

MATERIAL SAFETY DATA SHEET

1. About chemical products and the company

- A. Product Name: PERFECT CARE GEL (ethanol)
- B. Recommended use of the product and restrictions on use
- Recommended use: Sterilization of hands and skin
 - Restrictions on use: No data
- C. Manufacturer
- Manufacturer: Handock Cosmetics Co.,Ltd
 - Address: 19 Eunbong-ro, Namdong-gu, Incheon
 - Date of revision: February 28, 2020
- D. USA Distributor
- Distributor: DD OFFICE PRODUCTS, INC.
 - Address: 5025 Hampton St., Los Angeles, CA 90058
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2. Names and contents of components

INCI Name	CAS. NO
Ethanol	64-17-5
Glycerin	56-81-5
Propylene Glycol	57-55-6
Carbomer	9003-01-4
Triethanolamine	120-71-6
Water	69430-36-0

3. Hazard/Risk

A. Classification of hazard and risk

Flammable liquid: Classification 2 (When the ignition point is below 23°C and the initial boiling point exceeds 35°C)

Serious eye damage or irritation: Classification 2A (Skin irritants)

Carcinogenicity: Classification 2 (Substances presumed to be carcinogenic to humans)

Germ cell mutagenicity: Classification 1B (Substances presumed to cause genetic mutations in human germ cells)

Reproductive toxicity: Classification 1A (Substances known to have reproductive toxicity to humans)

Specific target organ toxicity (single exposure): Classification 3-Anesthesia action

Specific target organ toxicity (single exposure): Classification 3-Respiratory irritation

Specific target organ toxicity (repeated exposure): Classification 1 (Substances known to cause severe toxicity to specific organs or the human body)

B. Warning labels

- Pictorial symbols



- Signal word: Danger
- Adverse and risk expressions
 - Highly flammable liquid and steam
 - Causes severe eye irritation
 - May cause irritation to respiratory system
 - May cause drowsiness or dizziness
 - May cause cancer
 - Long-term or repeated exposure will cause damage to organs

- Precautionary statements

- Precautions

Obtain instructions before use.

Do not use/handle the product until all safety precautions have been read and understood.

Keep away from heat, sparks, flames, and heat – Nonsmoking

Seal the container tightly.

Connect or ground the container and receptacle.

Use explosion-proof electric/ventilation/lighting equipment.

Use non-sparking tools.

Provide antistatic measures.

Do not inhale dust/gas/mist/vapor/spray

Avoid inhaling dust/gas/mist/vapor/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear appropriate personal protective devices.

- Correspondence

If on skin, (or hair), remove or take off immediately all contaminated clothing.

If inhaled, move the victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes, rinse cautiously with water for several minutes. If possible, remove contact lenses. Continue rinsing.

If exposed or have concern about contact, seek medical advices.

If feeling uncomfortable, seek medical service (doctor/medical institutions).

If feeling uncomfortable, seek medical advices.

If irritation in the eye persists, seek medical advices.

Use a fire extinguisher to extinguish a fire.

- Storage

Keep container tightly closed and store it in a well-ventilated place.

Store in a well-ventilated place and keep at a low temperature.

Store locked up.

- Disposal

Dispose contents/containers in accordance with the related regulation.

C. Other dangerous characteristics not included in hazard classification (NFPA)

Health No data

Fire No data

Reactivity No data

4. First-aid Measures

A. If the product gets into eyes

Rinse for 15 minutes or more with plenty of water.

Rinse with plenty of water to eliminate chemical substances.

If chemicals get into your eyes, consult a doctor and get medical treatment.

B. If in contact with skin

Remove clothing and shoes contaminated with chemicals.

Rinse with plenty of soapy water for 15 minutes or more to remove chemical substances.

Rinse with plenty of soapy water to eliminate chemical substances.

Wash clothing and shoes contaminated with chemical substances before reuse.

When chemical substances come into contact with the skin, consult a doctor and get medical treatment.

C. If inhaled

Since inhalation is dangerous, avoid oral-to-oral method during first-aid treatment.

Immediately move the victim to a non-contaminated area with fresh air.

Provide oxygen if the victim experiences difficulty in breathing.

If the victim does not breathe, perform artificial respiration

If inhaled chemical substances, consult a doctor and get medical treatment.

D. If eaten

Do not induce vomiting.

If the victim is unconscious, avoid all intakes.

If conscious, have the victim rinse their mouth and slowly consume 2-4 cups of water or milk.

If eaten or drank chemical substances, consult a doctor and get medical treatment.

Position the head lower than hips to prevent airway obstruction during vomiting.

If unconscious, turn the head to the side to prevent airway obstruction.

If unconscious, avoid inducing vomiting and all intakes.

