HYDROCORTISONE
SAFETY DATA SHEET
Revision Date 2016-08-10

1. IDENTIFICATION

Product Identifier	Hydrocortisone
Product Number	H009
Distributor Name	TOKU-E Company
Distributor Address	715 W Orchard Dr. Suite 3 Bellingham, WA 98225
Phone Number	(360)734-1789
Emergency Phone Number (International)	+1 (352) 353-3500
Emergency Phone Number (US Only)	1 (800) 535-5053
Safety Data Sheet Issued by	TOKU-E USA
CAS-Number	[50-23-7]
EC/ REACH Number	[200-020-1]
Recommended Use	Hydrocortisone can be used to study its effects on immunological pathways and cells of the immune system.
Restrictions of Use	Not for human or animal use

2. HAZARD(S) IDENTIFICATION

GHS Classification: Reproductive Toxicity (Category 2)

GHS Label Elements, Including

Warning

Hazard Statements

H361	Suspected of damaging fertility or the unborn child

Precautionary Statements

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with governmental regulation

Hazards not otherwise classified (HNOC) by GHS: No Data Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym(s)	Cortisol, Kendall's compound F, Reichstein's substance M, 17-Hydroxycorticosterone
Formula	$C_{21}H_{30}O_5$

Molecular Weight	362.46
CAS-Number	[50-23-7]
EC/ REACH Number	[200-020-1]
Hazardous Components	Hydrocortisone Reproductive Toxicity (Category 2)

4. FIRST-AID MEASURES

General Advice	Consult a doctor/physician if exposed - additional medical care may be required. Show this Safety Data Sheet to the medical provider.
If Inhaled	If inhaled, move to fresh air. If not breathing, give artificial respiration and immediately call local emergency telephone number.
In Case of Skin Contact	Wash skin thoroughly with soap and water.
In Case of Eye Contact	Flush eye with water. After initial flush, remove any contact lenses and continue flushing for at least 15 minutes.
If Swallowed	Rinse mouth with water. Immediately call a doctor, physician, or poison control center. Never give anything by mouth to an unconscious person.
Specific Treatment	Please see Section 2 precautionary statements and/or Section 11.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water spray, alcohol-resistant foam, dry chemical, carbon dioxide
Special Protective Equipment for Firefighters	Wear self-contained breathing apparatus
Hazardous Combustion Products	Formed under fire conditions: carbon oxides, carbon monoxide, hydrogen peroxide

6. ACCIDENTAL RELEASE MEASURES

General	Evacuate personnel to a safe location. Use appropriate personal protective equipment while in contact with product. Avoid dust formation. Ensure adequate ventilation.
Personal Precautions	Prevent contamination of skin, eyes and clothing with appropriate protective equipment (Section 8). Wear respiratory protection.
Environmental Precautions	Recover waste, if possible, and place in suitable closed container for licensed disposal. Prevent spillage - do not let product enter drains.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Wear appropriate protective clothing/gear to prevent contact with skin and eyes. Provide exhaust ventilation or respiratory protection in areas where dust is formed.

Precautions for Safe Storage	Store in a tightly closed container. Protect from humidity. Recommended storage temperature: <30%
Incompatibilities	No Data Available

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Contains no substance/substances with occupational exposure limit values

OSHA Permissible Exposure Limits	No Data Available
NIOSH Recommended Exposure Limits	No Data Available
ACGIH Threshold Limit Values	No Data Available
PPE: Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
PPE: Hand Protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands
PPE: Eye Protection	Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)
PPE: Skin and Body Protection	Handle with gloves. Wear protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. When deemed needed according to the concentration and amount of this product, use a complete body suit

9. PHYSICAL/CHEMICAL PROPERTIES

Appearance	White or almost white crystalline powder
Lower Flammability/Explosion Limit	No Data Available
Upper Flammability/Explosion Limit	No Data Available
Odor	No Data Available
Vapor Pressure	No Data Available
Odor Threshold	No Data Available
Vapor Density	No Data Available
pH	No Data Available
Relative Density	No Data Available
Melting Point/Freezing Point	No Data Available

