

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Product name: **JETSORB Gel Extraction Kit**

Catalog No.: 110150, 110300, 110600

Date prepared: 16/01/2004

MANUFACTURER'S NAME:

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II. HAZARDOUS INGREDIENTS

1. JetSorb Suspension			
Hazardous ingredients	CAS No.	Percent	Warning
Modified Silica gel	N/A	Approx. 50 % (w/v)	-
Sodium perchlorate	7791-07-3	Approx. 50 % (w/v)	harmful
Tris	1185-53-1	< 1 % (w/v)	-

2. Buffer A1			
Hazardous ingredients	CAS No.	Percent	Warning
Sodium perchlorate	7791-07-3	50 – 150 % (w/v)	harmful

3. Buffer A2 (unreconstituted)			
Hazardous ingredients	CAS No.	Percent	Warning
Tris	1185-53-1	< 1 % (w/v)	-

The following information pertains to buffer A2 only:

According to 29 CFR 1910, a mixture which contains less than one percent by weight or volume of a non-carcinogenic hazardous component is not considered hazardous, unless there is evidence to the contrary. We do not consider the buffer A2 to be hazardous, however we recommend the use of gloves, lab coats, and eye protection when working with these or any chemical reagents.

III. PHYSICAL/CHEMICAL CHARACTERISTICS

Specific gravity:	Slurry-N/A.	Solubility in H₂O:	Very soluble.
Appearance and odor:	Clear, colorless, odorless liquid.		

IV. FIRE AND EXPLOSION HAZARD DATA

Extinguishing media:	CO ₂ , water, dry chemicals or polymer foam.
Special fire fighting procedures:	Wear self-contained breathing apparatus and protective clothing.
Unusual fire and explosion hazards:	Oxidizing agent; explosive when mixed with combustible material. Emits irritating and toxic decomposition products under fire conditions.

VI. REACTIVITY DATA

Stability:	Stable.
Incompatibility:	Explosive when mixed with combustible material.
Hazardous decomposition or By-products:	Emits irritating and toxic decomposition products under fire conditions.

V. HEALTH HAZARD INFORMATION

May be harmful by inhalation, ingestion, or skin absorption. Vapor or mist is irritating to eyes, mucous membranes, and upper respiratory tract.

LD₅₀ (Sodium perchlorate):	2100 mg/kg (rat, oral)
Symptoms of overexposure:	
Inhaled:	The silica gel in the JetSorb suspension is in an aqueous slurry and should not pose an inhalation problem. If spilled and allowed to dry out this product contains crystalline silica (cs), which is considered a hazard by inhalation of the dust. IARC has classified cs as probably carcinogenic for humans. CS has not been classified as a carcinogen by NTP or OSHA. CS is also a known cause of silicosis, a noncancerous lung disease.
Contact with skin or eyes:	May irritate eyes causing redness, tearing and pain may occur.
Swallowed:	Nausea, headache, and vomiting.
Health effects or risks from exposure:	
Acute:	If allowed to dry out, the dust causes transitory upper respiratory or eye irritation.
Chronic:	Crystalline silica has been classified as probably carcinogenic for humans by IARC. Crystalline silica is also a known cause of silicosis, a noncancerous lung disease caused by excessive exposure to crystalline silica.
First aid: emergency procedures	
Eye contact:	Flush with water for at least 15 minutes. Get medical attention.
Skin contact:	Wash with soap and water, remove contaminated clothing and wash before wearing. Get medical advice if skin irritation develops.
Inhaled:	Remove to fresh air. Drink water to clear the throat. Give oxygen if breathing becomes difficult. Call a physician.
Swallowed:	Wash out mouth with water. Call a physician.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

Spill:	Wear suitable protective clothing. Do not allow to dry out. Mop up wet slurry.
Waste disposal method:	Dilute sodium perchlorate containing solutions in water and mix with acidic sodium bisulfite solution.
Handling and storing:	Wear appropriate NIOSH/MSHA approved respirator, chemical resistant gloves, safety goggles, and other protective clothing. Take off immediately all contaminated clothing.

VIII. CONTROL MEASURES

Respiratory protection:	NIOSH/MSHA approved respirator.
Mechanical exhaust:	Yes.
Protective gloves:	Chemical resistant.
Eye protection:	Safety goggles.
Other protective:	Clothing or equipment: Suitable protective clothing, safety shower, eyewash.
Work/hygienic practices:	Avoid contact with eyes, skin, and clothes.

The information contained in this MSDS is believed to be correct and complete. All chemicals may present unknown hazards and should be used with caution. GENOMED assumes no liability for damage resulting from handling or contact with this product.

Substance:

Tris
EDTA
NaCl
NaClO₄
Gu-HCl
NH₄-Acetat
K-Acetat
NaOH
SDS
Silica-Gel

CAS No:

1185-53-1
60-00-4
7647-14-5
7791-07-3
50-01-1
631-61-8
127-08-2
1310-73-2
151-21-3
112926-00-8 (14464-46-1)