



Project NO.: BW200003

## SAFETY DATA SHEET

**Product Name:** Hand Sanitiser

**Applicant:** Shenzhen Oplus Biotechnologies Ltd.

**Address:** F10, Block 16, BiLang Science & Tech Park, Matian Street, Guangming District, Shenzhen, China

**Issued Date:** March 25, 2020

Skyte Testing Services Guangdong Co., Ltd.



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## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

**Product name:** Hand Sanitiser

**Product state:** Gel

**Specification/ Batch No.:** 50ml/100ml/250ml/500ml

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

**Recommended use:** Hand Sanitiser

**Uses advised against:** This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

#### 1.3 Details of the supplier of the safety data sheet

**Company:** Shenzhen Oplus Biotechnologies Ltd.

**Address:** F10, Block 16, BiLang Science & Tech Park, Matian Street, Guangming District, Shenzhen, China

**Telephone:** 15338840769

**E-mail address:** leslie@oplus.co

#### 1.4 Emergency telephone number

**Telephone:** Emergency number 110

Ambulance 120

Fire 119

### Section 2: Hazards identification

#### 2.1 GHS classification

**Flammable liquids:** Category 3

#### 2.2 GHS Label elements

**Hazard pictograms :**



**Signal word:** Warning

**Hazard statements:** H226: Flammable liquid and vapour

H319: Causes serious eye irritation

**Precautionary statements: Prevention:**

P210 Keep away from heat, hot surfaces, open flames, sparks. - No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical, lighting, ventilating equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

**Response:**

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337+P313 If eye irritation persists: Get medical advice/attention.

**Storage:**

P403+P235 Store in a well-ventilated place. Keep cool.

**Disposal:**

P501 Dispose of contents/container to an approved waste disposal plant.

**2.3 Other hazards:**

Vapors may form explosive mixture with air.

**Section 3: Composition/information on ingredients**
**3.1 Substance:** Not applicable.

Full text of H-phrases: see section 16.

**3.2 Mixtures:**

Name	CAS number	Classification acc. to 1272/2008/EC	Weight % content
Ethyl Alcohol	CAS: 64-17-5	Flam. Liq. 2 (H225)	75.00
Purified water	CAS: 7732-18-5	Substance is not classified as hazardous.	24.23
Glycerin	CAS: 56-81-5	Substance is not classified as hazardous.	0.16
Aloe Vera Extract	CAS: 85507-69-3	Substance is not classified as hazardous.	0.16
Carbomer	CAS: 9007-20-9	Substance is not classified as hazardous.	0.32
Triethanolamine	CAS: 102-71-6	Eye Dam. 1 (H318) Repr. 2 (H361) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Acute Tox. 4 (H302)	0.08
Natural flavors	Not available	Not available	0.06

## Section 4: First aid measures

### 4.1 Description of first aid measures

**General advice:** In the case of accident or if you feel unwell, seek medical advice immediately.

When symptoms persist or in all cases of doubt seek medical advice.

**If inhaled:** If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

**In case of skin contact:** No irritation or reaction expected.

Get medical attention if any symptoms occur.

**In case of eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

**If swallowed:** If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur.

Rinse mouth thoroughly with water.

**Most important symptoms and effects, both acute and delayed:** Causes serious eye irritation.

**Protection of first-aiders:** First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

**Notes to physician:** Treat symptomatically and supportively.

## Section 5: Fire-fighting measures

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Water spray

Alcohol-resistant foam

Dry chemical

Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media:** High volume water jet

### 5.2 Specific hazards during fire fighting:

Do not use a solid water stream as it may scatter and spread fire.

Flash back possible over considerable distance.

Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

### 5.3 Hazardous combustion products:

Carbon oxides.

### 5.4 Specific extinguishing methods:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do so.

Evacuate area.

### **5.5 Special protective equipment for fire-fighters:**

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

## **Section 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures:**

Remove all sources of ignition.

Use personal protective equipment.

Follow safe handling advice and personal protective equipment recommendations.

