

# SAFETY DATA SHEET

IMMULITE® 2000 CK-MB

**SIEMENS**  
**Healthineers** 

SDS no.:

L2KMB2\_6

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : IMMULITE® 2000 CK-MB  
**Product code** : L2KMB2/6, 10381033, 10381032

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** CK-MB Reagent Wedge Diagnostic agents.  
 CK-MB Adjustors Diagnostic agents.

**Restrictions on use** For professional users only.

**Supplier** : Siemens Healthcare Diagnostics Limited  
 Park View,  
 Watchmoor Park,  
 Camberley,  
 Surrey,  
 GU15 3YL  
 United Kingdom

Phone: +44 (0) 345 600 1955

**e-mail address of person responsible for this SDS** : dx.msds.healthcare@siemens-healthineers.com

### 1.4 Emergency telephone number

CHEMTREC: +44 20 3807 3798

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : CK-MB Reagent Wedge Mixture  
 CK-MB Adjustors Mixture

#### Classification according to UK CLP/GHS

##### **CK-MB Reagent Wedge**

Skin Sens. 1, H317

##### **CK-MB Adjustors**

Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

#### **Hazard pictograms**

:



#### **Signal word**

: CK-MB Reagent Wedge  
 CK-MB Adjustors

Warning  
 No signal word.

**SECTION 2: Hazards identification**

<b>Hazard statements</b>	: CK-MB Reagent Wedge CK-MB Adjustors	H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: CK-MB Reagent Wedge CK-MB Adjustors	P280 - Wear protective gloves/protective clothing/eye protection/face protection. P273 - Avoid release to the environment.
<b>Response</b>	: CK-MB Reagent Wedge  CK-MB Adjustors	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. Not applicable.
<b>Storage</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not applicable. Not applicable.
<b>Disposal</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not applicable. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not applicable. Not applicable.

**2.3 Other hazards**

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: CK-MB Reagent Wedge CK-MB Adjustors	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
<b>Other hazards which do not result in classification</b>	: CK-MB Reagent Wedge CK-MB Adjustors	None known. None known.
<b>Additional information</b>	: Potentially biohazardous material.  Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.	

**SECTION 3: Composition/information on ingredients**

3.1 Substances		: CK-MB Reagent Wedge CK-MB Adjustors	Mixture Mixture			
Product/ingredient name	Identifiers	%	Classification	Type		
CK-MB Reagent Wedge aminocaproic acid	EC: 200-469-3 CAS: 60-32-2	≤3	Eye Irrit. 2, H319	[1]		
3(2H)-Isothiazolone, 2-methyl-	EC: 220-239-6 CAS: 2682-20-4	<0.1	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318	[1]		
Date of issue/Date of revision		: 12/13/2022	Date of previous issue	: No previous validation	Version : 1	2/19

**SECTION 3: Composition/information on ingredients**

zinc chloride	EC: 231-592-0 CAS: 7646-85-7 Index: 030-003-00-2	<0.01	Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	[1] [2]
<b>CK-MB Adjustors</b> sodium azide	EC: 247-852-1 CAS: 26628-22-8 Index: 011-004-00-7	≤0.3	Acute Tox. 2, H300 Acute Tox. 1, H310 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) EUH032 <b>See Section 16 for the full text of the H statements declared above.</b>	[1] [2]

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures****Eye contact** : CK-MB Reagent Wedge

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

CK-MB Adjustors

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : CK-MB Reagent Wedge

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The

**SECTION 4: First aid measures**

	CK-MB Adjustors	exposed person may need to be kept under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Skin contact</b>	: CK-MB Reagent Wedge	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	CK-MB Adjustors	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: CK-MB Reagent Wedge	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	CK-MB Adjustors	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.
<b>Protection of first-aiders</b>	: CK-MB Reagent Wedge	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	CK-MB Adjustors	No action shall be taken involving any personal risk or without suitable training.

