MILTEX

HC #04
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MATERIAL SAFETY DATA SHEET

Revised/ Reviewed: July 24, 2003

SURGICAL INSTRUMENT STAIN REMOVER

Used for removing stains from surgical instruments and restoring original luster.

Section 1 – Product and Company Information

Manufactured for: Miltex, Inc; 589 Davies Drive, York, PA 17402
Information: 717-840-9335, 717-840-9347 (fax)
Chemical Name & Synonyms: Citric acid containing mixture
Chemical Formula: Propietary

Section 2 – Composition/Information on Ingredients

The product is composed of less than 15% citric acid (CAS # 77-92-9) and greater than 75% pumice (CAS # 1332-09-8). All components of this product that are required to be on the TSCA inventory are listed on the inventory.

Section 3 – Health Identification

Over exposure can cause skin and eye irritation. Inhalation of dust may irritate nose, throat, and respiratory tract.
Primary Route(s) of Entry: Ingestion, Eye, and Skin.
Carcinogen: NTP Program- No IARC Program- No OSHA Program- No
Medical Conditions Aggravated by Exposure: None known.
HMIS Ratings: Health – 1; Flammability = 0; Reactivity = 0
NFPA Ratings: Health = 1; Flammability = 0; Reactivity = 0

Section 4 – First Aid Measures

Eyes: Flush with tepid water for at least 15 minutes. Seek medical attention as soon as possible.
Skin: Flush with tepid water for at least 15 minutes
Ingestion: *Do not* induce vomiting. Give large quantities of water or milk. Do not give anything to an unconscious or convulsing person. Seek medical attention.
Inhalation: If any ill effects are noticed, remove person to fresh air. Seek medical attention as necessary.

Section 5 – Fire Fighting Measures

I- 250056
C- 3-800

Flash Point (Test Method): Not applicable.
Flammable Limits- LEL: Not applicable UEL: Not applicable
Extinguishing Media: As appropriate for primary cause of fire.
Special Fire Fighting Procedures: None known.
Unusual Fire and Explosion Hazards: None known.

Section 6 – Physical and Chemical Properties

Physical State: Powder
Appearance and Odor: Off-white and odorless.
Boiling Point (°C): Not applicable
Specific Gravity (Water=1): Not determined
Evaporation Rate (butyl acetate=1): Not applicable
Vapor Density (Air=1): Not applicable
Vapor Pressure (mm Hg): Not applicable
Solubility in Water: Partially soluble, approximately 15-g of powder per 100-g of water.
pH: 2.5-3.5

Section 7 – Stability and Reactivity

Stability: Stable
Conditions to Avoid: None known.
Incompatibility/ Materials to Avoid: Usual materials incompatible with organic acids.
Hazardous Polymerization: Will not occur
Hazardous Decomposition Products: Undetermined

Section 8 – Accidental Release, Disposal, and Ecological Information

Spill Response: Sweep up and transfer to a waste receptacle.
Waste Disposal Method: Dispose of in accordance with all applicable federal, state, and local regulations.
Ecological, General: Not determined

Section 9 – Exposure Controls/ Personal Protection

Eye Protection: Goggles
Respiratory Protection: NIOSH-approved dust and mist mask/respirator.
Ventilation Recommendations: Local exhaust to minimize dust exposure
Skin Protection: Rubber or plastic gloves.
Other: As required to minimize skin contact.

Section 10 – Storage and Handling

Storage: Keep in a cool, dry place. Keep container closed when not in use.
Handling: No unusual precautions

Section 11 – Miscellaneous

Toxicological Information: Not determined
Transportation Information: Not a DOT hazardous material.
Other: --

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Miltex

MATERIAL SAFETY DATA SHEET
Revised/ Reviewed: July 24, 2003

SURGICAL INSTRUMENT CLEANER
A phosphate-free formula for manual and ultrasonic cleaning or soaking of surgical instruments.

