Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PUTTY

Manufacturer / Supplier Identification:

- Manufacturer/ Supplier: Wengyuan Henghui Chemical Coating Co.,Ltd.

Address: No. A-06, A3 Road, Huacai Chemical Coating, Industrial Transfer Park, Wengcheng Town, Wengyuan, Shaoguan, China.

Zip code: 512627

Tel: 0086-751-2616938 / 2616899

Fax: 0086-751-2616899

For emergencies, call: 0086-751-2616938

For emergencies (abroad), call: (0532) 83889090; (0532) 83889191

Product Recommendations and Restricted Uses: Made into coatings for the protection and decorative coating of bamboo, wood or metal surfaces. Please refer to the product label or manual for construction methods and fields of use.

SECTION 2 HAZARDS IDENTIFICATION

GHS classification: Flammable liquids (Class 3); Acute toxicity - inhalation (Category 4); Skin corrosion/irritation (Category 2); Severe eye injury/eye irritation (Category 2A); Carcinogenicity (Category 2); Reproductive toxicity (category 2); Specific opposite target organ toxicity - repeated exposure (category 1); Hazards to the aquatic environment - acute hazards (Category 3).

GHS hazard statement:

H226 flammable liquid and vapor;

H315 causes skin irritation;

H319 caused severe eye irritation;

H332 harmful if inhaled;

H351 is suspected to be carcinogenic;

H361 suspected of damaging fertility or the unborn child;

H372 long-term or repeated exposure can cause damage to organs;

H402 is toxic to aquatic organisms;

GHS label signal word: Danger

GHS label pictogram:







[Precaution]

P203 Obtain, read and follow all safety instructions before use.

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

P233 Keep container tightly closed.

P240 Containers and loading equipment are grounded and equipotential bonding.

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

P242 Use spark-less tools.

P243 Take action to prevent electrostatic discharge.

P260 Avoid breathing dust/fume/gas/aerosol/vapor/spray.

P264+P265 Wash hands thoroughly after work. Do not touch eyes.

P270 Do not eat, drink or smoke while using this product.

P271 Can only be used outdoors or in well-ventilated areas.

P273 Avoid release into the environment,

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

[Incident Response]

P303+P361+P364+P353 If skin (or hair) is contaminated:Immediately remove all contaminated clothing, wash it before reuse, and wash the affected area with water [or shower].

P304+P340+P317 In case of accidental inhalation: Transfer the person to fresh air and maintain a comfortable breathing position. please seek medical attention.

P305+P351+P338 If entering eyes:Rinse carefully with water for a few minutes.If contact lenses are worn and can be easily removed,remove them.Keep rinsing.

P318 If you have been exposed or have any concerns, please seek medical treatment.

P319 If you feel unwell, please seek medical attention.

P321 Specialized treatment (see additional first aid instructions on this label).

P332+P317 If skin irritation occurs: Seek medical attention.

P337+P317 If eye irritation persists: Get medical advice,

P370+P378 In case of fire, use dry powder, foam or carbon dioxide to extinguish the fire.

[Safe Storage]

P403+P235 Store in a well-ventilated place. Keep container tightly closed. Keep the temperature low.

P405 Storage areas must be locked.

[Disposal]

P501 Refer to relevant national/local regulations for disposal of contents/containers

SECTION3 COMPOSITION/INFORMATION ON INGREDIENTS

Composition /Information on ingredients:

Chemical properties of formulation: mixture.

Harmful ingredients:	CAS No.	Weight %
Styrene	100-42-5	10-15
Talc	14807-96-6	50-60
Unsaturated polyester resin	26123-45-5	30-33

SECTION4 FIRST AID MEASURES

- Necessary first aid measures

- Breathing in harmful substances: make sure to move the wounded to a place with fresh air to keep the wounded calm. And keep warm with a quilt. If the casualty's breathing is irregular or stopped, artificial respiration can be performed. Do not feed any items to the wounded. If the injured person loses consciousness, put him in a rescue position and ask medical staff to deal with it.
- Harmful substances splashed into the eyes: You must remove the contact lenses, and immediately rinse your eyes with plenty of water for at least 10 minutes, and immediately ask a doctor for treatment.
- Skin contact with harmful substances: Take off contaminated clothing. Rinse the skin thoroughly with water and soap or an approved skin cleanser. Never use solvents or thinners.
- Ingestion of harmful substances: If you accidentally eat harmful substances, please immediately ask medical staff to deal with them, and show the container label of the harmful substances and this form. Keep the wounded calm and never induce the wounded to vomit.