E. Other physician precautions

No data

5. Countermeasures in case of explosion and fire

A. Appropriate (inappropriate) extinguish agent

- Appropriate extinguish agent

Alcohol resistant foam

Water

CO₂

Dry powder

- Inappropriate extinguish agent

No data

- Major fire

Uses alcohol-resistant foam and a large amount of fine water spray.

B. Specific hazards from chemicals

- Thermal decomposition

Carbon oxide

- Fire and explosion hazards

Risk of serious fire

Steam or gas can be ignited from long-distance ignition sources and spread quickly.

As steam is heavier than air, it can initially spread over the ground.

Steam may form explosive mixtures and air.

C. Protective gears and precautionary measures to be worn during fire fighting

If possible without danger, move the container away from fire area.

After the fire is extinguished, cool off the container by spraying water for a considerable amount of time.

Do not approach both ends of the tank.

If there is a fire in the in/out area or storage area, cool off the container by spraying water with an unmanned hose holder or a monitor nozzle for a considerable amount of time after extinguishing.

Keep away any unauthorized personnel, isolate the hazard and restrict access.

Let the flammable material burn.

Evacuate immediately if safety devices are operating or the tank is discolored by fire.

In cases of tank, rail car, and tank truck: Evacuation radius: 0.8Km (1/2 miles)

First, stop the leak and extinguish the fire.

Spray a large amount of water with a fine spray.

Do not spray high-pressure water steam to exposed materials to prevent from scattering.

After the fire is extinguished, cool off the container by spraying water for a considerable amount of time.

Spray water from a protected location or a safe distance.

Do not inhale substances or combustion products.

Go against the wind and avoid low-lying grounds.

Water may be ineffective to be used as an extinguishing agent.

6. Countermeasures in case of leakage

A. Measures and protective gears necessary for protecting the body

Reduce steam by spraying water.

Eliminate all sources of ignitions, e.g. heat, flame, spark, etc.

If it is not dangerous, the operator can stop the chemical leak.

B. Measures necessary for protecting environment

The air No data

Soil No data

Under water No data

C. How to purify or remove

If a small amount has leaked;

Absorb using non-combustible materials.

To dispose later, transfer and collect the leaked material to an appropriate container.

If a large amount has leaked;

Isolate the exposed area and limit access to relevant staff only.

Build an embankment to manage the leaked substances.

Avoid low-lying ground and stay upwind from the hazard.

7. Handling and storing

A. Safety handling tips

Do not apply physical actions, e.g. pressurization, cutting, polishing, heating, nor mechanical processes, e.g. welding, soldering, bonding, and drilling.

Install and use flame-proof and explosion-proof equipment.

Since residual materials in empty containers are dangerous, dispose of containers according to safety rules.

Ground the container carefully to prevent static.

Avoid contact with the source of ignition.

Wash the body and clothing after using chemicals

Use the product in a well-ventilated place

B. Safe storage method

Store in an airtight container.

Avoid contact with oxidizing substances.

Stored in a cool, dry and well-ventilated place.

Avoid contact with the source of ignition.

Ground to prevent static.

8. Exposure prevention and personal protection gear

A. Exposure limits of chemicals, biological exposure standards, etc.

Domestic regulations TWA - 1000ppm 1900mg/m³

ACGIH regulations TWA 1000 ppm

Biological exposure standards No data

B. Appropriate engineering

Install a local exhaust ventilation system and ensure appropriate control of wind velocity.

Check if the work process meets the Ministry of Labor's acceptable standards and exposure standards.

If concentration is at risk of explosion, install ventilation with explosion-proof equipment.

C. Personal protective gear

Respiratory protection

All respiratory protection apparatus shall be approved by the Korea Occupational Safety and Health Agency

Eye protection

Emergency washing facilities (shower rooms) and washing facilities should be easily accessible to workers.

Wear safety glasses and a face shield to protect eyes and face (front part of the head, forehead, chin, front of the neck, nose, and mouth) from various projectiles and harmful liquids.

Hand protection

Wear chemical-resistant protective gloves to avoid direct contact from chemicals.

Body protection

To prevent skin exposure, wear chemical-resistant protective clothing.

9. Physicochemical Property

A. Exterior	
Apperance	Transparent gel
Color	Colorless
B. Odor	Unique and special
C. pH	6.50 ± 1.00
D. Melting point/freezing point	-117°C
E. The range of initial boiling point and boiling point	78.5°C
F. Ignition point	20.6°C (with the lid closed)
G. Evaporation speed	1.4 (Carbon tetrachloride=1)
H. Flammable (solid, gas)	No data
I. Solubility	100 g/100 ml (25°C, Availability)
J. Relative importance	0.855

