

**Safety Data Sheet**  
**according to Regulation (EC) No. 1907/2006 (REACH)**

**FIPHARMA**

**Trade name :** Isoprenaline Sulfate  
(Isoproterenol Sulphate)  
**Revision date :** 13-03-2018  
**Print date :** 18-03-2019

**Version (Revision) :** 1.0.1 (1.0.0)

**SECTION 1: Identification of the substance/mixture and of the company/ undertaking**

**1.1 Product identifier**

Isoprenaline Sulfate  
(Isoproterenol Sulphate) (1706)  
Isoprenaline Sulfate ; CAS No. : 299-95-6

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Relevant identified uses**

**Product Categories [PC]**

PC29 - Pharmaceuticals

**Uses advised against**

This product should not be used for purposes other than the applications referred to above.

**1.3 Details of the supplier of the safety data sheet**

**Supplier (manufacturer/importer/only representative/downstream user/distributor)**

Ofipharma B.V.

**Street :** Heembadweg 5

**Postal code/city :** 9561 CZ Ter Apel

**Telephone :** +31 599 745 390

**Telefax :** +31 599 582 734

**1.4 Emergency telephone number**

+31 599 583 433

Telefoon voor professionele hulpverleners: NVIC + (0)30 - 274 88 88. Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen.

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

Acute Tox. 4 ; H302 - Acute toxicity (oral) : Category 4 ; Harmful if swallowed.

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

**2.2 Label elements**

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms**



Corrosion (GHS05) · Exclamation mark (GHS07)

**Signal word**

Danger

**Hazard statements**

H318 Causes serious eye damage.

H302 Harmful if swallowed.

**Precautionary statements**

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P310 Immediately call a POISON CENTER/doctor/....  
P330 Rinse mouth.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other hazards**

None

**2.4 Additional information**

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

**SECTION 3: Composition/information on ingredients**

**3.1 Substances**

**Substance name :** Isoprenaline Sulfate  
**CAS No. :** 299-95-6  
**Purity :** 100 % [mass]

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**General information**

When in doubt or if symptoms are observed, get medical advice.

**Following inhalation**

No special measures are necessary.

**In case of skin contact**

Change contaminated, saturated clothing. Wash contaminated clothing prior to re-use.

**After eye contact**

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

**After ingestion**

Call a physician in any case! Do NOT induce vomiting. If major quantity of dust is swallowed or inhaled, immediately drink: Water

**4.2 Most important symptoms and effects, both acute and delayed**

The following symptoms may occur: No known symptoms to date.

**4.3 Indication of any immediate medical attention and special treatment needed**

None

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

None

**5.2 Special hazards arising from the substance or mixture**

None

**5.3 Advice for firefighters**

None

**5.4 Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

None

### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

### 6.3 Methods and material for containment and cleaning up

#### For containment

Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

#### For cleaning up

Suitable material for taking up: Sand Absorbing material, organic

### 6.4 Reference to other sections

See protective measures under point 7 and 8.

## SECTION 7: Handling and storage



### 7.1 Precautions for safe handling

None

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep/Store only in original container. Suitable container/equipment material: Stainless steel Polyethylene (PE)

### 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

None

### 8.2 Exposure controls

#### Personal protection equipment

##### Skin protection

##### Hand protection

**Breakthrough time (maximum wearing time) :** > 60 m.

**Thickness of the glove material :** > 0,5 mm

##### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protection apparatus Full-/half-/quarter-face masks (DIN EN 136/140) Filtering device (full mask or mouthpiece) with filter: ABEK-P3

#### General health and safety measures

Immediately remove any contaminated clothing, shoes or stockings. Wash contaminated clothing prior to re-use.

#### Environmental exposure controls

See section 7. No additional measures necessary.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** solid

**Colour :** white

**Odour :** No data available

#### Safety relevant basis data

<b>Freezing point :</b>	( 1013 hPa )	No data available
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	No data available
<b>Flash point :</b>		No data available
<b>Ignition temperature :</b>		No data available
<b>Lower explosion limit :</b>		No data available
<b>Upper explosion limit :</b>		No data available
<b>Vapour pressure :</b>	( 50 °C )	No data available
<b>Relative density :</b>	( 20 °C )	No data available
<b>Water solubility :</b>	( 20 °C )	No data available
<b>pH :</b>		not determined
<b>log P O/W :</b>		No data available
<b>Cinematic viscosity :</b>	( 40 °C )	No data available
<b>Relative vapour density :</b>	( 20 °C )	No data available
<b>Evaporation rate :</b>		No data available
<b>Flammable solids :</b>	No data available.	
<b>Oxidising solids :</b>	No data available.	

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

not applicable

### 10.2 Chemical stability

Stable under normal conditions of use

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

Strong oxidizers

### 10.6 Hazardous decomposition products

No information available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Irritant and corrosive effects

##### Primary irritation to the skin

Not an irritant.

##### Irritation to eyes

Not an irritant.

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**Irritation to respiratory tract**

No data available

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.

**Germ cell mutagenicity**

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.

**STOT-single exposure**

not applicable

**SECTION 12: Ecological information**

**12.1 Toxicity**

harmless to aquatic organisms up to the tested concentration

**12.2 Persistence and degradability**

Biodegradable.