- The most important acute and delayed symptoms/effects

- Inhalation of harmful substances: Harmful if inhaled
- Hazardous substances splashed into the eyes: cause serious eye irritation
- Skin contact with harmful substances: cause skin irritation
- Ingestion of harmful substances: irritation of the mouth, throat and stomach over-exposure signs/symptoms
- Respiratory inhalation of harmful substances: No specific data
- Harmful substance splashed into the eyes: Adverse symptoms may include the following conditions: pain or irritation, tearing, redness and congestion
- Skin contact with harmful substances: Adverse symptoms may include the following: irritation, congestion and redness
- Ingestion of harmful substances: If there is no specific data, it is necessary to indicate immediate medical treatment and special treatment required
- Note for doctors: Treat symptomatically
- Special treatment: No special treatment
- Protection of emergency personnel: If there is any personal danger or without proper training, no action should be taken. If smoke is still suspected, the rescuer should wear an appropriate protective mask or independent breathing apparatus. If the mouth-to-mouth breathing method is used for rescue, it may be dangerous to the rescuer.

SECTION5 FIRE FIGHTING MEASURES

- Applicable and unsuitable fire extinguishing agents: Recommended use: anti-alcohol foam, CO2, dry powder, spray water
- Extinguishers not suitable for use: water jet

- Specific hazards from chemicals: Flammable liquids and vapors, often accompanied by thick black smoke, including combustion products of hazardous materials. Please use appropriate respiratory protection. For closed containers exposed to the fire, spray with water mist to cool down and extinguish the fire. Do not let the used fire extinguishing water discharge into the sewer or natural water course.
- Hazardous thermal decomposition products: Decomposition products may include the following substances: CO, CO2, smoke, or NO
- Special protective equipment and protective measures for firefighters: If there is a fire, evacuate all personnel from the disaster area and neighboring areas to quickly isolate the scene.
- If there is any personal danger or have not received proper training, no action can be taken. If there is no danger, remove the container from the fire area and cool the container exposed to the fire with mist of water.
- Special protective equipment for firefighters: Firefighters must wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with positive pressure to protect the entire face.

SECTION6 LEAKAGE EMERGENCY TREATMENT

Personal precautions, protective equipment and emergency procedures:

Eliminate ignition sources and ventilate. Avoid breathing harmful vapors; please wear appropriate respiratory protectors. For detailed ingredients, please refer to the protective measures in Sections 7 and 8. Ask irrelevant personnel to leave the scene.

Environmental precautions:

Do not discharge harmful substances into sewers or natural waterways. Once in sewers or sewers, please contact the local water company immediately. If you pollute streams, rivers or lakes, please contact the national river management department.

Methods and materials for restraint and cleaning:

Small leakage: If there is no danger, stop the leakage. Use non-combustible absorbent materials such as sand, soil, vermiculite and

And diatomaceous earth to contain and collect the spillage and place it in a suitable disposal container. Please use spark-proof and explosion-proof devices.

A large number of leaks:

If there is no danger, stop the leak. Move the container away from the spill area. Approach the leak from upwind. Prevent entry into sewers, waterways, basements or confined areas. Contain and collect spills with non-combustible absorbent materials such as sand, soil, vermiculite, and diatomaceous earth. Put hazardous waste into containers for disposal in accordance with local regulations. It is best to use detergent to clean, avoid solvent cleaning.

SECTION7 HANDLING AND STORAGE

Precautions for safe operation:

This steam is heavier than air and may spread along the floor. The mixing of steam and air may cause an explosion hazard, so good ventilation is required to prevent the vapor concentration from exceeding the occupational exposure limit. Avoid breathing harmful vapors and sprayed fumes. Avoid contact with skin or eyes. Keep away from fire and smoking is strictly prohibited. Use explosion-proof facilities. Use grounding measures when pouring from one container to another. Please wear anti-static boots and anti-static overalls at the work site. The floor should be conductive. The container remains sealed. The product and its empty container should be kept away from heat and ignition sources. It is strictly forbidden to use tools that can generate sparks. Do not eat food, drink water, and smoke at the work site. To strictly enforce the health and safety work regulations, the product must be stored in the original container, see section 8 for personnel protection. This container is not a high-pressure container, so do not pressurize when emptying. Regardless of whether the product is sprayed or not, when the operator must work in the spraying room, sometimes ventilation is not enough to control the particles and

solvent vapors in the room. In this case, the worker must wear a respirator supplied by compressed air during the spraying process until the concentration of solvent vapor and particulates in the room is below the exposure limit. The operation management regulations manual is also applicable to the management of the container/packaging of this product.

