

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-
- · Product number: NET396000MC, NET396250UC, NET396001MC
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · **Product category** PC21 Laboratory chemicals
- · Application of the substance / the mixture Laboratory chemicals
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Further information obtainable from:

US Technical Support 800-762-4000

· 1.4 Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

## SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · 2.1.1 Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- 2.1.3 Additional information: For the wording of the relevant risk phrases refer to section 16.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

[or shower].

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

(Contd. on page 2)

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

*Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-*

(Contd. of page 1)

· vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- . 3 2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 64-17-5	ethanol	<b>♦</b> Flam. Liq. 2, H225	75-100%
EINECS: 200-578-6		•	
Index number: 603-002-00-5			

· Additional information: For the wording of the relevant risk phrases refer to section 16.

### SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot$  4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

EU

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

*Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-*

(Contd. of page 2)

### SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

*No special precautions are necessary if used correctly.* 

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- · Storage class: 3
- · 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · Respiratory protection: Suitable respiratory protective device recommended.
- · Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

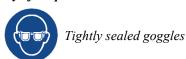
(Contd. on page 4)

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

*Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-*

(Contd. of page 3)

· Eye/face protection



## SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Fluid

· Colour: According to product specification

• Odour: Characteristic
• Odour threshold: Not determined.
• Melting point/freezing point: -114.5 °C

· Boiling point or initial boiling point and boiling range 78 °C

· Flammability Highly flammable.

Lower and upper explosion limit

Lower: 3.5 Vol %
 Upper: 15 Vol %
 Flash point: 13 °C
 Auto-ignition temperature: 425 °C

Decomposition temperature: Not determined.pH Not determined.

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

Solubility

water at 20 °C:
Partition coefficient n-octanol/water (log value)
Vapour pressure at 20 °C:
Vapour pressure at 50 °C:
1,000 g/l
Not determined.
59 hPa
280 hPa

· Density and/or relative density

Density at 20 °C:

Relative density

Vapour density

0.79 g/cm³

Not determined.

Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid

Important information on protection of health and

environment, and on safety.

• Ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Solvent content:

· Organic solvents: 100.0 %
· Molecular weight 46 g/mol

· Change in condition

• Evaporation rate Not determined.

· Information with regard to physical hazard classes

· Explosives Void

(Contd. on page 5)

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-

	(Contd. of page 4)
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gase	es
in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
Desensitised explosives	Void

### SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

## SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.

(Contd. on page 6)

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-

(Contd. of page 5)

- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects No further relevant information available.

## SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

Must be specially treated adhering to official regulations.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN number or ID number ADR, IMDG, IATA	UN1170
· 14.2 UN proper shipping name	
· ADR	1170 ETHANOL (ETHYL ALCOHOL) mixture
· IMDG · IATA	ETHANOL (ETHYL ALCOHOL) mixture ETHANOL mixture
	ETHANOL mixture
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class · Label	3 Flammable liquids.
· 14.4 Packing group · ADR, IMDG, IATA	II
14.5 Environmental hazards:	Not applicable.
	11
· 14.6 Special precautions for user · Hazard identification number (Kemler code):	Warning: Flammable liquids. 33
· EMS Number:	F-E,S-D
Stowage Category	A 2,5 2
· 14.7 Maritime transport in bulk according to IM	10
instruments	Not applicable.

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

*Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-*

	(Contd. of page
Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1170 ETHANOL (ETHYL ALCOHOL) MIXTURE, 3, II

## SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist.

Printing date 13.02.2024 Version number 1 Revision: 18.05.2023

Trade name: Hydrocortisone (Cortisol, [1,2,6,7-3H(N)]-), [1,2,6,7-3H(N)]-

(Contd. of page 7)

Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

#### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

- EU