Section 1: Product and Company Information

Manufactured for: Miltex, Inc; 589 Davies Drive, York, PA 17402
Information: 717-840-9335, 717-840-9347 (fax)
Chemical Name & Synonyms: --
Chemical Formula: --

Section 2 – Composition/ Information on Ingredients

The product is a mixture of water, sodium dodecylbenzene sulfoneate, propylene glycol, linear alcohol ethoxylate, cocamide diethannolamide, tetrasodium EDTA, sodium xylene sulfonate, and citric acid. No data is available regarding OSHA PEL's or ACGIH TLV's for these components.

Section 3 – Health Identification

Over exposure can cause skin and eye irritation. Vapor inhalation can irritate nose, throat, and respiratory tract. May cause nausea if ingested and tetrasodium EDTA will sequester calcium which is harmful to bones. Repeat excessive ingestion may cause central nervous system effects.
Primary Route(s) of Entry: Inhalation, Eye, Skin, and Ingestion.
Carcinogen: No known carcinogenic effects.
Medical Conditions Aggravated by Exposure: None known.

Section 4 – First Aid Measures

Eyes: Flush with tepid water for at least 15 minutes. Hold eyelids apart during flushing to ensure rinsing of entire eye and lid surface. *Do not* attempt to neutralize with chemical agents. Seek medical attention as soon as possible.
Skin: If in contact with skin, wash off with mild soap and water. Rinse with copious amounts of water. If dry skin results, apply a moisturizing cream or lotion.
Ingestion: *Do not* induce vomiting. Give a glass of water. If vomiting occurs, again give fluids. Do not give anything to an unconscious or convulsing person. Have medical personnel determine if evacuation of the stomach or induction of vomiting is necessary.
Inhalation: If any ill effects are noticed, remove person to fresh air.

Section 5 – Fire Fighting Measures

Flash Point (Test Method): Non-combustible
Flammable Limits- LEL: Not applicable UEL: Not applicable
Extinguishing Media: Carbon dioxide, dry chemical, or water spray.
Special Fire Fighting Procedures: Self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Combustion may produce irritating gases, fumes, and vapors (carbon monoxide and propionaldehyde).

Section 6 – Physical and Chemical Properties

Physical State: Liquid at ambient temperature.
Appearance and Odor: Clear yellow liquid with slight ammonical odor.
Boiling Point (°C): Not determined
Specific Gravity (Water=1): 1.05-1.09 pH: 7.0-7.7
Evaporation Rate (butyl acetate=1): Not determined Vapor Pressure (mm Hg): Not determined
Vapor Density (Air=1): Not determined Solubility in Water: Soluble

Section 7 – Stability and Reactivity

Stability: Stable
Conditions to Avoid: Contact with strong acids. Do not mix with bleach. Do not expose to high heat.
Incompatibility/ Materials to Avoid: Strong oxidizing agents
Hazardous Polymerization: Will not occur
Hazardous Decomposition Products: Irritating or toxic substances may be emitted upon thermal decomposition. In a fire situation, propionaldehyde and carbon dioxide could be emitted in the presence of limited oxygen. Aldehydes, acids, and ketoses could also be released.

Section 8 – Accidental Release, Disposal, and Ecological Information

Spill Response: Soak up spilled liquid with absorbent material and place into a chemical waste container for disposal.
Waste Disposal Method: Dispose of in accordance with all applicable federal, state, and local regulations.
Ecological, General: Not determined

Section 9 – Exposure Controls/ Personal Protection

Eye Protection: Goggles or lab safety glasses
Respiratory Protection: Not normally required
Ventilation Recommendations: General room ventilation is normally sufficient
Skin Protection: Rubber or plastic gloves.
Other: As required to minimize skin contact.

Section 10 – Storage and Handling

Storage: Keep in a cool, dry place. Keep container closed when not in use.
Handling: Avoid food in the work area. Wash hands and face before eating. Using gloves will protect skin from drying and possible irritation.

