

Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Commercial Name: STANDARD SAMPLE for LC/MS (Parts No.225-06613-05)

General Use: Instrument Adjustment Standard Sample

Manufacturer's Name: SHINWA CHEMICAL INDUSTRIES, LTD.

Address: 50-2 Kagekatsu-cho, Fushimi-ku, Kyoto 612-8307 Japan

Emergency Phone: 81(75)621-2360

Emergency Fax: 81(75)602-2660

2. HAZARDS IDENTIFICATION

HAZARD SYMBOL : -----

HAZARD STATEMENTS, including R-phrase : -----

ADDITIONAL HAZARD STATEMENTS : May be harmful if inhaled and ingested.

PRECAUTIONARY STATEMENTS, including S-phrase : -----

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Formula	CAS No.	Content
Papaverine Hydrochloride	C ₂₀ H ₂₁ NO ₄ ClH	61-25-6	50.0 / 25.0 / 5.0 / 1.0 / 0.5ng/μL
Water	H ₂ O	7732-18-5	99%

4. FIRST AID MEASURES

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water

FIRE & EXPLOSION HAZARDS : Toxic, irritating dust or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS :

Firemen should wear normal protective equipment(full bunker gear)and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :

Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS :

Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEANING UP :

Do not touch spilled material without suitable protection(See section 8). Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE**PRECAUTION FOR SAFE HANDLING :**

Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection away from source of heat or ignition and use non-sparking type tools. Use explosion-proof electrical equipments and lighting.

CONDITIONS FOR SAFE STORAGE :

Store away from sunlight in well-ventilated dry place at room temperature (preferably cool place). Keep container tightly closed.

INCOMPATIBILITIES :

Acids, alkalis, reducing agents, alkali metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING MEASURES :**

Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION :

Local Exhaust ; Necessary, Mechanical(General) ; Necessary
Special; Closed system is recommended.

INDIVIDUAL PROTECTION MEASURES ;

Respiratory protection :Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.

Hand protection : Impervious gloves

Eye protection : Safety glasses(goggles)

Skin protection : Protective clothing

CONTROL PARAMETER :

OSHA Final Limits : None established

ACGIH TLV(s) : None established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :

Colorless clear liquid

ODOUR :

Odorless

pH :

Not available

MELTING POINT :

Not available

INITIAL BOILING POINT :

Not available

FLASH POINT :

Not available

FLAMMABILITY (solid, gas) :

EXPLOSIVE LIMITS :	Not available
VAPOR PRESSURE :	Not available
SPECIFIC GRAVITY :	Not available
SOLUBILITY IN ;	
WATER :	Miscible
ETHANOL :	Miscible
ACETONE :	Miscible
PARTITION COEFFICIENT :	Not available
DECOMPOSITION	Not available
TEMPERATURE :	

10. STABILITY AND REACTIVITY

STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong bases, Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY(oral/dermal/inhalation) : Not available as the mixture

(Papaverine Hydrochloride)

LD50(oral,rat): 6800µg/kg(ARZNAD 39, 1109, 1989)

LD50(oral,mouse): 130mg/kg(JOETD7 6, 127, 1982)

TDLo(oral,woman): 130mg/kg(CTXAO 18, 417, 1981)

(Water)

TDLo(oral,infant): 333gm/kg(convulsions or effect on seizure threshold) (ADCHAK 54, 551, 1979)

TDLo(oral,man): 42.86gm/kg(tremor)(JPETAB 29, 135, 1926)

LD50(oral,rat): >90mL/kg(FOREAE 21, 348, 1956)

IRRITATION DATA : Not available

MUTATION DATA : Not available as the mixture

(Papaverine Hydrochloride)

Mutation in microorganisms; S.typhimurium; 100µg/plate(MUREAV 240, 267, 1990)

Cytogenetic analysis; hamster; fibroblast; 125mg/L(ESKHA5 (96), 55, 1978)

Cytogenetic analysis; hamster; lung; 340mg/L(GMCRDC 27, 95, 1981)

REPRODUCTIVE EFFECTS DATA: Not available as the mixture

(Papaverine Hydrochloride)

TDLo(scu,mouse): 140mg/kg(female 9 D preg)(DG DFA5 22, 61, 1980)

TUMORIGENIC DATA : Not available

ADDITIONAL INFORMATION ;

NTP : Not listed

IARC : Not listed

OSHA : Not listed

ACGIH: Not listed

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY : Not available

BIOACCUMULATION POTENTIAL : Not available

AQUATIC TOXICITY : Not available

OTHER INFORMATION : Not available

13. DISPOSAL CONSIDERATION

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. 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

DOT

Not a Hazardous Material for DOT shipping.

IATA

Not Restricted.

15. REGULATORY INFORMATION

US REGULATIONS ;

(Papaverine Hydrochloride)

EPA : CERCLA RQ= Not listed

EPCRA TPQ= Not listed

OSHA : TQ= Not listed

(Water)

EPA : CERCLA RQ= Not listed

EPCRA TPQ= Not listed

OSHA : TQ= Not listed

EU REGULATIONS ;

(Papaverine Hydrochloride)

SYMBOL : T

R-phrases : 25

Toxic if swallowed.

S-phrases : 22-36/37/39

Do not breathe dust.

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

EC index No. : Not listed

16. OTHER INFORMATION

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and Shinwa shall not be held liable for any damage resulting from handling or from contact with the above material.