### **6.2 Environmental precautions:**

Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages cannot be contained.

### **6.3 Methods and materials for containment and cleaning up:**

Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapors/mists with a water spray jet.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.

Clean up remaining materials from spill with suitable absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

## **Section 7: Handling and storage**

### **7.1 Technical measures:**

See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

### **7.2 Local/Total ventilation:**

Use with local exhaust ventilation.

Use only in an area equipped with explosion proof exhaust ventilation.

### **7.3 Advice on safe handling:**

Do not breathe vapors or spray mist.

Do not swallow.

Do not get in eyes.

Avoid prolonged or repeated contact with skin.

Handle in accordance with good industrial hygiene and safety practice.

Non-sparking tools should be used.

Keep container tightly closed.

Keep away from heat and sources of ignition.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the environment.

#### 7.4 Conditions for safe storage:

Keep in properly labeled containers.

Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition.

#### 7.5 Materials to avoid:

**Do not store with the following product types:** Strong oxidizing agents

Organic peroxides

Flammable solids

Pyrophoric liquids

Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit flammable gases

Explosives

Gases

### Section 8: Exposure controls/personal protection

#### 8.1 Ingredients with workplace control parameters:

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA Z-1
		STEL	1,000 ppm	ACGIH

#### 8.2 Engineering measures:

Minimize workplace exposure concentrations.

Use only in an area equipped with explosion proof exhaust ventilation.

Use with local exhaust ventilation.

### 8.3 Personal protective equipment:

**Respiratory protection:** General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

**Hand protection Material:** Impervious gloves.

Flame retardant gloves.

**Remarks:** Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often!

For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

**Eye protection:** Wear the following personal protective equipment: Safety goggles

**Skin and body protection:** Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.

Wear the following personal protective equipment: Flame retardant antistatic protective clothing.

Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

**Hygiene measures:** Ensure that eye flushing systems and safety showers are located close to the working place.

When using do not eat, drink or smoke.

Wash contaminated clothing before re-use.

## Section9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

**Appearance:** gel

**Color:** clear

**Odor:** lemon

**Odor Threshold:** No data available

**pH:** 6.5 - 8.5

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** 73°C

**Flash point:** 25°C

**Evaporation rate:** No data available

**Flammability (solid, gas):** Not applicable

**Upper explosion limit:** No data available

**Lower explosion limit:** No data available

**Vapor pressure:** No data available

**Relative vapor density:** No data available

**Density:** 0.881 g/cm<sup>3</sup>

**Solubility(ies) water solubility :** soluble

**Partition coefficient: noctanol/water:** Not applicable

**Autoignition temperature:** No data available

**Decomposition temperature:** The substance or mixture is not classified self-reactive.

**Viscosity:** 1,000 - 17,000 mm<sup>2</sup>/s (20°C)

**Explosive properties:** Not explosive.

**Oxidising properties:** The substance or mixture is not classified as oxidizing.

#### Section 10: Stability and reactivity

**10.1 Reactivity:** Not classified as a reactivity hazard.

**10.2 Chemical stability:** Stable under normal conditions.

**10.3 Possibility of hazardous reactions:** Flammable liquid and vapor.

Vapors may form explosive mixture with air.

Can react with strong oxidizing agents.

**10.4 Conditions to avoid:** Heat, flames and sparks.

**10.5 Incompatible materials:** Oxidizing agents.

**10.6 Hazardous decomposition products:** No hazardous decomposition products are known.

#### Section 11: Toxicological information

##### 11.1 Information on toxicological effects:

###### Toxicity of components

LD/LC50 values relevant for classification:		
CAS: 64-17-5 Ethanol		
Oral	LD50	5628 mg/kg bw
Dermal	LD50	No data available
Inhalation	LC50	No data available

###### Toxicity of the mixture

The acute toxicity estimate (ATE<sub>mix</sub>) for the classification of a substance in a mixture was determined using the appropriate from ECHA website.

