc IgM Positive Control	$CO, NO_x, SO_x, N_2.$
5. Specimen Diluent	CO, NO <sub>x</sub> , SO <sub>2</sub> , N <sub>2</sub>
6. HBcAg Reagent	CO, NO <sub>x</sub> , SO <sub>2</sub> , N <sub>2</sub>
7. Washing Solution D (20X) Concentrate	CO.
8. TMB Substrate Solution A	CO, NO <sub>x</sub> , SO <sub>x</sub> .
9. TMB Substrate Solution B	CO
10. 2N Sulfuric Acid	SO <sub>x</sub> .



	Material Safety Data Sheets of	Doc. No.	M-E01-B4
Doc. Name	ANTICORASE MB-96(TMB)	Version	1.1
	ANTICORRISE NID 70(TVID)	Page	Page 11 of 18

#### 6) Accidental Release Measures:

**Personal Precautions:** Wear protective gloves and avoid the generation of aerosols.

Keep unprotected persons away.

Ensure adequate ventilation.

Environmental Precautions: Treated (inactivated) as biological hazardous contamination.

## **Methods for Cleaning Up:**

Components	Methods for Cleaning Up
2. Anti-HBc • Peroxidase Solution	Inactivated with Sodium Hypochlorite Solution
3. HB Negative Control	prior to clean with plenty of water.
4. Anti-HBc Positive Control	
5. Specimen Diluent	
6. HBcAg Reagent	
7. Washing Solution D (20X) Concentrate	Clean with plenty of water.
8. TMB Substrate Solution A	
9. TMB Substrate Solution B	
10. 2N Sulfuric Acid	]

## 7) Handling and Storage:

## 7.1) Handling:

**Technical Measures:** No special measures required.

**Precautions:** Handled as biohazards.

Wear protective gloves and avoid the generation of aerosols.

Keep TMB Solution A away from fire sources.

**Specific Safe Handling Advice:** No special measures required.

#### **7.2**) **Storage:**

**Technical Measures:** No special measures required.

**Storage conditions:** Store in  $2 \sim 8 ^{\circ}$ C.

Incompatible products: No special measures required.Packaging Materials: No special measures required.

ILIAC NAMEL	Material Safety Data Sheets of	Doc. No.	M-E01-B4
	ANTICORASE MB-96(TMB)	Version	1.1
	ANTICORRISE WID 70(TWID)	Page	Page 12 of 18

## 8) Exposure Control/Personal Protection:

## **8.1) Engineering Measures:**

Additional Information about design of technical facilities: No, see item 7).

## **8.2**) Specific Control Parameters:

Ingredients with limit values that require monitoring at the workplace: No.

Additional Information: No special measures required.

# **8.3**) Personal Protective equipment:

**Respiratory Protection:** No special measures required.

**Hand Protection:** Wear protective gloves.

**Eye Protection:** No special measures required. **Skin and Body Protection:** Wear protective gown.

**8.4) Hygiene Measures:** Handled as biohazards.

## 9) Physical and chemical Properties:

## 9.1) Physical Properties:

Component	Form	Color	Odor	m.p.	b.p.	Flash Point	Self-ignition
1. Anti-h IgM Plate	solid	colorless	odorless	N/A	N/A	N/A	N/A
2. Anti-HBc •	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
Peroxidase Solution		colorless	odorless			determined	
3. Anti-HBc IgM	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
Negative Control		colorless	odorless			determined	
4. Anti-HBc IgM	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
Positive Control		colorless	odorless			determined	
5. Specimen Diluent	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
		colorless	odorless			determined	
6. HBcAg Reagent	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
		colorless	odorless			determined	
7. Washing Solution D	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
(20X)		colorless	odorless			determined	

Doc. Name	Material Safety Data Sheets of	Doc. No.	M-E01-B4
	ANTICORASE MB-96(TMB)	Version	1.1
		Page	Page 13 of 18

Component	Form	Color	Odor	m.p.	b.p.	Flash Point	Self-ignition
8. TMB Substrate	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
Solution A		colorless	odorless			determined	
9. TMB Substrate	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
Solution B		colorless	odorless			determined	
10. 2N Sulfuric Acid	Liquid	Nearly	Nearly	Not determined	Not determined	Not	Not determined
		colorless	odorless			determined	

