

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CR-56P H3-R 50L UNC PART A

Product Code: 850200 750200

Manufacturer: FUJIFILM HUNT CHEMICALS SINGAPORE PTE. LTD.
 Co. Reg. No. 198901418E
 15 Tuas Ave 7 Singapore 639270
 Tel: (65) 6862 2116 Fax: (65) 6861 4829

Distributor:

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients (Mixture)

<u>Component</u>	<u>CAS No.</u>	<u>%by Weight</u>	<u>ACGIH TLV</u>
2,2'[1,2-Ethanediy]bis(thio)bis-ethanol	5244-34-8	0.1 - 1	NE
Citrazinic Acid	99-11-6	0.1 - 1	NE
Sodium Nitrilotris(methylene) Triphosphate	2235-43-0	0.5 - 1.5	NE
Potassium Hydroxide	1310-58-3	1 - 5	NE
Sodium Sulfite	7757-83-7	1 - 5	NE
Potassium Phosphate	7778-53-2	7 - 15	NE
Water	7732-18-5	70 - 90	NE

SECTION 3 - HAZARDS IDENTIFICATION

Hazard Symbols:



Hazard Designation:

R34 - Causes burns

Contains 1 - 5% Potassium Hydroxide

Risk Phrases:

R:34

Causes burns.

Safety Phrases:

S: 1/2-24/25-26-36/37/39

Keep locked up and out of reach of children.

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.

Wear suitable protective clothing, gloves and eye/ face protection.

SECTION 4 - FIRST AID MEASURES

Eye Contact:

In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.

Skin Contact:

After contact with skin, wash immediately with plenty of water.

Ingestion:

If swallowed, contact a doctor or Poisons Information Centre immediately and show MSDS or label.

Inhalation:

Immediately remove victim to fresh air. Call a physician.

SECTION 5- FIRE FIGHTING MEASURES

Extinguishing Media:

Water spray, carbon dioxide, alcohol foam, dry chemicals.

Unsuitable Extinguishing Media:

None under normal conditions.

Fire Fighting Instructions:

Use water to keep fire-exposed containers cool and to dilute and flush spills from exposure.

Evacuate area and fight fire from a distance. Wear positive pressure demand breathing apparatus and protect eyes and skin. Use water to cool fire-exposed containers, to protect personnel and to disperse vapors and spills. Water runoff can damage the environment. Dike and collect water used to fight fire.

SECTION 6- ACCIDENTAL RELEASE MEASURES

Small Spills: Spills should be contained by, and covered with suitable absorbent material and removed for disposal

Large Spills: Prevent from entering into soil, waterways and groundwater

SECTION 7- HANDLING / STORAGE

Handling: Avoid contact with skin and eyes.
Use only in well ventilated area.
Wear suitable protective clothing, gloves and eye/face protection.

Storage: Keep out of reach of children.

SECTION 8- EXPOSURE CONTROL AND PERSONAL PROTECTION

Ventilation: Good general ventilation should be sufficient for most conditions.

Personal Protective Equipment:

Eye Protection: Chemical safety goggles.

Skin Protection: Neoprene gloves and apron.

Respiratory Protection: Required on all inadequately ventilated work stations.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid

Colour: Yellow

Odour: Slightly ammoniacal

Flammable Properties

Flash Point: N/Ap
Not flammable

Autoignition Temperature: N/Av
not flammable

Explosion Limits: Lower: N/Ap vol.%
Upper: N/Ap vol.%

Change in Physical State Boiling Point >100°C
Melting Point N/Av

Specific Gravity: 1.188

Vapour Pressure: N/Av

Viscosity: N/Av
like water

Solubility in water completely soluble

pH-value: 13.60 (25 deg C)

SECTION 10 - STABILITY AND REACTIVITY

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: .

Materials and Conditions to avoid: -

Further Information: None.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product Information:

AcuteOral (The oral LD50): >2000 mg/kg
 Test Animal: Rat (Slc:Wister)

AcuteDermal (The dermal LD50): N/Av
 Test Animal: -----

Acute Overexposure:

Primary Skin Irritation Index 7.42
 (Primary irritation index)
 Test Animal: Rabbit (Japanese)

Primary Eye Irritation Index -----
 (Single ocular instillation)
 Test Animal: Rabbit (Japanese)

Further Information: N/Av

Chronic Overexposure: N/Av

Ingredients Information:

<u>Component</u>	<u>CAS No.</u>	<u>Acute Oral LD 50 (mg/kg)</u>	<u>Test Animal</u>
2,2'[1,2-Ethanediy]bis(thio)bis-ethanol	5244-34-8	N/Av	-
Citrazinic Acid	99-11-6	N/Av	-
Sodium Nitrotris(methylene) Triphosphate	2235-43-0	N/Av	-
Potassium Hydroxide	1310-58-3	N/Av	-
Sodium Sulfite	7757-83-7	LD 50 (mg/kg)	Mice
Potassium Phosphate	7778-53-2	N/Av	-

SECTION 12- ECOLOGICAL INFORMATION

Ecotoxicity Data: N/Av

Chemical Fate Data: N/Av

<u>Component</u>	<u>CAS No.</u>	<u>Fish Toxicity</u>	<u>Fish Organism</u>
2,2'[1,2-Ethanediy]bis(thio)bis-ethanol	5244-34-8	N/Av	-
Citrazinic Acid	99-11-6	N/Av	-
Sodium Nitrilotris(methylene) Triphosphate	2235-43-0	N/Av	-
Potassium Hydroxide	1310-58-3	N/Av	-
Sodium Sulfite	7757-83-7	N/Av	-
Potassium Phosphate	7778-53-2	N/Av	-

SECTION 13- DISPOSAL CONSIDERATION

Disposal Regulations in Singapore:

Dispose off in accordance to the Environmental Public Health (Toxic Industrial Waste) Regulations under the Environmental Pollution Control Act 1999

Disposal Regulations Overseas:

Dispose off in accordance with all applicable local or national regulations

SECTION 14 - TRANSPORT INFORMATION

Marine Transportation

Class: Class 8, Corrosive

UN-No.: 1814

IMDG-code page: 8214

EMS: 8-06

MFAG: 705

Packing group: II

Sea Transport Statement Do not allow any contact with light metals ----- danger of corrosion

Proper shipping Name: Potassium Hydroxide, Solution



Air Transportation

Class: Class 8, Corrosive

UN-No.: 1814

Proper Shipping Name: Potassium Hydroxide, Solution

Subsidiary risk: -----

Labels: Corrosive

Packing group: II

Passenger aircraft: Packing Instruction 809 Max. 1L

Cargo aircraft only: Packing Instruction 813 Max. 30L

Further Information: Do not allow any contact with light metal ----- danger of corrosion



SECTION 15 - REGULATORY INFORMATION

Singapore Law

Environmental Public Health Act (Chapter 95) Rev. Ed. 1988
Part III : Disposal and Treatment of Industrial Wastes

The Environmental Pollution Control Act, 1999
Part V: Water Pollution Control
Part VII: Hazardous Substances Control

Water Pollution Control and Drainage Act, (Chapter 348) Rev. Ed. 1983
Part IV: Water Pollution Control
Part V: Sewerage

Workplace Safety and Health Act (Chapter 354A) Rev. Ed. 2007
Part V: General Duties of Persons at Workplaces

Workplace Safety and Health (General Provisions) Regulations 2006
Part IV: Special Provisions Relating to Health, Safety and Welfare
First Schedule: Permissible Exposure Limits of Toxic Substances

SECTION 16 - OTHER INFORMATION

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.