SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME
ADRENOCORTICOTROPHIC HORMONE (ACTH)

PRODUCT CODE
1904

SUPPLIER
MEDISCA Inc.
Tel.: 1.800.932.1039 | Fax.: 1.855.885.5855
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)
Sensitization - Skin (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.
May cause an allergic skin reaction.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.

AUSTRALIA-ONLY HAZARDS
Not Applicable.

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.
Contaminated work clothing must not be allowed out of the workplace.

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.
IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

Storage
Store locked up.

Last Revision: 08/2017
**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>Corticotrophin</th>
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<tbody>
<tr>
<td>BOTANICAL NAME</td>
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<tr>
<td>SYNONYM</td>
<td>Adrenocorticotropin</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**

<table>
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<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>% BY WEIGHT</th>
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<tr>
<td>ADRENOCORTICOTROPHIC HORMONE</td>
<td>9002-60-2</td>
<td>100</td>
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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.

**NOTES**

Synthetic porcine corticotropin hormone

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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**

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

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**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.

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, 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. Transient spikes up to 25°C (77°F) are permitted as long as they do not exceed 24 hours. Preserve in tight, light resistant containers between -25° to -10°C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
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<tr>
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<td>HSE</td>
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<tr>
<td>ACGIH TLV</td>
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</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. Fumehood, eye wash station, and safety shower.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
### SAFETY DATA SHEET

**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.

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<td>Not available</td>
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#### 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**  
Due to lack of data the classification is not possible.

**SERIOUS EYE DAMAGE/EYE IRRITATION**  
Due to lack of data the classification is not possible.
REPORATORY OR SKIN SENSITIZATION

Skin and respiratory sensitizer. 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

Due to lack of data the classification is not possible.

CARCINOGENICITY

OSHA

ADRENOCORTICOTROPHIC HORMONE is not listed.

NTP

ADRENOCORTICOTROPHIC HORMONE is not listed.

IARC

ADRENOCORTICOTROPHIC 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.

ADDITIONAL CARCINOGENICITY INFORMATION

Suspected of causing cancer. 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

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

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. Adenocorticotrophic 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

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

POTENTIAL HEALTH EFFECTS

Inhalation

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

Ingestion

Harmful if swallowed.

Skin

Harmful if absorbed through skin. May cause slight skin irritation. May cause an allergic skin reaction.

Eyes

May cause eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY

EC50: 48 Hr: Crustacea: (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

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<th>UN PROPER SHIPPING NAME</th>
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## AUSTRALIA

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<td>CLASS</td>
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<tr>
<td>PACKING GROUP</td>
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## ENVIRONMENTAL HAZARDS

Not available

## SPECIAL SHIPPING INFORMATION

Not applicable

# SECTION 15: REGULATORY INFORMATION

<table>
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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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<tr>
<td>ADRENOCORTICOTROPHIC HORMONE 9002-60-2</td>
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# SECTION 16: OTHER INFORMATION

## REFERENCES

Available upon request
ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service; GHS – Global Harmonized System; OSHA PEL – Occupational Safety &amp; 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</td>
</tr>
</tbody>
</table>

LAST REVISION
08/2017

SUPERSEDES
07/2015

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