**12.3 Bioaccumulative potential**

No indication of bioaccumulation potential.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

**12.6 Other adverse effects**

None

**12.7 Additional ecotoxicological information**

None

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Delivery to an approved waste disposal company. Contaminated packages must be completely emptied and can be re-used following proper cleaning. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information**

**14.1 UN number**

No dangerous good in sense of these transport regulations.

**14.2 UN proper shipping name**

No dangerous good in sense of these transport regulations.

**14.3 Transport hazard class(es)**

No dangerous good in sense of these transport regulations.

**14.4 Packing group**

No dangerous good in sense of these transport regulations.

**14.5 Environmental hazards**

No dangerous good in sense of these transport regulations.

**14.6 Special precautions for user**

None

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**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**SECTION 15: Regulatory information**

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

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

**15.2 Chemical safety assessment**

Chemical safety assessments for substances in this preparation were not carried out.

**SECTION 16: Other information**

**16.1 Indication of changes**

None

**16.2 Abbreviations and acronyms**

a.i. = Active ingredient  
ACGIH = American Conference of Governmental Industrial Hygienists (US)  
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road  
AFFF = Aqueous Film Forming Foam  
AISE = International Association for Soaps, Detergents and Maintenance Products (joint project of AISE and CEFIC)  
AOAC = AOAC International (formerly Association of Official Analytical Chemists)  
aq. = Aqueous  
ASTM = American Society of Testing and Materials (US)  
atm = Atmosphere(s)  
B.V. = Beperkt Vennootschap (Limited)  
BCF = Bioconcentration Factor  
bp = Boiling point at stated pressure  
bw = Body weight  
ca = (Circa) about  
CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)  
CEFIC = European Chemical Industry Council (established 1972)  
CIPAC = Collaborative International Pesticides Analytical Council  
CLP = REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
Conc = Concentration  
cP = CentiPoise  
cSt = Centistokes  
d = Day(s)  
DIN = Deutsches Institut für Normung e.V.  
DNEL = Derived No-Effect Level  
DT50 = Time for 50% loss; half-life  
EbC50 = Median effective concentration (biomass, e.g. of algae)  
EC = European Community; European Commission  
EC50 = Median effective concentration  
EINECS = European Inventory of Existing Commercial Chemical Substances (EU, outdated, now replaced by EC Number)  
ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)  
ErC50 = Median effective concentration (growth rate, e.g. of algae)  
EU = European Union  
EWC = European Waste Catalogue  
FAO = Food and Agriculture Organization (United Nations)  
GIFAP = Groupement International des Associations Nationales de Fabricants de Produits Agrochimiques (now CropLife International)  
h = Hour(s)  
hPa = HectoPascal (unit of pressure)  
IARC = International Agency for Research on Cancer

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IATA = International Air Transport Association  
IC50 = Concentration that produces 50% inhibition  
IMDG Code = International Maritime Dangerous Goods Code  
IMO = International Maritime Organization  
ISO = International Organization for Standardization  
IUCLID = International Uniform Chemical Information Database  
IUPAC = International Union of Pure and Applied Chemistry  
kg = Kilogram  
Kow = Distribution coefficient between n-octanol and water  
kPa = KiloPascal (unit of pressure)  
LC50 = Concentration required to kill 50% of test organisms  
LD50 = Dose required to kill 50% of test organisms  
LEL = Lower Explosive Limit/Lower Explosion Limit  
LOAEL = Lowest observed adverse effect level  
mg = Milligram  
min = Minute(s)  
ml = Milliliter  
mmHg = Pressure equivalent to 1 mm of mercury (133.3 Pa)  
mp = Melting point  
MRL = Maximum Residue Limit  
MSDS = Material Safety Data Sheet  
n.o.s. = Not Otherwise Specified  
NIOSH = National Institute for Occupational Safety and Health (US)  
NOAEL = No Observed Adverse Effect Level  
NOEC = No observed effect concentration  
NOEL = No Observable Effect Level  
NOx = Oxides of Nitrogen  
OECD = Organization for Economic Cooperation and Development  
OEL = Occupational Exposure Limits  
Pa = Pascal (unit of pressure)  
PBT = Persistent, Bioaccumulative or Toxic  
pH = -log10 hydrogen ion concentration  
pKa = -log10 acid dissociation constant  
PNEC = Previsible Non Effect Concentration  
POPs = Persistent Organic Pollutants  
ppb = Parts per billion  
PPE = Personal Protection Equipment  
ppm = Parts per million  
ppt = Parts per trillion  
PVC = Polyvinyl Chloride  
QSAR = Quantitative Structure-Activity Relationship  
REACH = Registration, Evaluation and Authorization of Chemicals (EU, see NCP)  
SI = International System of Units  
STEL = Short-Term Exposure Limit  
tech. = Technical grade  
TSCA = Toxic Substances Control Act (US)  
TWA = Time-Weighted Average  
vPvB = Very Persistent and Very Bioaccumulative  
WHO = World Health Organization = OMS  
y = Year(s)

### 16.3 Key literature references and sources for data

None

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

### 16.4 Relevant H- and EUH-phrases (Number and full text)

None

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**16.5 Training advice**

None

**16.6 Additional information**

None

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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