

# MATERIAL SAFETY DATA SHEET

## ALKALINE PHOSPHATASE liquicolor

1. Information of the Substance / Preparation and of the Company		
1.1	Product	<b>ALKALINE PHOSPHATASE liquicolor</b>
	<b>REF</b>	12217, 12017, 12027, 12037 This applies also for respective Cat.Nos. for bulk, neutral and OEM products.
1.2	Company	HUMAN Gesellschaft für Biochemia und Diagnostica mbH, Max-Planck-Ring 21, 65205 Wiesbaden, Germany ☎: +49 (0) 6122 99 88 0; Fax: +49 (0) 6122 99 88 100 eMail: <a href="mailto:human@human.de">human@human.de</a>
1.3	Emergency contact:	☎: +49 (0) 6122 99 88 0; Fax: +49 (0) 6122 99 88 100 eMail: <a href="mailto:human@human.de">human@human.de</a>

2. Composition / Information on Ingredients					
2.1 Contents:					
<b>REF</b>		<b>RG</b>	Reagent	Quantity	Formula
12217 (complete M-Test kit)	<b>BUF</b>	Buffer	16 x 4 ml	Formula	
	<b>SUB</b>	Substrate	1 x 16 ml	Formula	
12017 (complete test kit)	<b>BUF</b>	Buffer	10 x 8 ml	Formula	
	<b>SUB</b>	Substrate	2 x 10 ml	Formula	
12027 (complete test kit)	<b>BUF</b>	Buffer	8 x 40 ml	Formula	
	<b>SUB</b>	Substrate	8 x 10 ml	Formula	
12037 (complete test kit)	<b>BUF</b>	Buffer	4 x 200 ml	Formula	
	<b>SUB</b>	Substrate	4 x 50 ml	Formula	
2.2 Dangerous ingredients:					
Component	Substance	CAS	R-Phrases	Symbol acc. relative concentration	Concentration
None					

3. Hazards Identification
No dangerous substances in reportable quantities.

4. First-aid Measures	
Eye contact	Wash with copious amounts of water for several minutes. Assure adequate flushing of eyes by separating the eyelids. Seek medical advice.
Skin contact	Instantly rinse with plenty of water and apply disinfectant. Seek medical advice.
Ingestion	Rinse out mouth, and seek medical advice.
Inhalation	Fresh air. Seek medical advice.
Direction for physician	Symptomatic treatment, possibility of infection and allergenic reactions.

5. Fire-fighting Measures	
Extinguishing media	Water, foam, depending on environment.
Thermal decomposition	Dangerous decomposition products and gases which are damaging to health in large quantities are not anticipated.
Further data	Not yet available

6. Accidental Release Measures	
After spillage	Wear protective clothing, soak up with absorbent material (i.e. vermiculite, cotton fleece), dispose material as biochemical waste in accordance with regulations; rinse well with disinfectant, followed by water.
Absorbent material	No restrictions

7. Handling and Storage	
Handling	Substance itself does not burn. Handle with care.
Storage	Store at 2..8°C. Do not freeze.

8. Exposure Controls / Personal Protection	
Respiratory protection:	If gas or dust formation occurs.

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Eye protection:	Yes
Hand protection:	Yes
	Wear gloves, goggles and protective clothing. Wash and disinfect hands after work and before breaks. Change contaminated clothing immediately.

### 9. Physical and Chemical Properties

	BUF	SUB		
Appearance	Liquid	Liquid		
Colour	Colourless	Colourless - yellowish		
Odour	None	None		
pH (@20°C)	10.15-10.55	8.6 – 9.3		
Melting point	Similar to H <sub>2</sub> O	Similar to H <sub>2</sub> O		
Boiling point	Similar to H <sub>2</sub> O	Similar to H <sub>2</sub> O		
Flash point				
Ignition temp.				
Explosion limits, Lower Upper				
Vapour pressure				
Density				
Solubility in water	Soluble	Soluble		
Further data	Dilute aqueous solution	Dilute aqueous solution		

### 10. Stability and Reactivity

Hazardous reactions	None known when used appropriately
Conditions to avoid	High temperature, freezing
Hazardous decomposition products	Not known

### 11. Toxicological Information

Toxicological data for this product is not available

### 12. Ecological Information

Ecological data for this product is not available. No ecological problems are expected when the product is handled and used with due care and attention. Generally not hazardous for water.

### 13. Disposal Considerations

Chemicals and biochemical residues and remains should be routinely handled as special waste. These must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information. European waste catalogue: 180103 wastes whose collection and disposal is subject to special requirements in order to prevent infection.

### 14. Transport Information

UN	GGVE	RID/ADR	ICAO/IATA	IMDG/EMS	MFAG
-	-	-	-	-	-

### 15. Regulatory Information

Symbol	Warning	R-Phrases	Contents
	-	-	-

### 16. Other Information

The information herein is based on the current extent of our knowledge and is believed to be correct, but is provided without warranty of any kind. The recipient of our product is responsible for observing all applicable laws and regulations.