SECTION 1 : IDENTIFICATION

Product Name: Colistimethate for Injection, USP
Product Use/Restriction: Anti-Infective
Manufacturer Name: Fresenius Kabi USA, LLC
Address: Three Corporate Drive
Lake Zurich, Illinois 60047
General Phone Number: (847) 550-2300
Customer Service Phone Number: (888) 386-1300
Health Issues Information: (800) 551-7176
SDS Creation Date: April 10, 2012
SDS Revision Date: June 10, 2015
(M)SDS Format:

SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:

Signal Word: WARNING.
GHS Class: Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.
Hazard Statements: May cause respiratory irritation.
Precautionary Statements: Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Emergency Overview: This product is intended for therapeutic use only when prescribed by a physician. Potential adverse reactions from prescribed doses and overdoses are described in the package insert.
Route of Exposure: Inhalation Ingestion Eye contact Skin Absorption. Injection.
Potential Health Effects:
Eye: Contact with eyes may cause irritation.
Skin: May cause skin irritation.
Inhalation: May cause irritation of respiratory tract.
Ingestion: May cause irritation.
Signs/Symptoms: Possible adverse reactions include: gastrointestinal upset, tingling of extremities and tongue, slurred speech, dizziness, vertigo, paresthesia, generalized itching, urticaria, rash, and fever. Occupational exposure has not been fully investigated.
Aggravation of Pre-Existing Conditions: Individuals with a history of sensitivity to the drug or any of its components.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
<th>EC Num.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colistimethate Sodium</td>
<td>8068-28-8</td>
<td>150 mg</td>
<td></td>
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</tbody>
</table>

SECTION 4 : FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion: If conscious, flush mouth out with water immediately. Call a physician or poison control center immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Other First Aid: For Adverse Event Information, please call (800) 551-7176.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point: Not established.
Flash Point Method: Not established.
Auto Ignition Temperature: Not established.
Lower Flammable/Explosive Limit: Not established.
Upper Flammable/Explosive Limit: Not established.
Fire Fighting Instructions: Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media: Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts: Thermal decomposition products may include smoke and toxic fumes. Oxides of carbon, oxides of nitrogen and other organic substances may be formed. Other undetermined low molecular weight hydrocarbon compounds may be released in small quantities depending upon specific conditions of combustion.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personnel Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Avoid personal contact and breathing dust. Use proper personal protective equipment as listed in Section 8.
Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment: This material will settle out of the air.
Methods for cleanup: Use an industrial vacuum cleaner with a high efficiency filter to clean up dust. Avoid dust generation.

SECTION 7 : HANDLING and STORAGE

Handling: When handling pharmaceutical products, avoid all contact and inhalation of vapor, mists and/or fumes. Use with adequate ventilation. Use only in accordance with directions.
Storage: Store at controlled room temperature 20 to 25°C (68 to 77°F). Avoid contact with incompatible materials.
Work Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Hygiene Practices: Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust, vapor or mist.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: General ventilation is sufficient if this product is being used in a controlled medical setting (clinic, hospital, medical office) for its sole intended parenteral (injection) purpose. Otherwise, use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls including use of a biosafety cabinet / fume hood to control airborne levels below recommended exposure limits.
Eye/Face Protection: Chemical splash goggles. Wear a face shield also when splash hazard exist.
Skin Protection Description: Protective laboratory coat, apron, or disposable garment recommended.
Hand Protection Description: Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data. Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection: No personal respiratory protective equipment is normally required when this product is being used/administered by a licensed healthcare practitioner (i.e., an end-user such as a clinician / doctor / nurse) for its sole intended parenteral (injection) purpose in a controlled medical setting. The need for respiratory protection will vary according to the airborne concentrations and environmental conditions. A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances. Consult the NIOSH web site (http://www.cdc.gov/niosh/npgl/topics/respirators/) for a list of respirator types and approved suppliers.
Other Protective: Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

EXPOSURE GUIDELINES

Colistimethate Sodium:
Guideline ACGIH: Not established.
Guideline OSHA: Not established.
SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State: Lyophilized powder
Color: White to slightly yellow
The reconstituted liquid is colorless to light yellow
Boiling Point: Not established.
Melting Point: Not established.
Solubility: Soluble in water.
Vapor Density: Not established.
Vapor Pressure: Not established.
Percent Volatile: Not established.
pH: 6.5 - 7.5 after reconstitution
Molecular Formula: Mixture
Molecular Weight: 1750
Flash Point: Not established.
Flash Point Method: Not established.
Auto Ignition Temperature: Not established.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.
Hazardous Polymerization: Not reported.
Conditions to Avoid: Avoid direct sunlight, conditions that might generate heat, and sources of ignition. Avoid contact with incompatible materials.
Incompatible Materials: Avoid storage near oxidizers.

SECTION 11 : TOXICOLOGICAL INFORMATION

Teratogenicity: Pregnancy Category C: There are no adequate and well-controlled studies in pregnant women. Since colistimethate sodium is transferred across the placental barrier in humans, it should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Colistimethate Sodium:
RTECS Number: GH1650000
Ingestion:
Oral - Rat LD50 : 5450 mg/kg [Peripheral Nerve and Sensation - Flaccid paralysis without anesthesia (usually neuromuscular blockade)] Lungs, Thorax, or Respiration - Other changes
Oral - Mouse LD50 : >767 mg(base)/kg [Details of toxic effects not reported other than lethal dose value]
Other Toxicological Information:
Subcutaneous - Rat LD50 : 87 mg/kg [Peripheral Nerve and Sensation - Flaccid paralysis without anesthesia (usually neuromuscular blockade)] Lungs, Thorax, or Respiration - Other changes
Intraperitoneal - Rat LD50 : 86 mg/kg [Peripheral Nerve and Sensation - Flaccid paralysis without anesthesia (usually neuromuscular blockade)] Lungs, Thorax, or Respiration - Other changes
Intramuscular - Rat LD50 : 44 mg/kg [Details of toxic effects not reported other than lethal dose value]

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product.
Environmental Stability: No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Not Regulated.
DOT UN Number: Not Regulated.

SECTION 15 : REGULATORY INFORMATION

Colistimethate for Injection, USP
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 SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 1
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: X

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