# SECTION 1: PRODUCT IDENTIFICATION

**PRODUCT NAME**
CHONDROITIN SULFATE SODIUM, USP (Bovine)

**PRODUCT CODE**
0890

**SUPPLIER**

<table>
<thead>
<tr>
<th>MEDISCA Inc.</th>
<th>Tel.: 1.800.932.1039</th>
<th>Fax.: 1.855.850.5855</th>
</tr>
</thead>
<tbody>
<tr>
<td>661 Route 3, Unit C, Plattsburgh, NY, 12901</td>
<td>3955 W. Mesa Vista Ave., Unit A-10, Las Vegas, NV, 89118</td>
<td></td>
</tr>
<tr>
<td>6641 N. Belt Line Road, Suite 130, Irving, TX, 75063</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDISCA Pharmaceutique Inc.</th>
<th>Tel.: 1.800.665.6334</th>
<th>Fax.: 514.338.1693</th>
</tr>
</thead>
<tbody>
<tr>
<td>4509 Rue Dobrin, St. Laurent, QC, H4R 2L8</td>
<td>21300 Gordon Way, Unit 153/158, Richmond, BC V6W 1M2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDISCA Australia PTY LTD</th>
<th>Tel.: 1.300.786.392</th>
<th>Fax.: 61.2.9700.9047</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 7, Heritage Business Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-9 Ricketty Street, Mascot, NSW 2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EMERGENCY PHONE**
CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

**USES**
Supplement

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# SECTION 2: HAZARDS IDENTIFICATION

**GHS CLASSIFICATION**
Eye Irritation (Category 2B)

**PICTOGRAM**
Not Applicable

**SIGNAL WORD**
Warning

**HAZARD STATEMENT(S)**
Causes eye irritation.

**AUSTRALIA-ONLY HAZARDS**
Not applicable

**PRECAUTIONARY STATEMENT(S)**

| Prevention | Wash thoroughly after handling. |
| Response | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Storage | Not applicable |
| Disposal | Not applicable |

**HMIS CLASSIFICATION**

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>A</td>
</tr>
</tbody>
</table>

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# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**CHEMICAL NAME**
Chondroitin Sulfate Sodium

**BOTANICAL NAME**
Not applicable

**SYNONYM**
Chondroitin, hydrogen sulfate, sodium salt

**CHEMICAL FORMULA**
C₁₄H₁₉N Na₂O₁₄S

**CAS NUMBER**
9082-07-9

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Last Revision: 12/2015
**SECTION 4: FIRST-AID MEASURES**

**IN CASE OF EYE CONTACT**
Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.

**IN CASE OF SKIN CONTACT**
Wash with soap & water for 15 minutes. If irritation persists seek medical aid.

**IF SWALLOWED**
Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.

**IF INHALED**
Not expected to present a significant hazard under anticipated conditions of normal use.

**SYMPTOMS AND EFFECTS**
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.

**SECTION 5: FIREFIGHTING MEASURES**

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL**
Not applicable

**FLAMMABLE PROPERTIES**
May be combustible at high temperature

**HAZARDOUS COMBUSTION PRODUCTS**
Under fire conditions, hazardous fumes will be present.

**EXTINGUISHING MEDIA**
Small fire: dry chemical, CO₂ or water spray. Large fire: dry chemical, CO₂, alcohol resistant foam or water spray. Do not get water inside containers.

**PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**METHODS & MATERIAL FOR CONTAINMENT**
On land, sweep or shovel into suitable containers. Minimize generation of dust.

**CLEANUP PROCEDURE**
Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

**SECTION 7: HANDLING AND STORAGE**

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**CHEMICAL NAME** | **CAS NUMBER** | **% BY WEIGHT**
--- | --- | ---
CHONDROITIN SULFATE SODIUM | 9082-07-9 | 100
SAFETY DATA SHEET

PRECAUTIONS FOR SAFE HANDLING
Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