**4.2 Most important symptoms and effects, both acute and delayed****Over-exposure signs/symptoms**

<b>Eye contact</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No specific data. No specific data.
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**SECTION 4: First aid measures**

<b>Inhalation</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No specific data. No specific data.
<b>Skin contact</b>	: CK-MB Reagent Wedge  CK-MB Adjustors	Adverse symptoms may include the following: irritation redness No specific data.
<b>Ingestion</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No specific data. No specific data.

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

<b>Notes to physician</b>	: CK-MB Reagent Wedge  CK-MB Adjustors	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: CK-MB Reagent Wedge CK-MB Adjustors CK-MB Reagent Wedge CK-MB Adjustors	No specific treatment. No specific treatment. Not available. Not available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: None known.

**5.2 Special hazards arising from the substance or mixture**

<b>Hazards from the substance or mixture</b>	: In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

**5.3 Advice for firefighters**

<b>Special protective actions for fire-fighters</b>	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: 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

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Not available.

IMMULITE® 2000 CK-MB

**SECTION 7: Handling and storage**

**Industrial sector specific solutions** : Not available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limits**

Product/ingredient name	Exposure limit values
<b>CK-MB Reagent Wedge</b> zinc chloride	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> STEL: 2 mg/m <sup>3</sup> 15 minutes. Form: Fume TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Fume
<b>CK-MB Adjustors</b> sodium azide	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b> STEL: 0.3 mg/m <sup>3</sup> , (as NaN <sub>3</sub> ) 15 minutes. TWA: 0.1 mg/m <sup>3</sup> , (as NaN <sub>3</sub> ) 8 hours.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
<b>CK-MB Reagent Wedge</b> 3(2H)-Isothiazolone, 2-methyl-  zinc chloride	DNEL	Long term Inhalation	0.021 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	0.021 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Oral	0.027 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.043 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	0.043 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Oral	0.053 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.25 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Oral	16.7 µg/kg bw/day	General population	Systemic
<b>CK-MB Adjustors</b> sodium azide	DNEL	Long term Dermal	16.7 µg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	29 µg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	46.7 µg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.164 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	0.164 mg/m <sup>3</sup>	Workers	Systemic

## SECTION 8: Exposure controls/personal protection

### PNECs

No PNECs available

### 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: CK-MB Reagent Wedge	Liquid.
	: CK-MB Adjustors	Solid.
<b>Colour</b>	: CK-MB Reagent Wedge	Colourless.
	: CK-MB Adjustors	Off-white.
<b>Odour</b>	: CK-MB Reagent Wedge	Odourless.
	: CK-MB Adjustors	Bland.
<b>Odour threshold</b>	: Not relevant/applicable due to nature of the product.	
<b>Melting point/freezing point</b>	: Not relevant/applicable due to nature of the product.	
<b>Softening point</b>	: Not relevant/applicable due to nature of the product.	



**SECTION 9: Physical and chemical properties**

<b>Sublimation temperature</b>	: Not relevant/applicable due to nature of the product.	
<b>Initial boiling point and boiling range</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Flammability (solid, gas)</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
<b>Upper/lower flammability or explosive limits</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not applicable.
<b>Flash point</b>	: CK-MB Reagent Wedge CK-MB Adjustors	[Product does not sustain combustion.] [Product does not sustain combustion.]
<b>Auto-ignition temperature</b>	:	

Ingredient name	°C	°F	Method
CK-MB Reagent Wedge magnesium di(acetate)	310	590	EU A.16

<b>Decomposition temperature</b>	: Not relevant/applicable due to nature of the product.	
<b>pH</b>	: CK-MB Reagent Wedge CK-MB Adjustors	7.15 to 7.25 Not applicable.
<b>Viscosity</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not applicable.
<b>Solubility(ies)</b>	:	
Not available.		

