# Chemical Safety Data Sheet

Revision date：2025-03-10 SDS number：ST-53

product name：2,2,6,6-Tetramethylpiperidin-4-yl dodecanoate version：2

## Section 1 - Chemical Product & Company Information

**Chemical Chinese name：** 四甲基哌啶醇月桂酸酯

**English name of the chemical：** 2,2,6,6-Tetramethylpiperidin-4-yl dodecanoate

**Company Name:** Zhejiang Synose Tech Co., Ltd.

**Production enterprise address:** No. 158, Fumin Road, Tangxi Town, Wucheng District, Jinhua City

**Postal code:**321017

**contact number：** 86-579-82275537

**Email address：** expo@synose.com

**emergency call：** 0579-89128083

**Product recommendation and limited use：** For industrial use only.

## Section 2 - Hazards Identification

**Emergency summary:** Severe eye irritation.

**GHS risk category：** Eye irritation,Category 2

Hazardous to the aquatic environment,short-term(Acute)-Category Acute 1.

Hazardous to the aquatic environment,long-term(Chronic)-Category Chronic 1.

**GHS label elements**

**Pictograms：**

**Warning word：** Warning

**Danger information：**

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Precaution：**

P264 Wash thoroughly after handling.

P280 Wear protective gloves/wear protective clothing/wear protective eye pads/wear protective masks.

P273 Avoid release to the environment.

**Accident response：**

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: Seek medical attention.

P391 Collect spillage.

**Safe storage：** No data available.

**Disposal:**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations,and product characteristics at time of disposal.

**Physical and chemical dangers:**No data available.

**Health hazards:** Causing severe eye irritation.

**Environmental hazard**:Extremely toxic to aquatic organisms. It is highly toxic to aquatic organisms and has long lasting effects.

## Section 3 - Composition/Information On Ingredients

√Substances mixture

| Chemical Name | concentration,% | CAS No. |
|---|---|---|
| **2,2,6,6-Tetramethylpiperidin-4-yl dodecanoate** | ≥97% | **101238-01-1** |

## Section 4 - First Aid Measures

**skin contact：** Take off contaminated clothing immediately.Wash off with soap and plenty of water.Consult a doctor.

**eye contact：** Rinse with pure water or saline for at least 15 minutes.Consult a doctor.

**Inhale：** Move the victim into fresh air If breathing is difficult,give oxygen If not breathing,give artificial respiration and consult a doctor immediately.Do not use mouth to mouth fesuscitation if the victim ingested or inhaled the chemical.

**Ingestion：** Rinse mouth with water.Do not induce vomiting.Never give anything by mouth to an unconscious person.Call a doctor or Poison Control Center immediately.

**The main symptoms and effects (both acute and delayed):**Eye irritation.

## Section 5 - Fire Fighting Measures

**Hazardous characteristics:**No data available

**Hazardous combustion products:**No data available

**Fire fighting methods:**Use dry chemical,carbon dioxide or alcohol-resistant foam.Avoid using direct running water to extinguish the fire, which may cause splashing of flammable liquid and spread the fire.

**Fire fighting precautions and measures:**Fire personnel should wear air breathing apparatus, wear full fire clothing, and fight fire upwind. If possible, move the container from the fire to an open area. Fire personnel should wear air breathing apparatus, wear full fire clothing, and fight fire upwind. If possible, move the container from the fire to an open area. Contain and treat fire water to prevent environmental pollution.

## Section 6 - Leakage Emergency Treatment

**Worker protective measures, protective equipment and emergency procedures:**Avoid dust formation.Avoid breathing mist,gas or vapours.Avoid contacting with skin and eye.Use personal protective equipment Wear chemical impermeable gloves.Ensure adequate ventilation Remove all sources of ignition.Evacuate personnei to safe areas.Keep people away from and upwind of spil/leak.

**Environmental protection measures:**Prevent further spillage or leakage if it is safe to do so.Do not let the chemical enter drains.Discharge into the environment must be avoided.

