



Safety Data Sheet

Version:2.0

Establishment Date: May.2nd, 2020

Compiled by GB/T16483, GB/T17519

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Part 1. Chemical and company identification

Chemical Chinese name: 肉桂醛

Chemical English name: CINNAMALDEHYDE /CINNAMIC ALDEHYDE

Enterprise name: Wuhan Landmark Industrial Co., Ltd.

Add: NO. 18 TAZIHU EAST ROAD, JIANG'AN DISTRICT, WUHAN, HUBEI, CHINA, 430000

Tel/Fax: +86 (27) 8557 9352

Part 2. Risk overview

Emergency situation overview:

Harmful in contact with skin. Causes skin irritation. May cause allergic skin reactions.

Cause serious eye irritation.

GHS risk category:

Skin corrosion / irritation Category 4

severely eye damage / eye irritation Category 2

Skin corrosion / irritation category 2

Skin sensitive category 1

Label elements:



Pictogram:

Signal Word: Warning

Hazard statement:

H312 harmful in contact with skin.

H315 causes skin irritation.

H317 may cause allergic skin reactions.

H319 causes severe eye irritation.

Precautionary statement:



Incident Response: None

Disposal:

P280 wear protective gloves / clothing / goggles / masks.

P264 clean thoroughly after operation.

P261 avoid inhalation of dust / smoke / gas / smoke / vapor / spray.

P272 contaminated work clothes shall not be taken out of the work site.

Accident response:

P302 + p352 if the skin is contaminated: wash with water.

P312 if you feel unwell, call the detoxification center / doctor

P321 specific treatment

P362 + p364 remove the contaminated clothes and reuse them after cleaning

P332 + P313 in case of skin irritation: seek medical treatment / consultation.

P333 + P313 in case of skin irritation or rash: seek medical treatment / consultation.

P305 + P351 + P338 if in eyes: Rinse carefully with water for a few minutes. If you wear contact lenses and can easily take them out, take them out. Continue flushing.

P337 + P313 if eye irritation is still felt: seek medical treatment / see a doctor.

Safe storage: Low temperature, ventilation, dry warehouse; Fire prevention; Store separately with oxidants and food ingredients.

Waste disposal:

P501 dispose of contents / containers in accordance with local regulations.

Physical and chemical hazards: Not available

Health hazard: no information

Environmental hazards: Not available

Part 3. Ingredient / Composition Information

Ingredient	Concentration or concentration range (mass fraction,%)	CAS No.
CINNAMALDEHYDE	99+%	104-55-2

Part 4. First aid measures

First aid:

Inhalation: If inhaled, remove patient to fresh air.

Skin contact: Remove contaminated clothing and rinse skin thoroughly with soap and water. Seek medical attention if you feel unwell.

Eye contact: Separate the eyelids and rinse with running water or saline. Seek medical attention immediately.

Ingestion: Rinse mouth and do not induce vomiting. Seek medical attention



immediately.

Advice for protecting rescuers: Move patients to a safe place. Consult a doctor. Show this chemical safety data sheet to the doctor at the scene.

Special note to doctor: No information.

Part 5. Fire-fighting measures

Extinguishing agent:

Extinguish with water spray, dry powder, foam or carbon dioxide.

Avoid using DC water to extinguish the fire. DC water may cause the splash of flammable liquid and spread the fire.

Special dangers: No information

Precautions and protective measures:

Firefighters must wear portable breathing apparatus, full-body firefighting suits, and extinguish the fire in the upwind direction.

Move the container from the fire to the open space as much as possible.

Containers in the fire must be evacuated immediately if they have changed color or made a sound from a safety relief.

Isolate the scene of the accident and prohibit unrelated personnel from entering.

Contain and treat fire water to prevent environmental pollution.

Part 6. Emergency Response

Protective measures, protective equipment and emergency procedure for workers:

It is recommended that emergency handlers wear portable breathing apparatus, antistatic clothing, and rubber oil-resistant gloves.

Do not touch or cross spillage.

All equipment used during work should be grounded.

Cut off the source of the leak if possible.

Eliminate all ignition sources.

Define the warning area according to the area affected by liquid flow, vapor or dust diffusion, and irrelevant personnel should evacuate from the crosswind and upwind to the safe area.

Environmental protection measures:

Contain spills and avoid polluting the environment. Prevent the spills from entering sewers, surface water and groundwater.

Methods and materials for containment and cleaning up of spilled chemicals:

Small leaks: Collect leaking liquid in sealable containers if possible. Absorb with sand, activated carbon or other inert materials and transfer to a safe place. No entry into the sewer.

Large spills: build dikes or dig pits for containment. Close the drainage pipe. Cover



with foam to suppress evaporation. Use explosion-proof pump to transfer to tanker or special collector, recycle or transport to waste disposal place for disposal.