<b>Solubility in water</b>	: Not relevant/applicable due to nature of the product.
<b>Miscible with water</b>	: Not relevant/applicable due to nature of the product.
<b>Partition coefficient: n-octanol/ water</b>	: Not relevant/applicable due to nature of the product.
<b>Vapour pressure</b>	:

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
CK-MB Reagent Wedge water	23.8	3.2				

<b>Evaporation rate</b>	: Not relevant/applicable due to nature of the product.	
<b>Relative density</b>	: CK-MB Reagent Wedge	1
	CK-MB Adjustors	>1
<b>Density</b>	: CK-MB Reagent Wedge	Not available.
	CK-MB Adjustors	Not available.
<b>Vapour density</b>	: CK-MB Reagent Wedge	Not available.
	CK-MB Adjustors	Not applicable.
<b>Explosive properties</b>	: CK-MB Reagent Wedge	Not available.
	CK-MB Adjustors	Not available.
<b>Oxidising properties</b>	: CK-MB Reagent Wedge	Not available.
	CK-MB Adjustors	Not available.

**Particle characteristics**

<b>Median particle size</b>	: Not applicable.
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**9.2 Other information**

<b>Fire point</b>	: CK-MB Reagent Wedge	Not available.
	CK-MB Adjustors	Not available.
<b>Burning time</b>	: Not relevant/applicable due to nature of the product.	
<b>Fundamental burning velocity</b>	: Not relevant/applicable due to nature of the product.	
<b>Burning rate</b>	: Not relevant/applicable due to nature of the product.	

**SECTION 9: Physical and chemical properties**

<b>SADT</b>	: Not relevant/applicable due to nature of the product.
<b>SAPT</b>	: Not relevant/applicable due to nature of the product.
<b>Heat of reaction</b>	: Not relevant/applicable due to nature of the product.
<b>Heat of combustion</b>	: Not relevant/applicable due to nature of the product.
<b>Flow time (ISO 2431)</b>	: Not relevant/applicable due to nature of the product.
<b>Molecular weight</b>	: Not relevant/applicable due to nature of the product.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: No specific data.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<b>CK-MB Reagent Wedge</b> zinc chloride	LD50 Oral	Rat	350 mg/kg	-
<b>CK-MB Adjustors</b> sodium azide	LD50 Dermal LD50 Dermal LD50 Oral	Rabbit Rat Rat	20 mg/kg 50 mg/kg 27 mg/kg	- - -

<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
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**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>CK-MB Reagent Wedge</b> 3(2H)-Isothiazolone, 2-methyl-zinc chloride	100 350	300 N/A	N/A N/A	0.5 N/A	N/A N/A
<b>CK-MB Adjustors</b> CK-MB Adjustors sodium azide	10008.6 27	7413.8 20	N/A N/A	N/A N/A	N/A N/A

**Irritation/Corrosion**

IMMULITE® 2000 CK-MB

**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>CK-MB Reagent Wedge</b> aminocaproic acid	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
zinc chloride	Skin - Severe irritant	Rabbit	-	120 hours 1 %	-

**Conclusion/Summary**

<b>Skin</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Eyes</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Respiratory</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.

**Sensitisation****Conclusion/Summary**

<b>Skin</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Respiratory</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.

**Mutagenicity**

<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
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**Carcinogenicity**

<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
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**Reproductive toxicity**

<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
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**Teratogenicity**

<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
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**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
<b>CK-MB Reagent Wedge</b> zinc chloride	Category 3	-	Respiratory tract irritation

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

<b>Information on likely routes of exposure</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
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**Potential acute health effects**

<b>Eye contact</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No known significant effects or critical hazards. No known significant effects or critical hazards.

**SECTION 11: Toxicological information**

<b>Skin contact</b>	: CK-MB Reagent Wedge CK-MB Adjustors	May cause an allergic skin reaction. No known significant effects or critical hazards.
<b>Ingestion</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No known significant effects or critical hazards. No known significant effects or critical hazards.

