

TMB substrate

MATERIAL SAFETY AND DATA SHEET

Section 1 Chemical Product and Company Identification	
Name	Standard TMB Substrate Cat.#UP664780, UP664781, UP664782
Synonyms (CAS, chemical names, tradename, abbreviates...)	HRP substrate for ELISA, using 3,3',5,5'-tetramethylbenzidine Dihydrochloride
Company identification	UPTIMA-INTERCHIM 213 J.F.Kennedy, 03100 Montluçon (FRANCE) Tel.+33 (0)4 70 03 88 55 Fax +33 (0)4 70 03 82 60 e-mail uptima@interchim.com
In case of Emergency	In Europe: Call UPTIMA-INTERCHIM out of office: Centre anti Poisons de Lyon In US: call CHEMTREC Tel.+33 (0)4 70 03 88 55 Tel. 04 72 11 69 11 Tel. 800;424;9300

Section 2 Composition, Information on hazardous Ingredients		
Component	CAS number	Weight (mMol/L)
Proprietary Ingredients	The concentration of ingredients is so low, that it does not affect the classification of the product.	

Section 3 Hazards Identification	
Route(s) of Entry:	Inhalation, Skin, Ingestion
Health Hazards (Acute and Chronic)	Hazardous risks are low, and limited in intended use (immunoassays) – See section 15 Ingredients/high concentration: Acute: May cause irritation to eyes and skin Chronic: Based on laboratory animal data, overexposure may cause reproductive disorders
Carcinogenicity	No
Signs and Symptoms of Exposure:	Possible irritant to the eyes, mucous membranes or respiratory track
Medical Conditions Generally Aggravated by Exposure:	None known

Section 4 First aid Measures	
Emergency / First Aid Procedures	Ingestion: Wash out mouth immediately provided that person is conscious. Obtain medical attention. Inhalation: Remove the exposed person to fresh air and support breathing, if necessary. Obtain medical attention Eye Contact: Immediately flush eyes thoroughly with fresh water. Remove contact lenses, if any, and seek medical attention Skin Contact: Remove contaminated clothing and wash effected skin with soap and water. Seek medical attention if irritation is noted

Section 5 Fire Fighting Measures	
Flammability	Flash Point (Closed cup): 187°F Flammable Limits: LEL (Lower Explosive Limit) – 1.3 % UEL (Upper Explosive Limit) – 9.5 % See section 9 for vapor parameters
Extinguishing media	Use suitable extinguishing media for surrounding fire: Foam, Alcohol Foam, dry chemicals, CO2 and Water
Comments	When heated the product may form hazardous decomposition products, carbon monoxide and nitrogen oxides When extinguishing fires use breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6 Accidental Release Measures	
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For any question,
contact your local distributor

Uptima,
powered by



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Personal precautions	Wear suitable protective equipment to prevent inhalation and skin or eye contact.
Environmental precautions	Provide for sufficient ventilation/respiratory protection. Do not empty into drains. If a large amount of the product contaminates sewages, inform appropriate authorities in accordance with local regulations.
Spills and Leaks	Clean up small spills with a sponge or mop and copious amounts of water. Larger volumes can be absorbed with sand or vermiculite.

Section 7 Handling and Storage	
Storage	Store at 4 to 8°C. Protected against light.
Ventilation	Local Exhaust

Section 8 Exposure Controls, Personal Protection	
Personal protection (eyes, hands, body, respiratory...)	Direct contact with the product may result in eye irritation and skin irritation. Work/Hygienic Practices: Follow usual precautionary measures for handling chemicals. Keep away from food and beverages. Wear safety goggles when risk of splashes and use gloves of plastic or rubber when risk of contact. Respiratory protection is not required if good ventilation is maintained. Wear a NIOSH/MSHA approved respirator suitable for vapor or mist concentrations encountered.

Section 9 Physical Characteristics	
Appearance	Clear liquid
Other (pH, Melting/Freezing Point, Vapor Pressure, Vapor Density, Volatility, Boiling Point, Viscosity, Flash point, Auto-ignition temperature, Explosion limits (low.Upp.), Specific Gravity / Density, Molecular Formula /MW, CAS...)	Boiling Point: 81°C Specific Gravity (H2O = 1): 1.033 Melting Point: N/A Vapor Pressure(mm Hg): 0.29mm@20°C Vapor density (AIR=1): 3.4 Evaporation Rate: Not determined. Solubility in Water: soluble

Section 10 Stability and Reactivity Data	
Chemical Stability	This product is stable under normal storage and handling conditions.
Hazardous decomposition products	Thermal decomposition may produce carbon monoxide, carbon dioxide or nitrogen oxides.
Hazardous Polymerization	Will not occur
Incompatibility Material to avoid	Avoid contact with strong oxidizing agents.

Section 11 Toxicological Information	
Toxicology data	Not available Hazardous components/high concentrations: Acute: May cause irritation. Chronic: Based on laboratory animal data, overexposure may cause reproductive disorders May cause mutagenic effects

Section 12 Ecological Information	
Ecotoxicity (BOD5, COD...)	Not available / risks are very low under recommended use.
Biodegradation	
Mobility	
Remarks	Avoid empty into waters or drains.

Section 13 Disposal Considerations	
Remarks	Observe your local or regional rules for proper disposal. If regulated, consult your local or regional authority or a licensed professional waste service

Section 14 Transport Information	
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Shipping	Room temperature Not regulated for transportation
Section 15 Regulatory Information	
Classification Europe	Not classified according to EEC directives
Statements	R: 22-51/53 Harmful if swallowed; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment S: 36/37 Wear suitable protective clothing and gloves
Section 16 Additional Information	
MSDS validation	UPTIMA-INTERCHIM – I05E-E09E
Comment	<i>The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages</i>