

Material Safety Data Sheet

SBT Typing Kits

This Material Safety Data Sheet applies to all

HLA-A SBT Typing Kit

HLA-B SBT Typing Kit

HLA-C SBT Typing Kit

HLA-DRB1 SBT Typing Kit

HLA-DQB1 SBT Typing Kit

HLA-DPB1 SBT Typing Kit

Sequence-specific Sequencing Primers (3SPs)

Exon specific sequencing Primers

of the company R.O.S.E. Europe GmbH.

Material Safety Data Sheet (MSDS) produced in compliance with EC Directive 91/155/EEC.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

Date of Issue: August 2009

Product Name: See List

Company: R.O.S.E. Europe GmbH, Industriepark Höchst, G 830, 65926 Frankfurt am Main

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2. COMPOSITION/INFORMATION ON INGREDIENTS:

Component	Chemical	CAS No.
Initial PCR Ready to Use Mix:	Gelatin	9000-70-8
	Potassium Chloride	7747-40-7
	Magnesium Chloride Hexahydrate	7791-18-6
	2-Amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	1185-53-1
	Ammonium sulphate	7783-20-2
	(R*,R*)-1,4-Dimercaptobutane-2,3-diol	3483-12-3
	Dimethyl sulfoxide	67-68-5
Sequencing Ready to Use Mix:		
	Tris (hydroxymethyl)-aminomethane	77-86-1
	Glycerol	56-81-5
	Betaine Hydrochloride	590-46-5

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

3. HAZARDS IDENTIFICATION:

Tris (hydroxymethyl)-aminomethane, betaine hydrochlorid and dimethyl sulfoxide may be irritating to eyes, skin, mucous membranes or upper respiratory tract. Ingestion of magnesium chloride can cause stomach pains, vomiting, or diarrhea. DTT may be harmful if swallowed (R 22) and irritating to eyes and skin (R 36/38).

4. FIRST-AID MEASURES:

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

In case of skin contact: Immediately wash skin with soap and large amounts of water. Wash contaminated clothing before re-use.

In case of ingestion: If patient is conscious, give water, milk, or milk of magnesia. Call a physician if needed.

In case of inhalation: Remove to fresh air. If not breathing, give artificial respiration. If difficulties with breathing, give oxygen. Call physician.

5. FIRE-FIGHTING MEASURES:

Extinguishing media: Dry chemical powder or appropriate foam.

Extinguishing media NOT to use: None are known.

Special exposure hazards: May emit toxic fumes of carbon dioxide, carbon monoxide, nitrogen, phosphorus, hydrogen chloride, and hydrogen gas under fire conditions.

Special fire-fighting equipment: Wear self-contained breathing apparatus with full-face piece operated in positive pressure mode. Wear protective clothing to prevent contact with skin and eyes.

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6. ACCIDENTAL RELEASE MEASURE:

Personal Precautions: Wear self-contained breathing apparatus and full protective clothing.

Environmental Precautions: None are known.

Cleaning Method: Ventilate area. Neutralize spill with sand, soda ash, or lime. With clean shovel, carefully place material into clean, dry container and cover. Remove from area. Hold for hazardous waste removal. Flush spill area with water.

7. HANDLING AND STORAGE:

Handling

Information for safe handling: Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires: With appropriate handling and storage no special measures necessarily.

Storage

Requirements to be met by storerooms and containers: Store only in the original container.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: Store in cool, dry conditions in well sealed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

System design: Safety shower and eye bath are recommended.

Respiratory protection: Not necessary if room is well ventilated.

Hand protection: Wear compatible chemically resistant gloves.

Eye protection: By appropriate application not required. Avoid contact with the eyes.

Skin protection: Wear laboratory coat.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Initial PCR Ready to Use Mix

Form: Liquid. Appearance: Clear. Color: None. Odor: None.

Sequencing Ready to Use Mix:

Form: Liquid. Appearance: Clear. Color: None. Odor: None.

10. STABILITY AND REACTIVITY:

Conditions to avoid: Heat and moisture.

Materials to avoid: Most common metals, amines, metal oxides, acetic anhydride, propiolactone, vinyl acetate, mercuric sulfate, calcium phosphate, formaldehyde, alkalis, carbonates, strong bases, sulfuric acid, chlorosulfonic acid, strong oxidizing agents.

Hazardous decomposition products: Thermal decomposition or fire may produce toxic fumes of hydrogen chloride, hydrogen, chlorine, carbon monoxide, carbon dioxide, nitrogen oxides, and sulfur oxides.

11. TOXICOLOGICAL INFORMATION:

Chemical	Toxicity
Potassium Chloride	LD50= oral 2600 mg/kg (rat)
	LDLO= oral 20 mg/kg (human)
Tris	LD50= oral 5900 mg/kg (rat)
Glycerol	LD50= oral 4090 mg/kg (mouse)
	LD50= oral 12600 mg/kg (rat)
	LD50= oral 1428 mg/kg (human)
Ammonium-sulfate	LD50= oral 2840 mg/kg (rat)
Betaine Hydrochloride	LD50= subcutaneous 8g/kg (mouse)
Dimethyl sulfoxide	LD50= oral 3300 mg/kg (rat).

To the best of our knowledge, the toxicological properties of other ingredients have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION:

Not known to be hazardous to water.

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13. DISPOSAL CONSIDERATIONS:

Smaller quantities can be disposed with household waste.
Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION:

Land transport ADR/RID (cross-border)
ADR/RID-GGVS/E Class: -
Maritime transport IMDG:
IMDG Class: -
Marine pollutant: No
Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: -

15. REGULATORY INFORMATION:

Designation according to EC guidelines: The material is not subject to classification according to EC lists and other sources of literature known to us.

The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

Observe the normal safety regulations when handling chemicals

Safety phrases:

56 Dispose of this material and its container to hazardous or special waste collection point.

16. OTHER INFORMATION:

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. R.O.S.E. Europe GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.