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

<b>Eye contact</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No specific data. No specific data.
<b>Inhalation</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No specific data. No specific data.
<b>Skin contact</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Adverse symptoms may include the following: irritation redness No specific data.
<b>Ingestion</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No specific data. No specific data.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Short term exposure**

<b>Potential immediate effects</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Potential delayed effects</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.

**Long term exposure**

<b>Potential immediate effects</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Potential delayed effects</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.

**Potential chronic health effects**

Not available.

<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>General</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: CK-MB Reagent Wedge CK-MB Adjustors	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Interactive effects</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.

**Toxicokinetics**

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**SECTION 11: Toxicological information**

<b>Absorption</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Distribution</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Metabolism</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Elimination</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.
<b>Other information</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.

**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
<b>CK-MB Reagent Wedge</b> 3(2H)-Isothiazolone, 2-methyl-  zinc chloride	Acute EC50 0.18 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 0.07 ppm Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
	Acute EC50 34 µg/l Fresh water	Algae - Green algae - Chlorella vulgaris - Exponential growth phase	72 hours
	Acute EC50 26 µg/l Marine water	Algae - Diatom - Navicula incerta	96 hours
	Acute EC50 1.8 mg/l Fresh water	Aquatic plants - Lesser Duckweed - Lemna aequinoctialis	96 hours
	Acute EC50 100 µg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 49.99 µg/l Fresh water	Crustaceans - Water flea - Moina irrasa - Neonate	48 hours
	Acute LC50 0.027 mg/l Marine water	Fish - Sand Flounder - Limanda punctatissima - Pre-larvae	96 hours
	Chronic NOEC 20 µg/l Marine water	Algae - Green algae - Chlorella sp. - Exponential growth phase	72 hours
	Chronic NOEC 1000 µg/l Fresh water	Crustaceans - Red swamp crayfish - Procambarus clarkii - Intermolt	21 days
	Chronic NOEC 80 µg/l Fresh water	Daphnia - Water flea - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	21 days
	Chronic NOEC 31.5 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	30 days
<b>CK-MB Adjustors</b> sodium azide	Acute EC50 9200 µg/l Marine water	Algae - Giant kelp - Macrocystis pyrifera	96 hours
	Acute EC50 6.4 mg/l Fresh water	Crustaceans - Water flea - Simocephalus serrulatus - Larvae	48 hours
	Acute EC50 4.2 mg/l Fresh water	Daphnia - Water flea - Daphnia pulex - Larvae	48 hours
	Acute LC50 0.68 mg/l Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
	Chronic NOEC 5600 µg/l Marine water	Algae - Giant kelp - Macrocystis pyrifera	96 hours
<b>Conclusion/Summary</b>	: CK-MB Reagent Wedge CK-MB Adjustors	Not available. Not available.	

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**SECTION 12: Ecological information****12.2 Persistence and degradability**

**Conclusion/Summary** : CK-MB Reagent Wedge Not available.  
 CK-MB Adjustors Not available.

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
CK-MB Reagent Wedge aminocaproic acid	-2.95	-	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : CK-MB Reagent Wedge Not available.  
 CK-MB Adjustors Not available.

**Mobility** : CK-MB Reagent Wedge Not available.  
 CK-MB Adjustors Not available.

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste. Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information****ADR/RID**

**14.1 UN number** CK-MB Reagent Wedge Not regulated.  
 CK-MB Adjustors Not regulated.

**14.2 UN proper shipping name** CK-MB Reagent Wedge -  
 CK-MB Adjustors -

**14.3 Transport hazard class(es)** CK-MB Reagent Wedge -  
 CK-MB Adjustors -

**SECTION 14: Transport information**

<b>14.4 Packing group</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.5 Environmental hazards</b>	CK-MB Reagent Wedge	No.
	CK-MB Adjustors	No.
<b>Additional information</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

