# **Material Safety Data Sheet**

# **HCUTM** - Specimen transport and storage container, prefilled with Multipurpose Medium

<u>Version 01</u> Revision Date 2020. 03. 30 Date of issue : 20. 06. 2019

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

# 1.1 Product identifier

Trade name:

HCUTM, Specimen transport and storage container, prefilled with Multipurpose Medium

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use of the substance/Mixture**: A specimen transport and storage container, prefilled with multipurpose medium for specimen collection.

# 1.3 Detail of the supplier of the safety data sheet

Manufacturer/supplier:

Han Chang Medic

79-35, Jang San 2-gil, Susin-myeon Dongnam-gu, Cheonahn-si,

Chungcheongnam- do, Republic of Korea

E-mail address of person in charge; hanchangmedic@gmail.com, +82-41-569-8898

SDS/Contact Person : Mr. OH SE YOUNG

# **SECTION 2: Hazard identification**

# 2.1 Classification of the substance or mixture

Classification (Specimen transport and storage container for Medical Device)

Not a hazardous substance or mixture

According to OSHA & TSCA

#### 2.2 Label elements

# Labeling (Regulation(EC)No1272/2008)

Not a hazardous substance or mixture according to Regulation(EC) No. 1272/2008

# 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic(PBT), or very persistent and very bioaccumulate(vPvB) at levels of 0.1%, or Higher No special risks known.

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# **SECTION 3: Composition/Information on Ingredients**

#### 3.2 Mixtures

Chemical nature : Aqueous solution

Components (1L Per)

| Chemical name                 | CAS-No. Index-No. Registration No, | Concentration |
|-------------------------------|------------------------------------|---------------|
| Hank's balanced salt solution |                                    | 10.33%        |
| BSA (Bovine Serum Albumin)    | 9048-46-8                          | 10.54%        |
| L-cysteine                    | 616-91-1                           | 0.43%         |
| Gelatin                       | 9000-70-8                          | 0.79%         |
| Sucrose                       | 57-50-1                            | 72.19%        |
| L-glutamic acid               | 56-86-0                            | 0.74%         |
| HEPES                         | 7365-45-9                          | 3.17%         |
| Sodium bicarbonate            | 144-55-8                           | 0.37%         |
| Vancomycin                    | 1404-93-9                          | 0.10%         |
| Amphotericin B                | 1397-89-3                          | 1.31%         |
| Colistin                      | 1264-72-8                          | 0.02%         |
| Phenol Red                    | 143-74-8                           | 0.01%         |

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measure

In case of eye contact : Flush eyes with water as a precaution.

If swallowed : Do NOT induce vomiting

Drink water as a precaution.

Consult a physician if it is necessary

# 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Gastrointestinal discomfort

# 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available

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# **SECTION 5 : Fire fighting measures**

Not applicable due to contain non fire or burning materials.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Personnel Precautions : No special precautions required.

# **6.2 Environmental precautions**

Environmental precautions : Avoid subsoil penetration.

# 6.3 Methods and material for containment and clean up

Method of cleaning up : Wipe up with absorbent materials (e.g. cloth..)

#### 6.4 Reference to other sections

See chapter 13

# **SECTION 7: Handling and storage**

# 7.1 Precaution for safe handling : not required under normal use

Advice on safe handling : No special protective measures against fire required.

Hygiene measures : Keep away from food and drink. Keep away from children.

# 7.2 Condition for safe storage, including any incompatibilities

Requirement for storage : Store at room temperature in the original container.

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Further information on storage: Do not freeze, Keep away from direct sunlight.

Recommended storage temperature : 15 ~ 25 °C

Advice on common storage : No materials to be especially mentioned

# **SECTION 8 : Exposure Controls/Personal protection**

# 8.1 Control Parameters

| Substance name  | End use   | Exposure routes | Potential health effects                             | Value                     |
|-----------------|-----------|-----------------|------------------------------------------------------|---------------------------|
| Sodium Chloride | Workers   | Inhalation      | Long term systemic effects, Long term local effects  | LD50>10.5mg/L<br>4hr Rat  |
|                 | Workers   | Skin contact    | Long Term systemic effects                           | LD50>10000mg/kg<br>Rabbit |
|                 | Consumers | Inhalation      | Long term exposure Short term exposure Local effects | LD50>10.5mg/L<br>4hr Rat  |
|                 | Consumers | Skin contact    | Long term local effects                              | LD50>10000mg/kg<br>Rabbit |
|                 | Consumers | Injection       | Long term exposure Short term exposure Local effects | LD50>3000mg<br>Rat        |

# Derived No Effect Level(DNEL) according to Regulation (EC).No.1907/2006:

| Substance name  | Environment Compartment  | Value     |
|-----------------|--------------------------|-----------|
| Sodium chloride | Fresh water              | 10mg/L    |
|                 | marine water             | NA        |
|                 | Fresh water sediment     | 7.2 mg/kg |
|                 | Marin sediment           | 0.72mg/kg |
|                 | Soil                     | 1.26mg/kg |
|                 | Intermittent use/release | 3.44mg/L  |
|                 | Sewage treatment plant   | 24.5mg/L  |

Predicted No Effects Concentration according to Regulation (EC) No.1907/2006:

# 8.2 Exposure control

Personal protective equipment

Protective measures : Avoid contact with eyes

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical properties

Appearance : Liquid
Color : Pink red

Odor : Nearly odorless

Odor Threshold : Not determined

pH :  $7.3 \pm 0.2$  at  $25^{\circ}$ C

Melting point/freezing point : ca. 0 ℃

Decomposition temperature. : Not applicable
Flammability (solid, gas) : Not applicable
Upper explosion limit : Not applicable
Lower explosion limits : Not applicable

Vapor pressure : ca. 25hPa(20℃) similar to water

Vapor density : No data available

Relative density. : ca. 1,005g/cm3 (20 $^{\circ}$ C) Solubility Water solubility : In all proportions (20 $^{\circ}$ C)

Partition coefficient : Not applicable

(n-octanol/water)

Auto-ignition temperature : No data available

Explosive properties : No data available

Oxidizing properties : No data available

# 9.2 Other information

No data available

# **SECTION 10: Stabilities and reactivity**

# 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

# 10.2 Chemical stability

The product is chemically stable.

