

Safety Data Sheet
 acc. to OSHA HCS

Page 1/7

Printing date 05/27/2017
 Reviewed on 05/21/2017
 Version number: 3

1 Identification

- **Product identifier**
- **Trade name:** Kanamycin Sulfate
- **Article number:** A1493
- **CAS Number:**
25389-94-0
- **Application of the substance / the mixture**
For lab use only. Not for drug, household or other uses.
Laboratory chemical
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
AppliChem GmbH
Ottoweg 4
D-64291 Darmstadt
- **Information department:** Dept. Compliance
- **Emergency telephone number:** +49(0)6151 93570 (Inside normal business hours)

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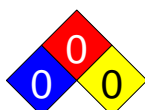
2 Hazard(s) identification

- **Classification of the substance or mixture**
Repr. 1A H360 May damage fertility or the unborn child.
- **Label elements**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard statements**
H360 May damage fertility or the unborn child.
- **Precautionary statements**
P201 Obtain special instructions before use.
P308+P313 IF exposed or concerned: Get medical advice/attention.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
 Fire = 0
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *1
 Fire = 0
 Reactivity = 0

(Contd. on page 2)

Trade name: Kanamycin Sulfate

(Contd. of page 1)

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
25389-94-0 Kanamycin Sulfate
- **Identification number(s)**
None

4 First-aid measures

- **Description of first aid measures**
- **General information:** Involve doctor immediately.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Call a doctor immediately.
- **After eye contact:** Seek medical treatment.
- **After swallowing:** Call a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Sulphur dioxide (SO₂)
CO, CO₂
(SO₂, SO₃)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Avoid formation of dust.
Do not inhale dust.
Avoid substance contact.
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Avoid generation of dusts.
Dispose contaminated material as waste according to item 13.

(Contd. on page 3)

Trade name: Kanamycin Sulfate

(Contd. of page 2)

- Clean up affected area.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**
 - **PAC-1:** Substance is not listed.
 - **PAC-2:** Substance is not listed.
 - **PAC-3:** Substance is not listed.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - Open and handle receptacle with care.
 - Any deposit of dust which cannot be avoided must be regularly removed.
- **Information about protection against explosions and fires:**
 - Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
 - Store under lock and key and with access restricted to technical experts or their assistants only.
 - Keep container sealed.
- **Recommended storage temperature:** +15 - +25 °C
- **Storage class:** 6.1 D
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Store protective clothing separately.
 - Vacuum clean contaminated clothing. Do not blow or brush off contamination.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

Trade name: Kanamycin Sulfate

(Contd. of page 3)

• **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **For the permanent contact gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min

• **As protection from splashes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min

• **Eye protection:** Safety glasses

• **Body protection:**

Use protective suit.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9 Physical and chemical properties

• **Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

Form: Powder

Color: White

• **Odor:** Characteristic

• **Odor threshold:** Not determined.

• **pH-value:** 6.5-8.5

• **Change in condition**

Melting point/Melting range: 250 °C (482 °F)

Boiling point/Boiling range: Undetermined.

• **Flash point:** Not applicable.

• **Flammability (solid, gaseous):** Product is not flammable.

• **Ignition temperature:**

Decomposition temperature: Not determined.

• **Auto igniting:** Not determined.

• **Danger of explosion:** Product does not present an explosion hazard.

• **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

• **Vapor pressure:** Not applicable.

• **Density:** Not determined.

• **Relative density** Not determined.

• **Vapor density** Not applicable.

• **Evaporation rate** Not applicable.

• **Solubility in / Miscibility with**

Water: Soluble.

• **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 5)

Trade name: Kanamycin Sulfate

(Contd. of page 4)

- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No dangerous reactions known.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Heating
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** strong oxidants
- **Hazardous decomposition products:** In the event of fire: See chapter 5

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
Quantitative data on the toxicological effect of this product are not available.

· Components	Type	Value	Species
Oral LD50		>4000 mg/kg	(rat)

- **Other information (about experimental toxicology):** headache
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow to enter waters, waste water, or soil.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Chemicals must be disposed of in compliance with the respective national regulations.

(Contd. on page 6)

Trade name: Kanamycin Sulfate

(Contd. of page 5)

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

• **Uncleaned packagings:**

• **Recommendation:**

Disposal must be made according to official regulations.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

• **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

• **UN-Number**

• DOT, ADR, ADN, IMDG, IATA Void

• **UN proper shipping name**

• DOT, ADR, ADN, IMDG, IATA Void

• **Transport hazard class(es)**

• DOT, ADR, ADN, IMDG, IATA

• Class Void

• **Packing group**

• DOT, ADR, IMDG, IATA Void

• **Environmental hazards:**

• **Marine pollutant:** No

• **Special precautions for user**

Not applicable.

• **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

• **Transport/Additional information:**

Not dangerous according to the above specifications.

• **UN "Model Regulation":**

Void

15 Regulatory information

• **Safety, health and environmental regulations/legislation specific for the substance or mixture**

• **Sara**

• **Section 355 (extremely hazardous substances):** Substance is not listed.

• **Section 313 (Specific toxic chemical listings):** Substance is not listed.

• **TSCA (Toxic Substances Control Act):** Substance is not listed.

• **Proposition 65**

• **Chemicals known to cause cancer:** Substance is not listed.

• **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.

• **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.

• **Chemicals known to cause developmental toxicity:** Substance is not listed.

• **Carcinogenicity categories**

• **EPA (Environmental Protection Agency)** Substance is not listed.

• **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.

• **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.

• **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 7)

Trade name: Kanamycin Sulfate

(Contd. of page 6)

· **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard statements**
H360 May damage fertility or the unborn child.
- **Precautionary statements**
P201 Obtain special instructions before use.
P308+P313 IF exposed or concerned: Get medical advice/attention.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Dept. Compliance
- **Contact:** Mr. Th. Stöckle
- **Date of preparation / last revision** 05/27/2017 / 2
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Repr. 1A: Reproductive toxicity – Category 1A
- *** Data compared to the previous version altered.**

US