# **9.2) Chemical Properties:**

Component	Danger of explosion	Density	Solubility in water	Organic Solvents Content	Water content
1. Anti-h IgM Plate	No	N/A	N/A	0	0
2. Anti-HBc • Peroxidase Solution	No	Not determined	Miscible	0	Aqueous Solution
3. Anti-HBc IgM Negative Control	No	Not determined	Miscible	0	Aqueous Solution
4. Anti-HBc IgM Positive Control	No	Not determined	Miscible	0	Aqueous Solution
5. Specimen Diluent	No	Not determined	Miscible	0	Aqueous Solution
6. HBcAg Reagent	No	Not determined	Miscible	0	Aqueous Solution
7. Washing Solution D (20X)	No	Not determined	Miscible	0	Aqueous Solution
8. TMB Substrate Solution A	No	Not determined	Miscible	<5%	Aqueous Solution
9. TMB Substrate Solution B	No	Not determined	Miscible	0	Aqueous Solution
10. 2N Sulfuric Acid	No	Not determined	Miscible	0	Aqueous Solution

# 10) Stability and Reactivity:

# 10.1) Thermal decomposition/Conditions to be avoid:

Decomposition will not occur if used and stored according to the package insert.

# 10.2) Materials to be avoided:

Please use the kit in accordance with the package insert.

Doc. Name	Material Safety Data Sheets of	Doc. No.	M-E01-B4
	ANTICORASE MB-96(TMB)	Version	1.1
		Page	Page 14 of 18

# **10.3) Dangerous Reactions:**

No dangerous reactions known.

# 10.4) Dangerous decomposition products:

Components	Specific Hazards
1. Anti-h IgM Plate	CO.
2. Anti-HBc • Peroxidase Solution	CO, NO <sub>x</sub> , SO <sub>x</sub> , Hg.
3. Anti-HBc IgM Negative Control	CO, NO <sub>x</sub> , SO <sub>x</sub> , N <sub>2</sub> .
4. Anti-HBc IgM Positive Control	CO, NO <sub>x</sub> , SO <sub>x</sub> , N <sub>2</sub> .
5. Specimen Diluent	CO, NO <sub>x</sub> , SO <sub>2</sub> , N <sub>2</sub>
6. HBcAg Reagent	CO, NO <sub>x</sub> , SO <sub>2</sub> , N <sub>2</sub>
7. Washing Solution D (20X) Concentrate	CO.
8. TMB Substrate Solution A	CO, NO <sub>x</sub> , SO <sub>x</sub> .
9. TMB Substrate Solution B	СО
10. 2N Sulfuric Acid	SO <sub>x</sub> .

# 11) Toxicological Information:

# 11.1) Acute Toxicity:

Acute toxicity will not occur if used and stored according to the package insert.

# 11.2) Local Effects:

Components	Local Effects
1. Anti-h IgM Plate	No.
2. Anti-HBc • Peroxidase	May cause irritation to skin, mucous membranes and eyes.
Solution	
3. Anti-HBc IgM Negative Control	May cause irritation to skin, mucous membranes and eyes.
4. Anti-HBc IgM Positive	May cause irritation to skin, mucous membranes and eyes.
Control	
5. Specimen Diluent	May cause irritation to skin, mucous membranes and eyes.
6. HBcAg Reagent	May cause irritation to skin, mucous membranes and eyes.
7. Washing Solution D (20X)	No.
8. TMB Substrate Solution A	May cause irritation to skin, mucous membranes and eyes.
9. TMB Substrate Solution B	May cause irritation to skin, mucous membranes and eyes.

Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4
Version	1.1
Page	Page 15 of 18

Components	Local Effects
10. 2N Sulfuric Acid	May cause irritation to skin, mucous membranes and eyes.
	May cause chemical burns to the respiratory tract.

# 11.3) Sensitization:

Components	Sensitization
1. Anti-h IgM Plate	No.
2. Anti-HBc • Peroxidase	May cause sensitization to mucous membranes and eyes.
Solution	
3. Anti-HBc IgM Negative Control	May cause irritation to skin, mucous membranes and eyes.
4. Anti-HBc IgM Positive	May cause irritation to skin, mucous membranes and eyes.
Control	
5. Specimen Diluent	May cause irritation to skin, mucous membranes and eyes.
6. HBcAg Reagent	May cause irritation to skin, mucous membranes and eyes.
7. Washing Solution D (20X)	No.
8. TMB Substrate Solution A	May cause irritation to mucous membranes and eyes.
9. TMB Substrate Solution B	No.
10. 2N Sulfuric Acid	No.

# 11.4) Chronic Toxicity or Long Term Toxicity:

Components	Chronic Toxicity or Long Term Toxicity
1. Anti-h IgM Plate	No.
2. Anti-HBc • Peroxidase	May cause systemic poison.
Solution	
3. Anti-HBc IgM Negative Control	May cause systemic poison.
4. Anti-HBc IgM Positive	May cause systemic poison.
Control	
5. Specimen Diluent	May cause systemic poison.
6. HBcAg Reagent	May cause systemic poison.
7. Washing Solution D (20X)	No.
8. TMB Substrate Solution A	May affects central nervous system.
9. TMB Substrate Solution B	No.
10. 2N Sulfuric Acid	May affects central nervous system.