Conditions for safe storage, including any incompatibilities:

Store the product in accordance with local or national regulations. See label notes for details. Storage temperature:> 5° C and $<30^{\circ}$ C

Store in a dry and well-ventilated place, away from heat sources and prevent direct sunlight. Keep away from sources of ignition-smoking is strictly prohibited. Keep away from oxidants, strong acids, and strong alkaline substances. Unauthorized personnel are strictly prohibited from approaching the product. After the container is opened, it must be resealed. The container should be placed upright to prevent leakage. When storing this product, the principles contained in the HSE guidance note "Storage of Dangerous Goods in Packages" should be followed.

- a) Products whose flash point is lower than 21°C and comply with the Petroleum (Combined) Law shall be stored in accordance with the conditions permitted by the Petroleum (Combined) Law.
- b) Products with a flash point below 32°C (not including a))

The use and storage of this product must be strictly in accordance with the requirements of the "extremely flammable liquid and liquefied petroleum gas" management regulations. Flammable liquids not exceeding 50 liters only need to be stored in a fireproof cabinet or small warehouse, but a large amount of flammable liquids must be stored separately in a storage room that meets the structural requirements specified in the above regulations. For other precautions, please refer to the HSE manual "Storage of Flammable Liquids in Packages".

c) Products with a flash point higher than 32°C

Although there are no special statutory requirements for the storage of this product, it is still necessary to strictly abide by the principles contained in the HSE Guidance Note "Storage of Flammable Liquids in Packages"..

SECTION 8 EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters: Lowest Exposure Limit (LEL): 1.1 Minimum ventilation requirement (MVR): 1400

10% LEL: 70 engineering control:

The minimum ventilation requirement required to keep the exposure value of this product below the OEL value, in units of m3 air per liter of paint. 10%LEL=When the required exposure value is lower than 10% of the LEL value, the air emission in meters 3 air/liter of paint. Good ventilation conditions should be provided. If local ventilation facilities and good exhaust facilities can achieve good ventilation effects, it is still feasible. If it is not sufficient to reduce the concentration of solvent vapors and particulates below the occupational exposure

limit, workers should also wear appropriate respiratory protection.

Respiratory protection of personal protective equipment:

If the concentration of harmful substances in the working environment exceeds the exposure limit, the staff must wear qualified respiratory protective equipment. When spraying this product, respiratory protection equipment supplied by compressed air must be used. Other nearby personnel should take similar protective measures when their environmental exposure value cannot be controlled below the OEL value, and the process control method cannot be improved.

Hand protection:

If you have long-term or repeated contact with the product, you need to wear nitrified rubber gloves or polychloroprene gloves or other suitable gloves.

Skin and body protection:

Protective cream may help protect bare skin, but it still cannot replace complete physical protection. Once exposure occurs, protection cream cannot be used for protection. Workers should wear antistatic overalls made of natural fibers or high-temperature resistant synthetic fibers. After contact with the product, wash the whole body.

Eye protection:

Safety glasses specially designed to protect against damage caused by liquid flying should be worn..

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and properties: gray viscous paste with pungent taste

PH value: /

Melting point/freezing point: /

Boiling point: 145°C

Flashpoint: 37°C (closed cup)

Flammability: /

Explosion (combustion) upper and lower limits: upper limit 6.1% lower limit 1.1% (styrene)

Vapor pressure: /

Steam density (air=1): 3.600 Density: 1.6-1.8 kg/dm 3

Solubility: /

Partition coefficient, n-octanol/water: / Auto-ignition temperature: 490°C Decomposition temperature: /

Odor threshold: / Evaporation rate: /

Volatile Organic Compounds (g/L): 108

SECTION 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: This product is stable.

