SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: ADRENOCORTICOTROPHIC HORMONE (ACTH)
PRODUCT CODE: 1904
SUPPLIER: MEDISCA Inc.
Tel.: 1.800.932.1039 | Fax.: 1.855.850.5855
661 Route 3, Unit C, Plattsburgh, NY, 12901
3955 W. Mesa Vista Ave., Unit A-10, Las Vegas, NV, 89118
6641 N. Belt Line Road, Suite 130, Irving, TX, 75063
MEDISCA Pharmaceutique Inc.
Tel.: 1.800.665.6334 | Fax.: 514.338.1693
4509 Rue Dobrin, St. Laurent, QC, H4R 2L8
21300 Gordon Way, Unit 153/158, Richmond, BC V6W 1M2
MEDISCA Australia PTY LTD
Tel.: 1.300.786.392 | Fax.: 61.2.9700.9047
Unit 7, Heritage Business Park
5-9 Ricketty Street, Mascot, NSW 2020

EMERGENCY PHONE
CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
NSW Poisons Information Centre: 131 126

USES: Therapeutic agent (epilepsy, multiple sclerosis)

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION
Sensitization - Respiratory (Category 1)
Carcinogenicity (Category 2)
Toxic to Reproduction (Category 2)

PICTOGRAM

SIGNAL WORD
Danger

HAZARD STATEMENT(S)
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.

AUSTRALIA-ONLY HAZARDS
Repeated exposure may cause skin dryness or cracking.

PRECAUTIONARY STATEMENT(S)
Prevention
Avoid breathing dust, fume, gas, mist, vapors, spray.
In case of inadequate ventilation wear respiratory protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection, face protection.

Response
IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms call a poison center or medical professional.
IF EXPOSED OR CONCERNED: Get medical advice/attention.

Storage
Store locked up.

Disposal
Dispose of contents and/or container in accordance with local regulations.

HMIS CLASSIFICATION
Health Hazard 2
Flammability 0
Reactivity 0
Personal Protection 1
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
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<tr>
<td>BOTANICAL NAME</td>
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<tr>
<td>SYNONYM</td>
<td>Corticotrophin</td>
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<tr>
<td>CHEMICAL FORMULA</td>
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<tr>
<td>CAS NUMBER</td>
<td>9002-60-2</td>
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<tr>
<td>ALTERNATE CAS NUMBER</td>
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<tr>
<td>MOLECULAR WEIGHT</td>
<td>4567.6 (free peptide)</td>
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### COMPOSITION

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.

### CHEMICAL FORMULA

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>% BY WEIGHT</th>
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<tbody>
<tr>
<td>ADRENOCORTICOTROPHIC HORMONE</td>
<td>9002-60-2</td>
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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**

SECTION 5: FIREFIGHTING MEASURES

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

**FLAMMABLE PROPERTIES**
Combustible at high temperatures.

**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.
SAFETY DATA SHEET

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

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 tight, light resistant containers at a temperature below -15°C.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name: ADRENOCORTICOTROPHIC HORMONE CAS #: 9002-60-2

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<tr>
<th></th>
<th>TWA</th>
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<th>STEL</th>
<th>REL</th>
<th>IDLH</th>
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</table>

N/L = Not Listed

EXPOSURE GUIDELINES

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.

PERSONAL PROTECTIVE EQUIPMENT

Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.

SPECIFIC ENGINEERING CONTROLS

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Solid

DESCRIPTION

White to almost white powder. Is hygroscopic.

SOLUBILITY

Soluble in water (at a concentration of 10 g/L).

ODOR

Not available

FLAMMABILITY

Combustible at high temperatures.
### 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): Not available
- Dermal: Rabbit: LD50: (mg/kg): Not available
- Inhalation: Rat: LD50: (mg/L/4hr): Not available

**SKIN CORROSION/IRRITATION**
- Not available

**SERIOUS EYE DAMAGE/EYE IRRITATION**
- Not available

**RESPIRATORY OR SKIN SENSITIZATION**
- Corticotropin can induce sensitisation, and severe hypersensitivity reactions, including anaphylaxis, may occur. This is generally considered to be due to the porcine component of the peptide.

**GERM CELL MUTAGENICITY**
- Not available

**CARCINOGENICITY**
- **OSHA**: ADRENOCORTICOTROPIC HORMONE is not listed.
- **NTP**: ADRENOCORTICOTROPIC HORMONE is not listed.
- **IARC**: ADRENOCORTICOTROPIC HORMONE 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.

Note: Substances like Corticotrophin showing glucocorticoid action have shown teratogenicity in animal testing, but data concerning human teratogenicity are inconsistent.

REPRODUCTIVE TOXICITY

Several animal studies indicate that specific exposure to Corticotrophin during pregnancy might result in specific developmental abnormalities, but data cannot be generalized to humans.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Not available

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

Not available

ASPIRATION HAZARDS

Not expected to present a significant hazard under anticipated conditions of normal use. Can produce marked sodium and water retention, considerable potassium loss; sensitisation, severe hypersensitivity reactions including anaphylaxis, and adrenal insufficiency. Adenocorticotropic hormone is a corticosteroid and has the potential to produce both adverse glucocorticoid and mineralcorticoid effects. Information on likely routes of exposure: Inhalation, skin and ingestion.

SIGNS AND SYMPTOMS OF EXPOSURE

May be harmful if inhaled. May cause respiratory tract irritation. Can induce severe hypersensitivity, including anaphylaxis.

POTENTIAL HEALTH EFFECTS

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation. Can induce severe hypersensitivity, including anaphylaxis.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. May cause slight skin irritation.

Eyes

May cause 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/L): Not available

PERSISTENCE AND DEGRADABILITY

Not available

BIOACCUMULATIVE POTENTIAL

Not available

MOBILITY IN SOIL

Highly mobile. Very soluble in water: 10, 000 mg/L.

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
### SAFETY DATA SHEET

#### AUSTRALIA

**UN PROPER SHIPPING NAME**  
Not dangerous good

**UN NUMBER**  
Not applicable

**CLASS**  
Not applicable

**PACKING GROUP**  
Not applicable

**HAZCHEM**  
Not available

**ENVIRONMENTAL HAZARDS**  
Not applicable

**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>ADRENOCORTICOTROPHIC HORMONE 9002-60-2</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>
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<tbody>
<tr>
<td>ADRENOCORTICOTROPHIC HORMONE 9002-60-2</td>
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</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

07/2015

#### SUPERSEDES

09/2013
SAFETY DATA SHEET

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.