

□ University Clinic Heidelberg
Department of Transplantation Immunology
Im Neuenheimer Feld 305
D-69120 Heidelberg - Germany
Phone: +49-6221-564013
Fax: +49-6221-564200
www.ctstransplant.org



Manual No.: 400B
Revision: March 17, 2009

CTS *Collaborative Transplant Study*

Material Safety Data Sheet for the CTS-PCR-SSP BULK KITS

1. Identification of the products and company

1.1 Products

Product No.	Description	
401	HLA-A* CTS-PCR-SSP BULK KIT (24 mixes)	 CE 0197
402	HLA-B* CTS-PCR-SSP BULK KIT (48 mixes)	
404	HLA-DRB1* CTS-PCR-SSP BULK KIT (24 mixes)	
403	HLA-Cw* CTS-PCR-SSP BULK KIT (24 mixes)	 IVD CE

1.2 Company:

University Clinic Heidelberg
Department of Transplantation Immunology
Im Neuenheimer Feld 305
D-69120 Heidelberg
Germany
Phone: +49-6221-564013
Fax: +49-6221-564200

1.3 In case of emergency: Call your local fire department.

2. Composition/information on ingredients

Component	Chemical	Common names	CAS No.	R	S
BULK reagents (PCR primer mixes)	Cresol red		62625-29-0	R36/37/38	S26/36
	Deoxyribonucleic acid (= DNA)	Oligonucleotides	170274-78-9	none	none
Mastermix	Ammonium sulfate		7783-20-2	none	none
	Tris buffer		77-86-1, 1185-53-1	R36/38	none
	Magnesium chloride		7791-18-6	none	none
	Glycerol	Glycerin	56-81-5	none	none
	Cresol red		62625-29-0	see above	see above
	Deoxy-ribonucleotides	dNTPs	1927-31-7	none	none

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

R-Phrases: health risks

S-Phrases: safety precautions

3. Hazards identification

Harmful if swallowed (cresol red)

Irritating to eyes and skin (Tris Buffer)

Target organ: eyes, nerves, kidney, central nervous system

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing.

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 inhalation: remove to fresh air, if not breathing give artificial respiration. If breathing difficult, give oxygen. Call a physician.

In case of ingestion: wash out mouth with water provided person is conscious. Call a physician.

Remove and wash contaminated clothing before reuse.

5. Fire-fighting measures

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

Special fire fighting procedures: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire hazards: emits toxic fumes under fire conditions

6. Accidental release measures

Personal protection: wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

Cleaning method: contain spill, absorb with inert material.

Sweep up, avoid raising dust, place in a suitable container and hold for disposal.

Ventilate area and wash spill site after material pick up.

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 at temperature indicated on the product labels and the working instruction.

8. Exposure controls/personal protection

Chemical safety goggles, compatible chemical-resistant gloves, NIOSH/MSHA-approved respirator, safety shower and eye bath.

Do not inhale. Mechanical exhaust is required.

Irritant. Avoid contact with skin, eyes, mucous membranes and clothing.

Wash thoroughly after handling.

Keep tightly closed.

9. Physical and chemical properties

Component	Appearance	Color
CTS-PCR-SSP BULK KIT	frozen liquid	pink
Mastermix	slight viscous liquid	purple

Additional information:

- The addition of sodium hypochlorite to a solution of acidified ammonium sulfate led to the formation of nitrogen trichloride and resulted in an explosion.
- Contact of potassium or sodium-potassium alloy with a mixture of ammonium sulfate and ammonium nitrate results in an explosion.
- Heating a mixture of potassium chlorate and ammonium sulfate results in decomposition with incandescence.
- Mixing ammonium sulfate with fused potassium nitrate results in a vigorous reaction with flames. Decomposes at 235°C releasing ammonia and sulfur.
- Violent or explosive reactions have occurred upon direct contact of glycerol with: sodium hydride, phosphorous trioxide, perchloric acid, chlorine, calciumhypochlorite, 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: will not occur

11. Toxicological information

Acute effects: harmful if swallowed. May be harmful if inhaled or if absorbed through skin. Causes eye and skin irritation. Material is irritating to mucous membranes and upper respiratory tract. Can cause CNS depression

To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

12. Ecological information

Data not available.

13. Disposal considerations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and Local environmental regulations.

14. Transport information

Contact dna-labor@med.uni-heidelberg.de for transportation information.

15. Regulatory information

Information according to EEC directives:

R phrases: R 36 /37/38

S phrases: S 26/36

S 26

16. Other information

The above information is believed to be accurate but does not purport to be comprehensive and should only be used as a guide. This product is for professional use by PCR-trained personnel only. The Department of Transplantation Immunology, University Clinic Heidelberg, is not liable for any damage resulting from handling or contact with the products mentioned above. See the information in the product catalogue or packing slip for additional terms and conditions of sale.