Possibility of hazardous reactions: Hazardous chemical reactions will not occur under normal storage and use.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame). It is forbidden to pressurize, cut, weld, braze, weld, or heat the container or contact the ignition source.

Incompatible materials: oxidizing agents and strong acid and strong alkaline substances

Hazardous decomposition products: Under the recommended storage and handling conditions, hazardous decomposition products will not be produced.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxic effects: No experimental data information about the toxicity of this product is available. Please refer to section 2 for details of the product components.

Irritation/corrosion:

Ingredients Result Type
Styrene Eye contact-mild irritation Human eyes

Exposure-moderately irritating rabbit Eye contact-severe irritation rabbit Skin contact-mild irritation rabbit Skin contact-moderate irritation rabbit

Sensitization: No data. Mutagenicity: No data. Carcinogenicity: No data.

Teratogenicity: No data Reproductive toxicity: No data Specific target organ system toxicity: No data Specific target organ system toxicity: No data. Aspiration hazard: No data. Eye contact: Causes serious eye irritation.

Inhalation: Harmful if inhaled. Skin contact: Causes skin irritation. Ingestion: Irritating to mouth, throat and

stomach

Respiratory inhalation of harmful substances: no specific data

Harmful substance splashed into the eyes: Adverse symptoms may include the following conditions: pain or irritation, tearing, redness and congestion

Skin contact with harmful substances: Adverse symptoms may include the following: irritation, congestion and redness

Ingestion of harmful substances: no specific data

Prolonged and immediate effects, as well as short-term and exposure to solvent vapors that exceed specified limits, can cause a variety of adverse health effects. Such as: stimulation

Chronic symptoms caused by long-term exposure: mucous membranes and respiratory system have adverse effects on the kidneys, liver and central nervous system. Symptoms mainly include: headache, dizziness, fatigue, muscle weakness, lethargy, and loss of consciousness in severe cases. Repeated long-term contact with the product may cause the reduction of subcutaneous fat, resulting in non-allergic contact dermatitis, and absorption through the skin. Splashing liquid into the eyes may cause eye inflammation or other recoverable injuries..

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: There is no data on ecotoxicity for this product.

Persistence and degradability:

Biodegradability: May not accumulate, but will be decomposed and excreted in the body.

Non-biodegradability: 1. Released into the soil, it is expected to seep into groundwater or undergo biodegradation, or it may volatilize.

- 2. When released into water, it is expected to undergo biological decomposition or evaporate and discharge.
- 3. It is released into the atmosphere and decomposed by the action of hydroxyl radicals.

Bioaccumulative potential: no data

Mobility in soil: no data

The requirements of the air pollution control regulations established in accordance with the Environmental Protection Law are applicable to this product.

SECTION 13 WASTE DISPOSAL

Main hazard: Category 3 dangerous substance-flammable liquid

UN Number (UN No.): UN3269

Official shipping name: Polyester resin equipment

Packing category: Class III Marine pollutants (yes/no): No Special precautions for users:/.

SECTION 14 TRANSPORTATION INFORMATION

Labelling according to EC-directive 88/379/EEC

Dangerous goods classification: F+XN

Composition: Styrene

Hazard terms: R11 Extremely flammable R20 Harmful if inhaled

R36/38 Irritating to eyes and skin

Safety term: S16 Keep away from fire-no smoking S23 do not breathe fumes

S37/39 Wear suitable gloves and eye/face protection

Regulatory Information:

Applicable laws and regulations: 1. Storage and disposal methods and facility standards for industrial waste. 2. Road traffic safety rules. 3. Labor safety and health facilities rules..

SECTION 15 REGULATORY INFORMATION

Regulatory information: Regulations on the safety management of hazardous chemicals (order of the State Council, No. 344, effective from March 15, 2002).

Classification and marking of common dangerous chemicals (GB 13690-1992).

SECTION 16 OTHER INFORMATION

Reference: special issue on safety production of hazardous chemicals, China Labor and social security press, August 2002.

Emergency Response Manual for hazardous chemicals, China personnel press, October 2002.

Solvent manual (3rd Edition) (Chemical Industry Press, November 2002)

Handbook of coatings industry (Chemical Industry Press, September 2001)

Filling time: November 15, 2020

Filling Department: Technology Department of Wengyuan Henghui Chemical Coatings Co., Ltd

Data audit unit: Wengyuan Henghui Chemical Coatings Co., Ltd