Doc.	Name

Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 16 of 18	

# 11.5) Carcinogenicity/Mutagenicity:

Components	Carcinogenicity/Mutagenicity
1. Anti-h IgM Plate	Not a carcinogen/mutagen.
2. Anti-HBc • Peroxidase	Not a carcinogen/mutagen.
Solution	
3. Anti-HBc IgM Negative Control	Not a carcinogen/mutagen.
4. Anti-HBc IgM Positive	Not a carcinogen/mutagen.
Control	
5. Specimen Diluent	Not a carcinogen/mutagen.
6. HBcAg Reagent	Not a carcinogen/mutagen.
7. Washing Solution D (20X)	Not a carcinogen/mutagen.
8. TMB Substrate Solution A	May be a carcinogen/mutagen.
9. TMB Substrate Solution B	Not a carcinogen/mutagen.
10. 2N Sulfuric Acid	IARC Category 1

## 11.6) Additional Toxicological Information:

Not found.

## 12) Ecological Information (Possible environmental Effects behavior and fate):

2N Sulfuric Acid: Water hazard class 2: hazardous for water.

**Other liquid components:** Water hazard class 1: slightly hazardous for water.

Do not allow undiluted liquid components or large quantities of the liquid components to reach ground water, water course or sewage system.

## 13) Disposal Considerations:

Components	Recommended Disposal Methods for		
	components/contaminated components/used components.		
1. Anti-h IgM Plate	Treated as potential infectious materials before disposal.		
2. Anti-HBc • Peroxidase	Treated as potential infectious materials before disposal.		
Solution			
3. Anti-HBc IgM Negative Control	Treated as potential infectious materials before disposal.		
4. Anti-HBc IgM Positive	Treated as potential infectious materials before disposal.		



Material Safety Data Sheets of ANTICORASE MB-96(TMB)

Doc. No.	M-E01-B4	
Version	1.1	
Page	Page 17 of 18	

Components Recommended Disposal Methods for			
	components/contaminated components/used components		
Control			
5. Specimen Diluent	Treated as potential infectious materials before disposal.		
6. HBcAg Reagent	Treated as potential infectious materials before disposal.		
7. Washing Solution D (20X)	Diluted with large quantities of water.		
8. TMB Substrate Solution A	No special measures required.		
9. TMB Substrate Solution B	No special measures required.		
10. 2N Sulfuric Acid	Neutralized with base and/or diluted with large quantities of		
	water.		
Specimens	Treated as potential infectious materials before disposal.		

## **14) Transport Information**

## 14.1) Land Transport ADR/RID:

2N Sulfuric Acid: ADR/RID Class: 8 Corrosive Substances

UN Number: UN2796 Packaging Group: II

Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s., sulfuric acid.

Other components: ADR/RID Class: None

## **14.2) Maritime Transport IMDG:**

2N Sulfuric Acid: IMDG Class: 8

UN Numbe: UN2796 Packaging Group: II

Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s., sulfuric acid.

Other components: IMDG Class: None

## 14.3) Air Transport ICAO-Ti and IATA\_DGR:

2N Sulfuric Acid: ICAO/IATA Class: 8

UN Number: UN2796 Packaging Group: II

Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s., sulfuric acid.

Other components: ICAO/IATA Class: None

Doc. Name	Material Safety Data Sheets of ANTICORASE MB-96(TMB)	Doc. No.	M-E01-B4
		Version	1.1
		Page	Page 18 of 18

# **15) Regulations:**

#### **15.1) Product Related Hazard Information:**

Observe the general safety regulations when handling the kit, its components and specimens.

#### 15.2) Labeling according to EU guidelines/NFPA chemical Hazard Labels:

The kit including its components will be classified and marked in accordance with EU Directives/NFPA Chemical Hazard Labels.

#### 15.3) Information about limitation of use:

The kit and its components are for in vitro diagnosis use and for professional use only.

# **15.4**) Code letter, risk phrases, safety phrases and hazard designation of the kit and its components: Please see 2.3) and 3.1) of this MSDS.

#### **16) Other Information:**

This MSDS is based on our present knowledge. However, it is intended only as a guide to the appropriate precautionary handling of the kit and its components for professional use. Individuals receiving this MSDS must exercise their independent judgment in determining its appropriateness for a particular purpose