# 10.3 Possibilities of hazardous reactions

Hazardous reactions : None reasonable foreseeable

10.4 Condition to avoid

Condition to avoid : Do not store at temperature above 30 °C

# 10.5 Incompatible materials

Materials to avoid : Do not mix with other products

# 10.6 Hazardous decomposition products

None reasonably foreseeable.

# **SECTION 11 : Toxicological information**

# 11.1 Information on toxicological effects

# **Product:**

Acute oral toxicity : Not applicable

**Components**:

Sodium bicarbonate

Acute oral toxicity : LD50>10,000mg/kg Rabbit
Acute inhalation toxicity : LD50>10.5mg/L 4hr Rat
Acute dermal toxicity : LD50>10000mg/kg Rabbit

**BSA** 

Acute oral toxicity : Not applicable

Acute inhalation toxicity : Not applicable

Acute dermal toxicity : Not applicable

# 11.2 Skin corrosion/irritation

Product:

Result : No skin irritation

**Components**:

**Sodium bicarbonate** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

**BSA** 

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

# 11.3 Serious eye damage/eye irritation

Product :

Result : Assessment of eye tolerance in rabbits – slightly irritating

Remarks : According to the classification criteria of the EC the product is not

considered as an eye irritant.

# **SECTION 12: Ecological information**

# **12.1 Toxicity**

# **Product:**

Toxicity to microorganisms : EC50:> 3.200mg/L

Method: OECD 209

**Components:** 

Sodium chloride

Toxicity to fish : LC50(Leucis idus (Golden orfe)): NA

Exposure time: 96h

Toxicity to daphnia and : EC50:>500mg/L

Other aquatic invertebrates : Exposure time : 48h

Toxicity to algae : EC50(Desmodesmus subspicatus(green algae))

500mg/L, Exposure time: 72h

Toxicity to fish(Chronic toxicity) : NOEC:23mg/L

Exposure time: 34d

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and : NOEC: 9.43 mg/L

Other aquatic invertebrates : Exposure time : 34d

(Chronic toxicity) Species : Daphnia magna (Water flea)

**BSA** 

Toxicity to daphnia and : No data

Other aquatic invertebrates

Toxicity to algae : No data

Toxicity to fish(Chronic toxicity). : No data

Toxicity to daphnia and : No data

Other aquatic invertebrates

(Chronic toxicity)

# 12.2 Persistence and degradability

**Product:** 

Biodegradability : Biodegradation : 90 ~ 100%

Exposure time: 15d

Method: OECD Test Guideline 301A

According to the result of tests of Biodegradability

this product is considered as being readily Biodegradable

Chemical Oxygen Demand : 594 mg/L(COD)

Test substance: 1 % solution.

# **Components**:

# Sodium chloride

Biodegradability : The methods of determining Biodegradability are not applicable

to inorganic substance

**BSA** 

Biodegradability : Biodegradation : 90 ~ 100%

Exposure time: 15d

Method: OECD Test Guideline 301A

According to the result of tests of Biodegradability this product is considered as

being readily Biodegradable

#### 12.3 Other adverse effects

Product:

Additional ecological : none information

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

Product : Dispose of the product according to the defined EWC

(European Waste Code)

Contaminated packaging : Take empty packaging to the recycling plant.

Waste key for the unused: European waste catalogue (EWC) 070601

# **SECTION 14: Transport information**

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precaution for user

Not applicable

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environment regulation/legislation specific for the substance or mixture

REACH – Candidate List of Substance of very High: Not applicable

Concern for Authorization (Article 59)

Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable

# Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major accident hazards involving dangerous substance. Not applicable.

Volatile organic compounds : Volatile organic compound(VOC) content: < 3%

Directive 2010/75/EC on the limitation of emission of

volatile organic compound.

Not applicable.

# Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of works from the risks related to chemical agents at work.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

# 15.2 Chemical safety assessment

Exempt

# **SECTION 16: Other information**

Full text of H-Statement

H302 : Harmful if swallowed

H315 : Cause skin irritation

H319 : Cause skin irritation

H400 : Very toxic to aquatic life

H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term(acute) aquatic hazard

Aquatic Chronic : Long-term(chronic) aquatic hazard

Eye irritation : Eye irritation
Skin irritation : Skin irritation

ADN–European Agreement concerning the international Carriage of Dangerous Goods by inland Waterway; ADR-European Agreement concerning the international Carriage of Dangerous goods by Road; AICS-Austrian Inventory of Chemical Substance; ASTM-American Society for the Testing Materials; bw-Body weight; CLP-Classification Labeling Packaging Regulation; Regulation(EC) No 1272/2008; OECD-Organization for Economic Co-operation and Development REACH-Regulation (EC) 1907/2006 of the European parliament and of the Council concerning the Registration. TSCA-Toxic Substances Control Act(U.S.A): UN-United Nations.

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