Section 11 – Miscellaneous

Toxicological Information: LD_{50} (oral) = 630-1260 mg/kg (rats), 2.6 ml/kg (rabbit)
LD_{50} (skin) = 5.7-ml/kg (rabbit)
LC_{50} (inhalation) = 800-mg/m^3 (guinea pigs)
Transportation Information: Not a DOT hazardous material.

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Miltex

MATERIAL SAFETY DATA SHEET
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SPRAY LUBE
An anti-corrosive, non-greasy, steam-compatible surgical instrument lubricant.

Section 1 - Product and Company Information

Manufactured for: Miltex, Inc; 589 Davies Drive, York, PA 17402
Information: 717-840-9335, 717-840-9347 (fax)
Chemical Name & Synonyms: --
Chemical Formula: --

Section 2 - Composition/Information on Ingredients

Does not contain hazardous materials (per OSHA's Hazardous Communication Standard, 29 CFR 1910.1200). The product is a mixture of de-ionized water, paraffinic oil, polyethylene glycol, POE sorbitan monoleate, sorbitan monooleate, methyl paraben, and propyl paraben.

Section 3 - Health Identification

Over exposure can cause skin and eye irritation. Ingestion may cause irritation. With inhalation, no hazards are anticipated.
Primary Route(s) of Entry: Eye, Skin, and Ingestion.
Carcinogen: No known carcinogenic effects. (IARC, NTP, & OSHA all = No)
Medical Conditions Aggravated by Exposure: None known.

Section 4 - First Aid Measures

Eyes: Flush with tepid water for at least 15 minutes. Hold eyelids apart during flushing to ensure rinsing of entire eye and lid surface. *Do not* attempt to neutralize with chemical agents. Seek medical attention as soon as possible.
Skin: If in contact with skin, wash off with mild soap and water. Rinse with copious amounts of water. If dry skin results, apply a moisturizing cream or lotion.
Ingestion: Induce vomiting. Give a glass of water. If vomiting occurs, again give fluids. Do not give anything to an unconscious or convulsing person.
Inhalation: If any ill effects are noticed, remove person to fresh air.

Section 5 - Fire Fighting Measures

Flash Point (Test Method): Non-combustible
Flammable Limits- LEL: Not applicable UEL: Not applicable
Extinguishing Media: Carbon dioxide, dry chemical, or water spray.
Special Fire Fighting Procedures: None.
Unusual Fire and Explosion Hazards: Combustion may produce irritating gases, fumes, and vapors (carbon monoxide and carbon dioxide).

Section 6 – Physical and Chemical Properties

Physical State: Liquid at ambient temperature.
Appearance and Odor: Milky white with a bland odor.
Boiling Point (°C): >100 (212°F)
Specific Gravity (Water=1): 0.99
Evaporation Rate (butyl acetate=1): <1
Vapor Pressure (mm Hg): Not determined
Vapor Density (Air=1): Not determined
Solubility in Water: Emusible

Section 7 – Stability and Reactivity

Stability: Stable
Conditions to Avoid: Contact with oxidizing agents
Incompatibility/ Materials to Avoid: Strong oxidizing agents
Hazardous Polymerization: Will not occur
Hazardous Decomposition Products: Carbon dioxide and carbon monoxide

Section 8 – Accidental Release, Disposal, and Ecological Information

Spill Response: Soak up spilled liquid with absorbent material and place into a chemical waste container for disposal.
Waste Disposal Method: Dispose of in accordance with all applicable federal, state, and local regulations.
Ecological, General: Not determined

Section 9 – Exposure Controls/ Personal Protection

Eye Protection: Goggles or lab safety glasses
Respiratory Protection: Not normally required
Ventilation Recommendations: General room ventilation is normally sufficient
Skin Protection: Rubber or plastic gloves.
Other: As required to minimize skin contact.

Section 10 – Storage and Handling

Storage: Keep in a cool, dry place. Do not store in a hot environment.
Handling: Avoid food in the work area. Wash hands and face before eating.

Section 11 – Miscellaneous

Toxicological Information: LD_{50} (oral) = 23-33, 7 g/kg (rats)
Transportation Information: Not a DOT hazardous material.
Other: --