STORAGE CONDITIONS
Store in original container, tightly sealed container, protected from direct sunlight, in a dry, cool and well-ventilated area, away from incompatible materials. Store in accordance with local regulations. Eliminate all ignition sources. Separate from oxidizing materials. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Preserve in airtight container, protected from light.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name: CHONDROITIN SULFATE SODIUM</th>
<th>CAS #: 9082-07-9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TWA</strong></td>
<td>Ceiling</td>
</tr>
<tr>
<td>OSHA PEL</td>
<td>N/L</td>
</tr>
<tr>
<td>ACGIH TLV</td>
<td>N/L</td>
</tr>
<tr>
<td>NIOSH</td>
<td>N/L</td>
</tr>
<tr>
<td>AIHA WEEL</td>
<td>N/L</td>
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<tr>
<td>Safe Work Australia HSIS</td>
<td>N/L</td>
</tr>
<tr>
<td>HSE</td>
<td>N/L</td>
</tr>
</tbody>
</table>

N/L = Not Listed

EXPOSURE GUIDELINES
Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m3.

PERSONAL PROTECTIVE EQUIPMENT
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SPECIFIC ENGINEERING CONTROLS
Adequate mechanical ventilation. Fume hood, eye wash station, and safety shower.

NOTES
Occupational exposure limits: Organic dust, total 3 mg/m3

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE
Solid

DESCRIPTION
White to off-white to cream colored powder. Hygroscopic

SOLUBILITY
Freely soluble in water, practically insoluble in acetone and in ethanol (96 per cent).

ODOR
Odorless or slightly characteristic

FLAMMABILITY
May be combustible at high temperature

ODOR THRESHOLD
Not available

PH
5.5 - 7.5 (1%) MELTING POINT
Not available

BOILING POINT
Not available FREEZING POINT
Not available FLASH POINT
Not available

SPECIFIC GRAVITY
Not available EVAPORATION RATE
Not available EXPLOSIVE LIMIT
Not available
**SAFETY DATA SHEET**

**UPPER FLAMMABLE/EXPLOSIVE LIMIT(S):** Not available

**LOWER FLAMMABLE/EXPLOSIVE LIMIT(S):** Not available

**VAPOR PRESSURE:** Not available

**VAPOR DENSITY (AIR = 1):** Not available

**RELATIVE DENSITY (WATER = 1):** 0.3 - 2.0 g/mL

**VAPOR DENSITY:** Not available

**RELATIVE DENSITY:** Not available

**VISCOSITY:** Not available

**LOG P (OCTANOL-WATER):** Not available

**DECOMPOSITION TEMPERATURE:** Not available

**SECTION 10: STABILITY AND REACTIVITY**

**REACTIVITY:** Not established

**STABILITY:** Stable under recommended storage conditions

**MATERIALS TO AVOID:** Strong oxidants

**HAZARDOUS DECOMPOSITION PRODUCTS:** Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur

**HAZARDOUS POLYMERIZATION:** Will not occur

**POSSIBILITY OF HAZARDOUS REACTION:** Not established

**CONDITIONS TO AVOID:** Moisture, sunlight and extreme temperatures

**SECTION 11: TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:**
- Oral: Rat: LD50: (mg/kg): > 10 000
- Dermal: Rabbit: LD50: (mg/kg): Not available
- Inhalation: Rat: LD50: (mg/L/4hr): Not available

**SKIN CORROSION/IRRITATION:** Due to lack of data the classification is not possible.

**SERIOUS EYE DAMAGE/EYE IRRITATION:**
- Causes eye irritation.
- Draize test result: Irritant.
- Species: Rabbit
- Organ: Eye
- Severity: Slight.

**RESPIRATORY OR SKIN SENSITIZATION:** Due to lack of data the classification is not possible.

**GERM CELL MUTAGENICITY:** Due to lack of data the classification is not possible.

**CARCINOGENICITY:**
- OSHA: CHONDROITIN SULFATE SODIUM is not listed.
- NTP: CHONDROITIN SULFATE SODIUM is not listed.
- IARC: CHONDROITIN SULFATE SODIUM is not evaluated.
- California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**ADDITIONAL CARCINOGENICITY INFORMATION:** Not available

**REPRODUCTIVE TOXICITY:** Due to lack of data the classification is not possible.

**SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** Due to lack of data the classification is not possible.
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE
Due to lack of data the classification is not possible.