Water Solubility	No Data Available
Solubility in Other Solvents	No Data Available
Boiling Point and Range	No Data Available
Flash Point	No Data Available
Evaporation rate	No Data Available
Flammability (solid, gas)	No Data Available
Partition Coefficient: n-octanol/water	No Data Available
Ignition Temperature	No Data Available
Auto-Ignition Temperature	No Data Available
Decomposition Temperature	No Data Available
Viscosity	No Data Available
Density	No Data Available
Specific Rotation	+150° – +156°
Absorbance (290nm, 5% in H_2O)	No Data Available
Water Content (Loss on Drying)	Not more than 1.0%

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions
Possibility of Hazardous Reactions	No Data Available
Conditions to Avoid	No Data Available
Materials to Avoid	Strong oxidizing agents
Hazardous Decomposition Products	Formed under fire conditions: carbon oxides, carbon monoxide, hydrogen peroxide

11. TOXICOLOGICAL INFORMATION

Oral LD_{50}	No Data Available
Inhalation LC_{50}	No Data Available
Dermal LD_{50}	No Data Available
Intraperitoneal LD_{50}	Rat: 150 mg/kg
Intravenous LD_{50}	No Data Available
Subcutaneous LD_{50}	Rat: 449 mg/kg
Skin Corrosion/Irritation	No Data Available
Serious Eye Damage/ Eye Irritation	No Data Available
Respiratory or Skin Sensitization	No Data Available
Germ Cell Mutagenicity	No Data Available
Carcinogenicity	This substance has not been identified as a potential carcinogen within the National Toxicology Program Report on Carcinogens or within the International Agency for Research on Cancer Monograph.
Reproductive Toxicity	Rat: Female, TDLo 210 mg/kg, oral 14 day(s) pre-mating Reproductive - Maternal Effects - uterus, cervix, vagina
Reproductive Toxicity	Rat: Female, TDLo 330 mg/kg, subcutaneous 18 days after conception Reproductive - Effects on Newborn - biochemical and metabolic

Reproductive Toxicity	Rat: Female, TDLo 200 mg/kg, subcutaneous 24-15 days after conception Effects on Embryo or Fetus - fetotoxicity
Specific Target Organ Toxicity: Single Exposure (Globally Harmonized System)	No Data Available
Specific Target Organ Toxicity: Repeated Exposure (Globally Harmonized System)	No Data Available
Aspiration Hazard	No Data Available
Potential Heath Effects	See Section 2, Hazard(s) Identification
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated
Synergistic Effects	No Data Available
Additional Information	No Data Available

12. ECOLOGICAL INFORMATION

Toxicity	No Data Available
Persistence and Degradability	No Data Available
Bio accumulative Potential	No Data Available
Mobility in Soil	No Data Available
PBT and vPvB Assessment	No Data Available

In the absence of complete ecological information, treat product as environmentally hazardous. Use proper storage, handling, and disposal to prevent unintentional release into the environment.

13. DISPOSAL CONCENTRATIONS

Product	Dispose of product through a licensed disposal company.
Contaminated Packaging	Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US)	Not a Dangerous Good
IMDG	Not a Dangerous Good
IATA	Not a Dangerous Good

15. REGULATORY INFORMATION

SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.
SARA 311/312 Hazards	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312

Massachusetts Right to Know	No components are subject to the Massachusetts Right to Know Act
Pennsylvania Right to Know	No components are subject to the Pennsylvania Right to Know Act
New Jersey Right to Know	No components are subject to the New Jersey Right to Know Act
California Prop. 65 Components	No This product does not contain any chemicals known to the State of California to cause birth defects, cancer, or any other reproductive harm
EU Information	SDS in accordance with REACH 1907/2006 EC/ REACH Number [200-020-1] CAS-Number [50-23-7] Name: Hydrocortisone Envisaged Registration Deadline: 30/11/2010 See GHS Information under Section 2, Hazard Identification

16. OTHER INFORMATION

Revision Date: 2016-08-10

HMIS Rating	Health Hazard	0
	Chronic Health Hazard	Y
	Flammability	0
	Physical Hazard	0
NFPA Rating	Health Hazard	0
	Fire Hazard	0
	Reactivity Hazard	0

This safety data sheet represents TOKU-E Company's current understanding of the hazards associated with this product. The stated hazard information is based on existing experimental data and is not guaranteed to be all-inclusive. TOKU-E Company strives to maintain current and comprehensive safety information but recognizes that this safety data sheet may require revision as new information becomes available. TOKU-E Company shall not be held liable for damage or injury resulting from contact, handling, or storage of this product.