###### Acute toxicity

ATE<sub>mix</sub> (oral) = 8040 mg/kg bw (Not classified)

ATE<sub>mix</sub> (dermal) No data available

ATE<sub>mix</sub> (inhalation) No data available

###### 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 sensitization:

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.

**Summary of evaluation of the CMR properties:**

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.

<b>Section 12: Ecological information</b>
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**12.1 Ecotoxicity:****Ingredients: Ethanol**

Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Toxicity to algae: EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC (Daphnia magna (Water flea)): 9.6 mg/l

Exposure time: 9 d

Toxicity to bacteria: EC50 (Photobacterium phosphoreum): 32.1 mg/l

Exposure time: 0.25 h

**12.2 Persistence and degradability:****Ingredients: Ethanol**

Biodegradability: Result: Readily biodegradable.

Biodegradation: 84 %

Exposure time: 20 d

**12.3 Bioaccumulative potential:****Ingredients: Ethanol**

Partition coefficient: octanol/water : log Pow: -0.35

**12.4 Mobility in soil:** No data available

**12.5 Other adverse effects:** No data available

## Section 13: Disposal considerations

### 13.1 Disposal methods

Waste from residues: Dispose of in accordance with local regulations.

Contaminated packaging: Dispose of as unused product.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Do not burn, or use a cutting torch on, the empty drum.

## Section 14: Transport information

### 14.1 International Regulation:

#### UNRTDG

UN number: UN 1987

Proper shipping name: ALCOHOLS, N.O.S. (Ethanol)

Class: 3

Packing group: III

Labels: 3

#### IATA-DGR

UN/ID No.: UN 1987

Proper shipping name: ALCOHOLS, N.O.S. (Ethanol)

Class: 3

Packing group: III

Labels: Flammable Liquids

Packing instruction (cargo aircraft): 366

Packing instruction (passenger aircraft): 355

#### IMDG-Code

UN number: UN 1987

Proper shipping name: ALCOHOLS, N.O.S. (Ethanol)

Class: 3

Packing group: III

Labels: 3

EmS Code: F-E, S-D

Marine pollutant: no

### 14.2 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not applicable for product as supplied.

### 14.3 Domestic regulation:

#### 49 CFR

UN/ID/NA number: UN 1987

Proper shipping name: ALCOHOLS, N.O.S.

Class: 3

Packing group: III

Labels: FLAMMABLE LIQUID

ERG Code: 127

Marine pollutant: no

#### Section15: Regulatory information

##### 15.1 EPCRA - Emergency Planning and Community Right-to-Know

###### **CERCLA Reportable Quantity:**

This material does not contain any components with a CERCLA RQ.

###### **SARA 304 Extremely Hazardous Substances Reportable Quantity:**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards:** Fire Hazard / Acute Health Hazard

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313:** The following components are subject to reporting levels established by SARA Title III, Section 313:

##### 15.2 The ingredients of this product are reported in the following inventories:

**REACH:** All ingredients (pre-) registered or exempt.

**TSCA:** All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

**DSL:** All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

**AICS:** All ingredients listed or exempt.

##### 15.3 Inventories:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), NECSI (Taiwan), TSCA (USA)

#### Section16: Other information

##### 16.1 Full text of other abbreviations:

**ACGIH:** USA. ACGIH Threshold Limit Values (TLV)

**ACGIH BEI:** ACGIH - Biological Exposure Indices (BEI)

**NIOSH REL:** USA. NIOSH Recommended Exposure Limits

**OSHA Z-1:** USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

**ACGIH / TWA:** 8-hour, time-weighted average

**ACGIH / STEL:** Short-term exposure limit

**NIOSH REL / TWA:** Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek

**NIOSH REL / ST:** STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday

**OSHA Z-1 / TWA:** 8-hour time weighted average

**Sources of key data used to compile the Material Safety Data Sheet:** Internal technical data, data from raw material

SDSs, OECD Chem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date: 03/24/2020

## **DISCLAIMER OF LIABILITY**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.