Part 7. Handling and storage

Operational Precautions:

- *Operators should be specially trained and strictly abide by the operating procedures.
- *Operation and disposal should be carried out in a place with local ventilation or full ventilation facilities.
- *Avoid contact with eyes and skin. Avoid breathing steam.
- *See Section 8 for personal protective measures.
- *Keep away from fire and heat sources, smoking is strictly prohibited in the workplace.
- *Use explosion-proof ventilation systems and equipment.
- *If canning is required, the flow rate should be controlled and a grounding device should be provided to prevent static electricity accumulation.
- *Avoid contact with incompatible materials such as oxidants (see Section 10 for incompatible materials).
- *Handle with care when handling to prevent damage to packaging and containers.
- *Empty containers may be harmful residues.
- *Wash hands after use and do not eat or drink in the workplace.
- *Equipped with the corresponding variety and quantity of fire-fighting equipment and leakage emergency treatment equipment.

Precautions for storage:

- *Store in a cool, ventilated warehouse.
- *The storage temperature should not exceed 37 ° C.
- *It should be stored separately from oxidants and edible chemicals, and must not be mixed (see Section 10 for incompatible ingredients).
- *Keep container tightly closed.
- *Keep away from fire and heat sources.
- *The warehouse must be equipped with lightning protection equipment.
- *The exhaust system shall be provided with a grounding device to conduct static electricity.
- *Adopt explosion-proof lighting and ventilation settings.
- *Never use spark-prone equipment and tools.
- *The storage area should be equipped with spill emergency treatment equipment and suitable containment materials.



Part 8. Exposure control / personal protection

Biological restrictions: Not available

Monitoring method:

GBZ/T 160.1 ~ GBZ/T 160.81-2004 Workplace Air Determination of Toxic Substances (Series Standards), EN 14042 Workplace Air Procedure Guidelines for Evaluation of Exposure to Chemical or Biological Agents

Engineering control:

*The workplace is recommended to be separated from other workplaces.

*Closed operation to prevent leakage.

*Increase ventilation.

*Set up automatic alarm devices and accident ventilation facilities.

*Set up emergency evacuation routes and necessary escape areas.

Set up red area warning lines, warning signs and Chinese warning instructions, and set up a communication alarm system.

*Provide safety shower and eyewash equipment.

Personal protective equipment:

*Respiratory protection: When the concentration in the air exceeds the standard, wear a filtering gas mask (half-mask). Wear a respirator for emergencies or evacuation.

*Hand protection: Wear rubber oil-resistant gloves.

*Eye protection: Wear chemical safety eye protection.

*Skin and body protection: Wear protective work clothes.

Part 9. Physical and chemical properties

Appearance and properties: Light yellow liquid

Smell: No information.

PH value: No information.

Melting point (°C): -9~-4°C

Boiling point(°C):250~252°C

Burning temperature (°C): No information.

Flash point (°C): >71°C

Decomposition temperature: No information.

Water solubility: Slightly soluble

Evaporation rate: No information.

Saturated vapor pressure (kPa): 0.0265mmHg at 25°C.

Flammability (solid, gas): No information.

Relative density: 1.046-1.050g/ml at 25°C.

Steam density: No information.



Part 10. Stability and reactivity

Stability: This product is stable when stored and used under normal ambient temperature.

Dangerous reaction: No information

Conditions to avoid: static discharge, heat, humidity, etc.

Incompatibility: Strong oxides, strong acids, strong bases.

Hazardous decomposition products: No information

Part 11. Toxicological information

Acute toxicity

By mouth: LD50 Rat oral 3400 mg/kg

Inhalation: No information

Trans dermal: No information

Skin irritation or corrosion: No information

Eye irritation or corrosion: No information

Respiratory or skin sensitization: No information

Germ cell mutagenicity: No effect.

Specific target organ system toxicity-repeated exposure: No effects.

Specific target organ system toxicity-single exposure: No effect.

Aspiration hazard: No effect.

Toxicology, metabolism and distribution information: No data

Part 12. Ecological information

Eco toxicity:

Fish acute toxicity test: Not available.

Tritium acute activity suppression test: EC50; Species: Daphnia magna (Water flea, 2-24 hours old); Conditions: static bioassay, 16 hours light 8 hours dark cycle (light intensity of 200 lx), oxygen concentration of 8.4-8.6, temperature 20.2-20.5°C, pH 7.75-8.19; Concentration: 11.5 mg/L for 48 hours; Effect: immobilization. (65-75% cinnamic aldehyde).

Algae growth inhibition test: Not available.

Toxicity to microorganisms: Not available.

