SIGMA CHEMICAL CO -- HEPARAN SULFATE SODIUM FROM BOVINE KIDNEY, H9637 - -6505-00N093134

==================================  Product Identification  =============================

Product ID: HEPARAN SULFATE SODIUM FROM BOVINE KIDNEY, H9637
MSDS Date: 01/01/1999
FSC: 6505
NIIN: 00N093134
Status Code: A
MSDS Number: CJXXQ

=== Responsible Party ===
Company Name: SIGMA CHEMICAL CO
Box: 14508
City: ST LOUIS
State: MO
ZIP: 63178
Country: US
Info Phone Num: 314-771-5765
Emergency Phone Num: 314-771-5765
CAGE: 21076

=== Contractor Identification ===
Company Name: SIGMA CHEMICAL COMPANY
Address: 3050 SPRUCE ST
Box: 14508
City: ST LOUIS
State: MO
ZIP: 63178
Country: US
Phone: 314-771-5765
CAGE: 21076

==================================  Composition/Information on Ingredients  ===========================

Ingred Name: HEPARAN SULFATE SODIUM
CAS: 57459-72-0
= Wt: 100.

==================================  Hazards Identification  ===========================

Routes of Entry: Inhalation: YES  Skin: YES  Ingestion: YES
Reports of Carcinogenicity: NTP: NO  IARC: NO  OSHA: NO
Health Hazards Acute and Chronic: ACUTE EFFECTS: MAY BE HARMFUL BY INHALATION, INGESTION OR SKIN ABSORPTION. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRA CT. TARGET ORGAN: BLOOD. TO THE BEST OF MANUFACTURER’S KNOWLEDGE, THE CHEMICAL, PHYSICAL AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
Effects of Overexposure: SEE HEALTH HAZARDS.

==================================  First Aid Measures  ===========================

First Aid: INGESTION: IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. SKIN: IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.
INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN. EYES: 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.

==================================  Fire Fighting Measures  ===========================

Extinguishing Media: CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. WATER SPRAY.
Fire Fighting Procedures: USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT TO PREVENT CONTACT WITH SKIN AND EYES.
Unusual Fire/Explosion Hazard: EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

==================================  Accidental Release Measures  ===========================

Spill Release Procedures: WEAR NIOSH APPROVED RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES. SWEEP UP,
PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

------------------------ Handling and Storage ------------------------

Handling and Storage Precautions: DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. WASH THOROUGHLY AFTER HANDLING. KEEP TIGHTLY CLOSED. STORE IN A COOL, DRY PLACE.

------------------- Exposure Controls/Personal Protection -------------------

Respiratory Protection: NIOSH APPROVED RESPIRATOR.
Ventilation: MECHANICAL EXHAUST.
Protective Gloves: COMPATIBLE CHEMICAL-RESISTANT GLOVES.
Eye Protection: ANSI APPROVED CHEMICAL WORKERS GOGGLES.
Other Protective Equipment: ANSI APPROVED EYE WASH AND DELUGE SHOWER.
Supplemental Safety and Health

----------------------- Physical/Chemical Properties -----------------------

Appearance and Odor: SOLID.

----------------- Stability and Reactivity Data -----------------

Stability Indicator/Materials to Avoid: YES
Hazardous Decomposition Products: TOXIC FUMES OF CARBON MONOXIDE, CARBON DIOXIDE. NITROGEN OXIDES. SULFUR OXIDES.

------------------ Toxicological Information ------------------

Toxicological Information: SEE HEALTH HAZARDS.

------------------- Ecological Information -------------------

Ecological: DATA NOT YET AVAILABLE.

---------------------- Disposal Considerations ----------------------

Waste Disposal Methods: 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.

----------------- MSDS Transport Information -----------------

Transport Information: CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

--------------- Regulatory Information ------------------

Federal Regulatory Information: EUROPEAN INFORMATION - CAUTION: SUBSTANCE NOT YET FULLY TESTED.

----------------- Other Information ------------------

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