10. Safety and reactivity

- A. Possibility of chemical stability and adverse reaction
Stable at normal temperature and pressure
Not polymerized
- B. Conditions to avoid
Avoid heat, flame, sparks, or contact with other ignition sources.
If container is exposed to heat, it can burst or explode.
- C. Materials to avoid
Peroxide, metal oxide, combustible substances, oxidizing agent (Hypochlorite calcium, silver oxide and ammonia, nitrate, silver nitrate, magnesium perchlorate, etc.), metal, halo carbon compound, metal salt, acid, and base
- D. Hazardous materials generated in decomposition
Generates carbon oxide during pyrolysis
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11. Toxicological information

A. Information on likely routes of exposure

May cause irritation, difficulty in breathing, headache, drowsiness, dizziness, and loss of coordination (function)

May cause low body temperature or fever, changes in blood pressure, nausea, vomiting, dyspnea, irregular heartbeat, drowsiness, loss of dynamism, speech disorders, emotional change, loss of coordination (function), visual impairment, pupil expansion, convulsions, and coma.

May cause irritation

B. Health hazard information

Acute toxicity

Oral	LD50 6200 mg/kg Rat
Transermal	No data
Inhalation	LC50 20000 ppm 4 hr Rat

Skin corrosion or irritation Non-irritation

Serious eye damage or irritation Moderate irritation

Respiratory sensitization No data

Skin sensitization No data

Carcinogenicity

The Industrial Safety and Health Act	No data
Notice of the Ministry of Labor	No data
IARC	Group 1
OSHA	OSHA
ACGIH	A3
NTP	No data
EU CLP	No data

Germ cell mutagenicity Dominant lethality test in rats and mice-positive
Aneuploidy has been reported in mouse germ cells.

Reproductive toxicity Numerous malformations of the human fetus and other adverse effects have been reported due to habitual intake of alcohol.

Specific target organ toxicity (single exposure)

Affects a person's central nervous system, causing headache, fatigue, and decreased concentration.

Inhalation causes airway irritation, haziness, and pathological sleep.

Specific target organ toxicity (repeated exposure)

Affects the human liver and nerves (epileptic, delirious, etc.).

Absorption hazard No data

12. Environmental effect

A. Ecotoxicity

Fish LC50 42 mg/l 96 hr *Oncorhynchus mykiss*

Crustacean EC50 2 mg/l 48 hr *Daphnia magna*

Bird EC50 5,000 mg/l 24hr *Geen alage Dunaliella tertiolecta*

B. Residual tendency and degradability

Residual tendency No data

Degradability BOD5/COD 0.57

C. Bioaccumulative

Condensibility 75 (%) 20 day (Aerobic, other,s easily breakdown)

Biodegradable Koc 1

D. Soil mobility No data

E. Other adverse effects No data

13. Disposal Precautions

A. How to dispose

The contents container should be disposed in accordance with (if specified) the Waste Management Act.

B. Disposal precautions

If specified in the Waste Management Act, consider precautions specified in the regulation.

14. Information necessary for transportation

A. UN No.	1170
B. Proper shipping name	Ethanol or ethanol solution(ETHANOL(ETHYL ALCOHOL) or ETHANOL SOLUTION(ETHYL ALCOHOL SOLUTION))
C. Hazard class in transportation	3
D. Container class	II
E. Marine pollutants	No Data
F. Special safety measures that the user needs to know about transportation or means transportation	
Emergency measures upon fire	F-E
Emergency measures upon leak	S-D

15. Regulatory Information

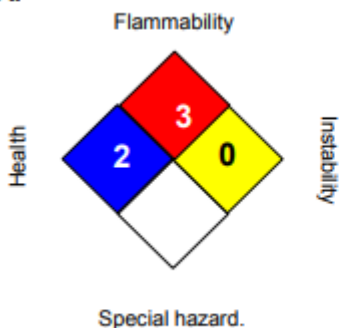
A. Regulation by the Industrial Safety and Health Act	N/A
B. Regulation by the Chemicals Control Act	N/A
C. Regulation by the Dangerous Goods Safety Management Act	Four types of alcohols 400ℓ
D. Regulation by the Waste Control Act	No data
E. Regulations by other domestic and international laws	
Domestic regulations	
The Control of Persistent Organic Pollutants Act	N/A
Overseas regulations	
US Administration Information (OSHA Regulation)	N/A
US Administration Information (CERCLA Regulation)	N/A
US Administration Information (EPCRA 302 Regulation)	N/A
US Administration Information (EPCRA 304 Regulation)	N/A
US Administration Information (EPCRA 313 Regulation)	N/A
US Administration Information (Rotterdam Convention Materials)	N/A
US Administration Information (Stockholm Convention on Persistent Organic Pollutants)	N/A
US Administration Information (Montreal Protocol on Substances)	N/A

EU Classification Information (results of chemical classification)	F ; R11
EU Classification Information (Risk Statement)	R11
EU Classification Information (Safety Statements)	S2, S7, S16

16. Other Information

Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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 eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

SDS date of preparation/update: 4/13/2020

Revision: 1.2

Disclaimer

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