



# SAFETY DATA SHEET

2024-11-13

May be used to comply with  
OSHA's Hazard Communication Standard,  
29 CFR 1910. 1200.  
Standard must be consulted for specific requirements.

U.S. Department of Labor  
Occupational Safety and Health Administration  
(Non-Mandatory Form)  
OMB No.1218-0072

## § 1 - IDENTITY INFORMATION

Product Name (as used on label and list) : **SPIRITS OF TURPENTINE**  
(O501, O401, O301, O201, O101)

Manufacturer : **HOLBEIN Works, Ltd.**  
Address : **1-3-14, Hishiya-nishi, Higashi-osaka-shi**  
**OSAKA 577-0807, JAPAN**  
Telephone Number for information : **81-6-6191-7722**  
Emergency Telephone Number : **81-72-985-1222 (HOLBEIN Labo, Ltd.)**  
Preparer : **ALAKI, Yutaka**

## § 2 - HAZARD IDENTIFICATION

Classification : **Flammable Liquid, Category 3**  
Hazard information : **Irritant to eyes and skin. Inhalation of concentrated vapor irritates eyes and/or bronchial pathway, or may influences to central nerve.**  
Acute toxicity : **Category 4**  
Skin Irritation : **Category 3**  
Eye Effects : **Category 2B**  
Respiratory Sensitization : **Category 2/Inhalation may cause allergy, asthma or dyspnea.**  
Skin Sensitization : **Category 1/May cause allergic dermatitis.**  
Aquatic Environment Hazards (short-term, acute) : **Category 1/ Hazardous to the aquatic organisms.**



## § 3 - COMPOSITION / INGREDIENTS

| Common Name(s)Components (Specific Chemical Identity)                       | CAS No    |
|-----------------------------------------------------------------------------|-----------|
| Spirits of Turpentine ( $\alpha$ -pinene, C <sub>10</sub> H <sub>16</sub> ) | 8006-64-2 |

## § 4 - FIRST AID MEASURES

Inhalation : **Remove patiently to fresh air.**  
Ingestion : **Do NOT induce vomiting, except in case of excess swallowing.**  
Eyes : **In case of eye contact, rinse with plenty of water and if necessary consult an eye specialist.**  
Skin Contact : **Upon skin contact, wash with plenty of water, soap or other non-irritating cleansing agents.**  
Notes to Physician : **Provide general supportive measures and follow the kerosene accident.**

## § 5 - FIRE AND EXPLOSION HAZARD DATA

Flammability : **Flammable**  
Flash Point : **31 °C**  
Ignition Point : **278 °C**

Flammable Limits : 1~7 %

Extinguishing Method : Take off fire or other flammable materials, and use with extinguishing tools.

Extinguishing Media : Foam, Dry powder, CO2

Unusual Fire and Explosion Hazards : None

## § 6 - ACCIDENTAL RELEASE MEASURES

Step to Be Taken in Case Material Is Released or Spilled : Remove sources of ignition and provide ventilation. Then take up with absorbent materials.

Prevention of Secondary Disaster : Take off fire or other flammable materials.

Personal Consideration : Use mechanical ventilation, and use protective equipment such as rubber gloves and safety glasses, when large spills happened.

Environmental Precautions : Prevent spills from entering storm sewers or drains.

## § 7 - HANDLING AND STORAGE

Precautions : Avoid prolonged or repeated contact with skin and eyes.

Storage Requirements : Keep from fire or flammable materials.  
Do not allow product temperature to rise high.

## § 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls : Use mechanical ventilation when applying.

Personal Protection : Especially none

## § 9 - PHYSICAL / CHEMICAL CHARACTER

Appearance : Clear liquid

Color : Water white

Odor : Terpenoid

Boiling Point : 155 ° C

Vapor Pressure : 800 Pa (30 ° C)

Vapor Density (Air = 1): 4.7

Specific Gravity (H2O = 1) : 0.864

Solubility in Water : Not soluble

## § 10 - HAZARD INFORMATION AND STABILITY

Physical Dangers : Flammable

Stability : Stable under normal state

Incompatibility (materials to avoid) : None

Byproducts : Carbon dioxide and water

## § 11 - TOXICOLOGICAL INFORMATION

Primary Routes of Entry : Dermal, eye contact, swallowing

Oral Toxicity : LD50=3,700 mg/kg

Ingestion : Although the effect or toxicity of swallowing is not serious, the liquid or vapor based on swallowing or vomiting may cause of bronchitis or pulmonary edema.

Inhalation : High density vapor irritates respiratory organ, and induces dizziness, headache, anesthesia, slumber or the effect to central nervous system.

Eye irritation : Usually irritant to the eye mucous membrane

Skin irritation : Long time or repeated contact may irritate to skin and may cause inflammation.

Repeated Exposure : Inhalation of mist may cause irritation of bronchial pathway and/or stupor.

Sensitization, Reproductive Toxicity : No data available on products.

Hazardous Ingredient : Terpene

Classification : CL

CL : Cautionary Label : Any known health risks and with information on the safe and proper use of these materials

AP : Approved Product : Contain no materials in sufficient quantities to be toxic or injurious to humans.

## § 12 - ECOLOGICAL INFORMATION

Persistence and Degradability : Since a plant-derived product, considered to be naturally degradable.

Fish Toxicity :  $LC_{50} = 0.18 \text{ mg/L}$  (fathead minnow, 96 hrs.)

Bioaccumulation Potential : Suspected bioaccumulation.  $\text{LogPow} = 4.83$  ( $\alpha$ -pinene)

Mobility : Not confirmed

$\text{LogPow}$  : Logarithm of Octanol/Water Partition coefficient

$LC_{50}$  : Median Lethal Concentration

## § 13 - DISPOSAL CONSIDERATIONS

Disposal Considerations : To be incinerated.

Waste Disposal Method : Stained cloths or papers which has been used to wipe or so on are so flammable that they had better been wetted with water. In accordance with local official regulations, pass on to an appropriate incinerating plant or depository.

## § 14 - TRANSPORT INFORMATION

UN Proper Shipping Name : Turpentine (Spirits of turpentine)

UN number : 1299

Hazard Class : 3 (Flammable)

Packing Group : III

Special Provisions for Transport: Marine Pollutant

## § 15 - REGULATORY INFORMATION

Conforms to ACMI, Art & Creative Materials Institute, under ASTM D 4236

Industrial Safety and Health Law : Flammable organic solvent

Fire Service Law (Japan) : Dangerous Materials ; Group 4  
Petroleum Category 2

Registered Number : 4041-144692

Regulation to Control Dangerous Materials : Conforms to article 41 and below.

High Pressure Gas Safety Law : N/A

## § 16 - OTHER INFORMATION

Notice : The information of this sheet is based on the present state of our knowledge and does not therefore guarantee certain properties.