Persistence and degradability: No data.

Bioaccumulation or bioaccumulation: No data.

Mobility in soil: No data.

Part 13. Disposal



Waste chemicals:

Recycle as much as possible.

If it cannot be recycled, use incineration for disposal.

Do not dispose of this product by discharging it to the sewer.

Contaminated packaging:

Return the container to the manufacturer or dispose in accordance with national and local regulations.

Disposal considerations:

Please refer to relevant national and local regulations before disposal.

Refer to Part 8 for safety precautions for disposal personnel.

Part 14. Shipping information

UN number Dangerous goods number (UN number): No information

UN shipping name: No information

UN Classification: 6.1

Packing category: No information

Packaging method: Pack according to the method recommended by the manufacturer, for example: open steel drum. Common wooden case outside ampoules. Threaded glass bottles, iron capped glass bottles, plastic bottles or ordinary wooden boxes outside metal barrels (tanks).

Marine pollutants (yes / no): No

Transportation precautions: The transportation vehicle should be equipped with the corresponding variety and quantity of fire-fighting equipment and leakage emergency treatment equipment.

It is strictly forbidden to mix and transport with oxidants and edible chemicals.

The vehicle's exhaust pipe must be equipped with a fire arrester.

The tank truck should have a grounding chain when transporting, and a whole partition can be set in the tank to reduce vibration and generate static electricity.

The use of machinery and tools that are prone to sparks is prohibited.

Summer is best to transport in the morning and evening.

During transportation, it should be protected from direct sunlight, rain and high temperature.

Stay away from fire, heat sources, and high temperature areas during a stopover.

When transporting by road, follow the prescribed route and do not stop in residential areas and densely populated areas.

Railroad transportation is prohibited.

It is strictly forbidden to use wooden ships and cement ships for bulk transportation.

Danger signs and announcements shall be posted on the means of transport in accordance with relevant transportation requirements.



Part 15. Regulatory Information

The following laws, regulations, rules and standards provide corresponding provisions for the management of this chemical:

Component: CINNAMALDEHYDE

CAS: 104-55-2

Law of the People's Republic of China on Prevention of Occupational Diseases:

Occupational Disease Hazardous Factors Inventory (2015): Not included

Dangerous Chemicals Safety Management Regulations:

Dangerous Goods Inventory (2015): Not listed

Inventory of hazardous chemicals (2017): Not listed

List of dangerous chemicals to be supervised:

List of the first and second batches of key chemicals to be regulated: Not listed

Measures for Environmental Management and Registration of Dangerous Chemicals (Trial):

List of key environmental management hazardous chemicals: Not listed

Regulations on the management of narcotic drugs and psychotropic substances:

List of Narcotic Drugs: Not listed

List of psychotropic substances: Not listed

Environmental Management Measures for New Chemical Substances:

Inventory of Existing Chemical Substances in China (2013): Not included

Part 16. Other information

Writing and revising information:

This edition is the 1.0 edition, and is compiled in accordance with GB/T 16483-2008, GB/T 17519-2013, and GB 30000 series classification standards.

References:

【1】 International Chemical Safety Program: International Chemical Safety Card (ICSC), URL: <http://www.ilo.org/dyn/icsc/showcard.home>.

【2】 International Agency for Research on Cancer, URL: <http://www.iarc.fr/>.

【3】 OECD Global Chemical Information Platform, URL: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en.

【4】 CAMEO Chemical Substance Database, URL: <http://cameochemicals.noaa.gov/search/simple>.

【5】 American Medical Library: Chemical Identification Database, URL: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.

【6】 US Environmental Protection Agency: Integrated Hazard Information System, URL: <http://cfpub.epa.gov/iris/>.

【7】 US Department of Transportation: Emergency Response Guide,



URL: <http://www.phmsa.dot.gov/hazmat/library/erg>.

【8】 German GESTIS-Hazardous Substance Database,

URL: <http://gestis-en.itrust.de/>.

Acronyms and acronyms

MAC: (maximum allowable concentration), refers to the concentration of toxic chemical substances at the work place, within one working day, at any time.

PC-TWA: (permissible concentration-time weighted average), refers to the average allowable exposure concentration for 8-hour workdays and 40-hour workweeks specified by time.

PC-STEL: (permissible concentration-short term exposure limit), refers to the concentration that allows short-term (15 min) exposure under the premise of complying with PC-TWA.

Disclaimer:

The information in this SDS is only applicable to the specified product, and it is not applicable to the mixture of this product with other substances, etc., unless otherwise specified. This SDS only provides information on product safety for those who use the product with appropriate professional training. Users of this SDS must make independent judgments as to its suitability. The authors of this SDS will not be held responsible for any injuries caused by the use of this SDS.