ASPIRATION HAZARDS
Due to lack of data the classification is not possible.

SIGNS AND SYMPTOMS OF EXPOSURE
Not expected to present a significant hazard under anticipated conditions of normal use.

POTENTIAL HEALTH EFFECTS
- **Inhalation**: May be harmful if inhaled. May cause irritation to mucous membranes and respiratory tract.
- **Ingestion**: May be harmful if swallowed.
- **Skin**: May be harmful if absorbed through skin. May cause skin irritation
- **Eyes**: Causes eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

**TOXICITY**
- EC50: 48 Hr: Daphnia magna: (mg/L): Not available
- LC50: 96 Hr: Fish: (mg/L): Not available
- IC50: 72 Hr: Algae: (mg): Not available

**PERSISTENCE AND DEGRADABILITY**
Not available

**BIOACCUMULATIVE POTENTIAL**
Not available

**MOBILITY IN SOIL**
Soluble in water

**OTHER ADVERSE EFFECTS**
This product is not intended to be released into the environment

SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL**
Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment.

SECTION 14: TRANSPORT INFORMATION

**UNITED STATES & CANADA**
- **UN PROPER SHIPPING NAME**: Not dangerous good
- **UN NUMBER**: Not applicable
- **CLASS**: Not applicable
- **PACKING GROUP**: Not applicable

**AUSTRALIA**
- **UN PROPER SHIPPING NAME**: Not dangerous good
- **UN NUMBER**: Not applicable
- **CLASS**: Not applicable
- **PACKING GROUP**: Not applicable
- **HAZCHEM**: Not Applicable

**ENVIRONMENTAL HAZARDS**
Not available

**SPECIAL SHIPPING INFORMATION**
Not applicable
### SECTION 15: REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Chemical Name &amp; CAS</th>
<th>CERCLA 40 CFR Part 302.4</th>
<th>SARA (Title III) 40 CFR Part 372.65</th>
<th>EPA 40 CFR Part 355 Appendix A</th>
<th>Pennsylvania</th>
<th>Right-to-know New Jersey</th>
<th>Massachusetts</th>
<th>California Prop 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHONDROITIN SULFATE SODIUM 9082-07-9</td>
<td>N/L</td>
<td>N/L</td>
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<td>N/L</td>
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</table>

N/L = Not Listed; X = Listed

### AUSTRALIAN REGULATIONS

<table>
<thead>
<tr>
<th>Chemical Name &amp; CAS</th>
<th>Poisons and Therapeutic Goods Regulation</th>
<th>Therapeutic Goods Act</th>
<th>Code of Practices - Illicit Drug Precursors</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHONDROITIN SULFATE SODIUM 9082-07-9</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
</tr>
</tbody>
</table>

### SECTION 16: OTHER INFORMATION

**REFERENCES**

Available upon request

**ABBREVIATIONS AND ACRONYMS**

CAS – Chemical Abstract Service; GHS – Global Harmonized System; OSHA PEL – Occupational Safety & Health Administration Permissible Exposure Limits; TWA – Time Weighted Average; HSIS – Hazardous Substances Information System; STEL – Short Term Exposure Limit; AIHA WEEL – American Industrial Hygiene Association Workplace Environment Exposure Levels; LD50 – Lethal Dose, 50%; IARC – International Agency for Research on Cancer; NTP – National Toxicology Program; WHMIS – Workplace Hazardous Materials Information System; SARA – Superfund Amendments and Reauthorization Act; EPA – Environmental Protection Agency; CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act; HMIS – Hazardous Materials Information System; NIOSH – National Institute for Occupational Safety and Health; MSHA - Mine Safety and Health Administration; ACGIH - American Conference of Governmental Industrial Hygienists; IDHL - Immediately Dangerous to Health or Life; TLV – Threshold Limit Value; HSE – Health and Safety Executive; REL - Recommended Exposure Limit

**LAST REVISION**

12/2015

**SUPERSEDES**

10/2012

**DISCLAIMER**

This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEDISCA® shall not be held liable for any damage resulting from handling or from contact with the above product. Recipients of the product must take responsibility for observing existing laws and regulations.