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**Revision Number** 2

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identification

Product Description: Cat No. : CAS-No	<u>Chondroitin sulfate, sodium salt</u> <b>456280000; 456280010; 456280050; 456280250</b> 9082-07-9
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended Use Uses advised against	Laboratory chemicals. No Information available
1.3. Details of the supplier of the sa	fety data sheet
Company	Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium
E-mail address	begel.sdsdesk@thermofisher.com
1.4. Emergency telephone number	For information <b>US</b> call: 001-800-ACROS-01 / <b>Europe</b> call: +32 14 57

For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1. Classification of the substance or mixture

#### CLP Classification - Regulation (EC) No 1272/2008

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

Based on available data, the classification criteria are not met

### Environmental hazards

Based on available data, the classification criteria are not met

Classification according to EU Directives 67/548/EEC or 1999/45/EC R-phrase(s) None

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

#### 2.2. Label elements

#### **Hazard Statements**

#### **Precautionary Statements**

#### 2.3. Other hazards

No information available

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Chondroitin, hydrogen sulfate, sodium salt	9082-07-9		>95	-	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

### **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.	
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.	
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.	
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.	
Protection of First-aiders	No special precautions required.	
4.2. Most important symptoms and effects, both acute and delayed		

None reasonably foreseeable.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Extinguishing media which must not be used for safety reasons No information available.

#### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### Hazardous Combustion Products

None under normal use conditions.

#### Chondroitin sulfate, sodium salt

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

#### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. To maintain product quality. Keep refrigerated.

#### 7.3. Specific end use(s)

Use in laboratories

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Chondroitin sulfate, sodium salt

#### **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

#### Derived No Effect Level (DNEL) No information available

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				
Inhalation				

**Predicted No Effect Concentration** No information available. **(PNEC)** 

#### 8.2. Exposure controls

#### Engineering Measures

None under normal use conditions.

Personal protective equipment		
Eye Protection	Safety glasses with side-shields	(European standard - EN 166)

Hand Protection Protective gloves

Glove material Natural rubber Nitrile rubber Neoprene	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)
PVC				

#### Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection	No protective equipment is needed under normal use conditions.
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> Particle filter
Small scale/Laboratory use	Maintain adequate ventilation
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on basic physical and chemical properties

Appearance Physical State	Solid	
Odor	No information available	
Odor Threshold	No data available	
рН	No information available	
Melting Point/Range	No data available	
Softening Point	No data available	
Boiling Point/Range	No information available	
Flash Point	No information available	Method - No information available
Evaporation Rate	Not applicable	Solid
Flammability (solid,gas)	No information available	
Explosion Limits	No data available	
Vapor Pressure	No data available	
-		0
vapor Density	Not applicable	Solid
Vapor Density Specific Gravity / Density	Not applicable No data available	Solid
		Solid
Specific Gravity / Density	No data available	Solid
Specific Gravity / Density Bulk Density	No data available No data available	Solid
Specific Gravity / Density Bulk Density Water Solubility	No data available No data available No information available No information available	Solid
Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents	No data available No data available No information available No information available	Solid
Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat	No data available No data available No information available No information available <b>ter)</b>	Solid
Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat Autoignition Temperature	No data available No data available No information available No information available <b>ter)</b> Not applicable No data available Not applicable	Solid
Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat Autoignition Temperature Decomposition Temperature	No data available No data available No information available No information available <b>ter)</b> Not applicable No data available	

9.2. Other information

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity	None known, based on information available
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reacti	ons
Hazardous Polymerization Hazardous Reactions	Hazardous polymerization does not occur. None under normal processing.
10.4. Conditions to avoid	Incompatible products. Excess heat. Avoid dust formation.
10.5. Incompatible materials	None known.

#### 10.6. Hazardous decomposition products

None under normal use conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

#### **Product Information**

(a) acute toxicity;

Oral Dermal	Based on available data, the on No data available	classification criteria are not me	t
Inhalation	No data available		
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chondroitin, hydrogen sulfate, sodium salt	>10 g/kg ( Rat )		
(b) skin corrosion/irritation;	No data available		
(c) serious eye damage/irritation;	No data available		
(d) respiratory or skin sensitization;			
Respiratory	No data available		
Skin	No data available		
(e) germ cell mutagenicity;	No data available		
(f) carcinogenicity;	No data available		
	There are no known carcinoge	enic chemicals in this product	
(g) reproductive toxicity;	No data available		
(h) STOT-single exposure;	No data available		
(i) STOT-repeated exposure;	No data available		
Torget Orgens	No information available.		
Target Organs	no mornation available.		
(j) aspiration hazard;	Not applicable Solid		
Other Adverse Effects	See actual entry in RTECS for	r complete information	
Symptoms / effects,both acute and	No information available		

delayed

Chondroitin sulfate, sodium salt

## SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
12.2. Persistence and degradability	No information available
12.3. Bioaccumulative potential	No information available
12.4. Mobility in soil	No information available
<u>12.5. Results of PBT and vPvB</u> assessment	No data available for assessment.
<u>12.6. Other adverse effects</u> Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance

### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste from Residues / Unused Products	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
Contaminated Packaging	Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.
European Waste Catalogue (EWC) Other Information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product
	waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: TRANSPORT INFORMATION** 

IMDG/IMO	Not regulated
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> 14.4. Packing group	
ADR	Not regulated
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> 14.4. Packing group	
IATA_	Not regulated
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u>	
14.5. Environmental hazards	No hazards identified
14.6. Special precautions for user	No special precautions required
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable, packaged goods

## **SECTION 15: REGULATORY INFORMATION**

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

International Inventories

X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Chondroitin, hydrogen sulfate, sodium salt	-	-		-	Х	-	-	Х	Х	-	-

**National Regulations** 

#### Chondroitin sulfate, sodium salt

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment. Take note of Dir 94/33/EC on the protection of young people at work Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

### **SECTION 16: OTHER INFORMATION**

Full text of R-phrases referred to under sections 2 and 3 Not applicable

#### Legend

CAS - Chemical Abstracts Service	<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances	
WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>PNEC - Predicted No Effect Concentration</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
<ul> <li>ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road</li> <li>IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code</li> <li>OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor</li> </ul>	ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - Volatile Organic Compounds
Key literature references and sources for data	

#### Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

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### This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

#### Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

## **End of Safety Data Sheet**