







Material Safety Data Sheet for the CTS-PCR-SSP TRAY and MINITRAY KITS

1. Identification of the products and company

1.1 Products

To be applied to the following products:

Product No.	Description	
101	HLA-A* CTS-PCR-SSP TRAY KIT	   0197
102	HLA-B* CTS-PCR-SSP TRAY KIT	
104	HLA-DRB1* CTS-PCR-SSP TRAY KIT	
120	HLA-A*+B*+C* CTS-PCR-SSP TRAY KIT	
121	HLA-A*+B*+DRB1* CTS-PCR-SSP TRAY KIT	
122	HLA-DRB1*+DQB1* Low Resolution CTS-PCR-SSP TRAY KIT	
246	Celiac Disease CTS-PCR-SSP MINITRAY KIT	  
103	HLA-C* CTS-PCR-SSP TRAY KIT	
119	HLA-DQB1* Low Resolution CTS-PCR-SSP TRAY KIT	
127	HLA-DQA1* Low Resolution CTS-PCR-SSP TRAY KIT	
128	HLA-DQB1*+DQA1* Low Resolution CTS-PCR-SSP TRAY KIT	
502	CTS-Cycler Control Kit	

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2. Composition/information on ingredients

Component	Chemical	Common name	CAS No.
PCR primer mixes	Cresol red		62625-29-0
	Deoxyribonucleic acid (= DNA)	Oligonucleotide	170274-78-9
Mastermix	Ammonium sulfate		7783-20-2
	Tris buffer		77-86-1, 1185-53-1
	Magnesium chloride		7791-18-6
	Tween 20		9005-64-5
	Hydrochloric acid		7647-01-0
	Glycerol	Glycerin	56-81-5
	Cresol red		62625-29-0
	Deoxyribonucleotides	dNTPs	1927-31-7
	Aqua ad iniectabilia		

CAS No: unique numeric identifier (designates only one substance)

3. Hazards identification

Mastermix: Since the chemicals are heavily diluted, it may be harmful only if ingested, inhaled or absorbed in excessive amount through skin. The effects could be irritations to eyes, skin und mucous membranes.

Unusual fire hazards: May emit toxic fumes under fire conditions.

4. First aid measures

In case of contact with eyes: Immediately flush eyes with copious amounts of water for at least 15 minutes. Call a physician.

In case of contact with skin: Immediately wash skin with soap and copious amounts of water. Call a physician.

In case of ingestion: Wash out mouth with water, if the person is conscious. Call a physician.

In case of inhalation: Provide fresh air or oxygen. Call a physician.

5. Fire-fighting measures

Extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Firefighting procedures: Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal protection: Avoid direct contact with reagents. Wear protective clothing and boots, appropriate chemically resistant gloves and chemical safety goggles.

Cleaning method: Clean up with inert material, avoid raising dust and place in a suitable container for disposal. Wash spilled site after material having been picked up and ventilate area.

7. Handling and storage

Wear suitable protective clothing and gloves. It is not necessary to work in a hood or to wear a mask while performing the test.

Store the components at the temperature indicated for each of them on the product labels and in the working instructions. Protect from light.

In case of any changes in the appearance of the provided TRAYS/MINITRAYS or the Mastermix, we recommend testing with control DNAs (DNAs with known specificities available in your lab) to ensure the functionality of the kit.

8. Exposure controls/personal protection

Laboratory coat, suitable chemical-resistant gloves (e. g. nitrile gloves while handling ethidium bromide), chemical safety goggles, respirator (e. g. NIOSH/MSHA-approved respirator), safety shower and eye bath.

9. Physical and chemical properties

Component	Appearance	Color
CTS-PCR-SSP Tray or Minitray	Dried primer solutions in cavities of tray or minitray	Pink
Mastermix	Slight viscous liquid in plastic tubes	Purple

Violent or explosive reactions have been reported to occur upon direct contact of glycerol with e. g. sodium hydride, phosphorous trioxide, perchloric acid, chlorine, calcium hypochlorite, nitric acid and hydrofluoric acid, nitric acid and sulfuric acid, sodium peroxide, hydrogen peroxide or potassium permanganate.

10. Stability and reactivity

Incompatibilities: Strong oxidizing agents, strong bases

Hazardous combustion or decomposition products: Sulfur oxides, ammonia, nitrogen oxides, carbon monoxide, carbon dioxide, and phosphorous oxides.

Hazardous polymerization: Not known to occur.

11. Toxicological information

Toxicological information on the chemicals listed in section 2 (Composition/information on ingredients) can be obtained e. g. from the TOXNET Data Bases (Toxicology Data Network) (<http://toxnet.nlm.nih.gov>).

12. Ecological information

Data not available.

13. Disposal considerations

The material can be burned in an appropriate chemical incinerator. Observe all applicable Federal, State and Local environmental regulations.

14. Transport information

Contact dna.labor@med.uni-heidelberg.de for transportation information. No classification has been assigned.

15. Regulatory information

Data not available.

16. Other information

The information given in this Material Safety Data Sheet is not supposed to be comprehensive and should only be used as a guide. This product is for professional use by PCR-trained personnel only. The Institute of Immunology, Transplantation Immunology, Heidelberg University Hospital, Heidelberg, Germany, is not liable for any damage resulting from handling or using the products mentioned above.