**ADN**

<b>14.1 UN number</b>	CK-MB Reagent Wedge	Not regulated.
	CK-MB Adjustors	Not regulated.
<b>14.2 UN proper shipping name</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.3 Transport hazard class(es)</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

<b>14.4 Packing group</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.5 Environmental hazards</b>	CK-MB Reagent Wedge	No.
	CK-MB Adjustors	No.
<b>Additional information</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

**IMDG**

<b>14.1 UN number</b>	CK-MB Reagent Wedge	Not regulated.
	CK-MB Adjustors	Not regulated.
<b>14.2 UN proper shipping name</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.3 Transport hazard class(es)</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

<b>14.4 Packing group</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.5 Environmental hazards</b>	CK-MB Reagent Wedge	No.
	CK-MB Adjustors	No.
<b>Additional information</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

**IATA**

<b>14.1 UN number</b>	CK-MB Reagent Wedge	Not regulated.
	CK-MB Adjustors	Not regulated.
<b>14.2 UN proper shipping name</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.3 Transport hazard class(es)</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

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**SECTION 14: Transport information**

<b>14.4 Packing group</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-
<b>14.5 Environmental hazards</b>	CK-MB Reagent Wedge	No.
	CK-MB Adjustors	No.
<b>Additional information</b>	CK-MB Reagent Wedge	-
	CK-MB Adjustors	-

**14.6 Special precautions for user** : CK-MB Reagent Wedge

CK-MB Adjustors

**Transport within user's premises:**

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport within user's premises:**

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** Not applicable.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****UK (GB) /REACH****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Ozone depleting substances**

Not listed.

**Prior Informed Consent (PIC)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : CK-MB Reagent Wedge  
CK-MB Adjustors

Not applicable.

Not applicable.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : CK-MB Reagent Wedge  
CK-MB Adjustors

Not listed

Not listed



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**SECTION 15: Regulatory information**

**Industrial emissions** : CK-MB Reagent Wedge Not listed  
**(integrated pollution** CK-MB Adjustors Not listed  
**prevention and control) -**  
**Water**

**International regulations****Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**15.2 Chemical safety** : Not applicable.  
**assessment**

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and** : ATE = Acute Toxicity Estimate  
**acronyms** GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and  
Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019  
No. 720 and amendments  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = GB CLP-specific Hazard statement  
N/A = Not available  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
SGG = Segregation Group  
vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

Classification	Justification
<b>CK-MB Reagent Wedge</b> Skin Sens. 1, H317	Calculation method
<b>CK-MB Adjustors</b> Aquatic Chronic 3, H412	Calculation method

**Full text of abbreviated H statements**

<b>CK-MB Reagent Wedge</b>	
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

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**SECTION 16: Other information**

H410 Very toxic to aquatic life with long lasting effects.  
 EUH071 Corrosive to the respiratory tract.

**CK-MB****Adjustors**

H300 Fatal if swallowed.  
 H310 Fatal in contact with skin.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H412 Harmful to aquatic life with long lasting effects.  
 EUH032 Contact with acids liberates very toxic gas.

**Full text of classifications****CK-MB Reagent****Wedge**

Acute Tox. 2 ACUTE TOXICITY - Category 2  
 Acute Tox. 3 ACUTE TOXICITY - Category 3  
 Acute Tox. 4 ACUTE TOXICITY - Category 4  
 Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1  
 Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1  
 Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1  
 Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
 Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B  
 Skin Sens. 1 SKIN SENSITISATION - Category 1  
 Skin Sens. 1A SKIN SENSITISATION - Category 1A  
 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

**CK-MB Adjustors**

Acute Tox. 1 ACUTE TOXICITY - Category 1  
 Acute Tox. 2 ACUTE TOXICITY - Category 2  
 Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1  
 Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1  
 Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

**Date of printing** : 12/13/2022

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**Date of previous issue** : No previous validation

**Version** : 1

**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.

