MSDS
MATERIAL SAFETY DATA SHEET

SPEX CertiPrep

Emergency Phone Number (24 hours) CHEMTREC (800-424-9300)
Outside US: 703-527-3887

SECTION 1
CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION

NAME: Cyanide Standard--Single Element Solution; 1,000 ppm of Cyanide (from Potassium Cyanide) in 2% Potassium Hydroxide Solution.
CHEMICAL FAMILY: Dilute Alkaline Solution.
COMMON NAME OR SYNONYMS: None
SPEX CERTIPREP CATALOG NUMBER: RSCN9-2X, RSCN9-2Y

Manufacturer/Supplier
SPEX CERTIPREP
203 Norcross Avenue
Metuchen, NJ 08840

SPEX CERTIPREP LTD
2 Dalston Gardens
Stanmore, Middlesex HA7 1BQ
England
Tel: (0) 20 8204 6656

SECTION 2
COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS:				
MATERIAL	**%**	**TLV UNITS**	**CAS #**	**EINECS**
KCN	0.25	5 mg/m3 as CN TWA	[151-50-8]	
KOH	2	CL2 mg/kg3 TWA	[1310-58-5]	
NONHAZARDOUS:				
Water	~97	N/A	[7732-18-5]	

SECTION 3
HAZARDS IDENTIFICATION

Corrosive. Harmful by ingestion. Irritating to the eyes and skin upon contact.

SECTION 4
FIRST AID MEASURES

General: Remove contaminated clothing, wash thoroughly before reuse.
Eyes: Flush with water for at least 15 minutes occasionally lifting upper and lower eyelids.
Skin: Remove contaminated clothing and flush with water thoroughly. *Inhalation:* Move to fresh air. Consult doctor if symptoms persist. *Ingestion:* Get immediate medical help. If the patient is conscious, give large quantities of water.

SECTION 5
FIRE FIGHTING MEASURES

Flash Point: Not applicable.
Extinguishing media: Appropriate to surrounding fire conditions.
Special Hazards and Procedure: It may emit toxic Cl fumes in case of fire.
Protective Equipment: Wear self contained breathing apparatus and full protective suit.

SECTION 6
ACCIDENTAL RELEASE MEASURES

Ventilate area. Wear protective equipment. Do not allow to enter drainage systems or water ways. Dilute spill with water and neutralize with soda ash, limestone etc. Wipe up and put into a sealed container for proper disposal. Wash spill site with water after material pick up is complete. Wear chemical resistant glasses, gloves and clothing.

SECTION 7
HANDLING & STORAGE

Ensure good ventilation/exhaustion at work place. Have an immediate availability of an eye wash in case of emergency. Store at room temperature. Keep the container tightly closed.

SECTION 8
EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear goggles, protective apron and acid resistant gloves. Use under fume hood. In case of brief exposure, use MSHA/NIOSH approved respirator.

SECTION 9
PHYSICAL & CHEMICAL PROPERTIES

Form:	Liquid
Appearance & odor:	Transparent with acrid odor
Specific Gravity:	Approximately 1.0
pH:	> 12
Melting point:	n/a
Boiling Point:	~100C
Solubility in water:	Soluble
Danger of Explosion:	Not explosive
Self-ignitability:	Not self igniting

RSCN9 Cont'd

SECTION 10
STABILITY & REACTIVITY

Stability: Stable under normal storage and use.
Reactivity: No information available for this solution.
Incompatibility: No information available for this solution.
Hazardous Decomposition Products: Toxic fumes under conditions of fire.
Hazardous Polymerization: Will not occur.

SECTION 11
TOXICOLOGICAL INFORMATION

Potassium Hydroxide is considered a strong irritant to the upper respiratory tract. If it is inhaled, it can cause inflammation and edema of the larynx and bronchi. It can also cause hardening of the upper respiratory tract if continuous exposure occurs. If KOH is contacted with the skin or eyes, it can react with proteins to form albuminates and gelatinized tissues, leaving severe injury. Skin exposure can be irritating, cause burns and contact dermatitis. If KOH is ingested, perforation of the stomach and esophagus can occur rapidly. Symptoms of exposure are burning sensation, wheezing laryngitis, coughing, shortness of breath, headaches, nausea, and vomiting.

KCN is a rapidly fatal poison when taken into the digestive system. KCN concentration in this solution is at 0.25%. Toxic symptoms may also occur when inhaled. Prolonged skin contact will cause irritation and possible poisoning could occur if the skin is broken.

TOXICITY DATA:

Concentrated KCN--RTECS#-TS8750000	Concentrated KOH--RTECS#TT2100000
orl-hmn LDLo: 2857 ug/kg	orl-rat LD50: 365 mg/kg
orl-rat LD50 10 mg/kg	

SECTION 12
ECOLOGICAL INFORMATION

Do not allow product to reach ground water, water bodies or sewage system.

SECTION 13
DISPOSAL CONSIDERATIONS

Contact local Hazardous or Chemical waste disposal agency for regulations.

SECTION 14
TRANSPORT INFORMATION

Air & Ground:
CLASS: 8
UN/ID # 3266
Packing Group: III
Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s. (Potassium Hydroxide solution).

SECTION 15
REGULATORY INFORMATION

USA:
SARA: Subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372.
Components of this solution are reported in EPA TSCA Inventory List
WHMIS Classification (Canada): CLASS E
EC Guidelines:
C: Corrosive
Risk Phrases:
22 – Harmful if swallowed
34 - Causes burns
Safety Phrases:
36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection
26 - in case of contact with eyes, rinse immediately with plenty of water and seek medical attention.
45 - in case of accident or if you feel unwell, seek medical advice immediately.

SECTION 16
OTHER INFORMATION

SPEX CERTIPREP ASSUMES NO RESPONSIBILITY AND MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED HEREIN. INDICATED SAFETY MEASURES MAY NOT REFLECT ALL APPROPRIATE SAFETY MEASURES. SPEX CERTIPREP ASSUMES THAT ONLY QUALIFIED INDIVIDUALS, TRAINED AND FAMILIAR WITH PROCEDURES SUITABLE TO THIS PRODUCT, WILL HANDLE THIS PRODUCT.

References:
The Sigma/Aldrich Library of Chemical Safety Data, Ed.I, (1985)
Registry of Toxic Effects of Chemical Substances, 1981-82
Patty's Industrial Hygiene and Toxicology, 3rd Revised Edition, Vol. 2A, 1981
Threshold Limit Values and Biological Exposure Indices for 1988-89, ACGIH
Dangerous properties of Industrial Materials by N.Irving Sax and Richard J. Lewis, Sr.(Ninth Edition) *

Date: February 24, 2006