**Methods and materials for containment and disposal of spilled chemicals:**Small amount of leakage: Collect the leaking liquid in a sealable container as much as possible. Absorb with sand, activated carbon or other inert material and transfer to a safe place. Do not flush down the drain. Large leakage: build a embankment or dig a pit to contain it. Seal the drainage pipe. Cover with foam to inhibit evaporation. Transfer to a tank truck or special collector with an explosion-proof pump for recycling or transport to a waste disposal site.

**Preventive measures against secondary hazards:**Collect the spill and recycle it into a closed container. Move to a safe place.

## Section 7 - Handling And Storage

**Operational notes:**Handling in a well ventilated place.Wear suitable protective clothing.Avoid contact with skin and eyes.Avoid formation of dust and aerosols. Use non-sparking tools.Prevent fire caused by electrostatic discharge steam.

**Storage notes:**Well closed in a dry place.Store apart from foodstuff containers or incompatible materials.

## Section 8 - Contact Control / Personal Protection

**Monitoring method:**There are no known national limits for exposure.
**engineering control:**No data available

**Respiratory protection:**If the exposure limits are exceeded,irritation or other symptoms are experienced,use a full-face respirator.
**Hand protection:**Wear rubber oil-resistant gloves.

**Eye protection:**Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU)or NIOSH (US).

**Skin and body protection:**Wear fire/flame resistant and impervious clothing.Handle with gloves.Gloves must be inspected prior to use.Wash and dry hands.The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Other protection:** No data available.

## Section 9 - Physical And Chemical Properties

**Appearance and traits：** Colorless to yellow liquid

**pH:** No data available

**Melting point(℃):** ≥7℃

**Boiling point, initial boiling point and boiling range (℃):** No data available

Relative density (water =1): 0.903g/cm3. Temperature: 20℃.

**Relative vapor density (air = 1):** No data available

**Saturated vapor pressure (kPa):** 97.4Pa. Temperature: 160℃

**Heat of combustion (kJ/mol):** No data available

**Critical temperature (℃):** No data available

**Critical pressure (MPa):** No data available

**Octanol/water partition coefficient:** No data available

**Flash point (℃):** No data available

**Ignition temperature (℃):** No data available

**Lower explosion limit [%(V/V)]:** No data available

**Upper explosion limit [%(V/V)]:** No data available

**MIE value（mJ）：** No data available

**Solubility:** Water solubility: 1.9mg/L. Temperature: 20° C. pH value: 5.9-8.

## Section 10 - Stability And Reactivity

**stability:** The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Conditions to avoid:** Electrostatic discharge, heat, humidity, etc.

**Incompatible materials:** No data available.

**Dangerous decomposition products:** No data available.

## Section 11 - Toxicological Information

**Acute toxicity:** Oral:LD50-rat(female)->2000 mg/kg bw. Remarks:2/6 animals died.

- Inhalation:no data available
- Dermal:LD50-fat (male/female)->2000 mg/kg bw.

**Skin irritation or corrosion:** No data available

**Eye irritation or corrosion:** No data available

**Respiratory or skin sensitization:** No data available

**Germ cell mutagenicity:** No data available

**Carcinogenicity:** No data available

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ system toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

## Section 12 - Ecological Information

**Ecological toxicology:**No data available
**Persistence and degradability:**No data available
**Potential bioaccumulation:**No data available
**Mobility in the soil:**No data available

## Section 13 - Disposal Considerations

**Disposal method：** Recycle whenever possible. If it cannot be recycled, incineration is used for disposal. This product shall not be disposed of by means of drainage.

**Contaminated packaging：** Return the container to the manufacturer or dispose of it in accordance with national and local regulations. National and local regulations should be consulted before disposal. See Section 8 for safety precautions for disposal personnel.

**Disposal considerations：** National and local regulations should be consulted before disposal. See Section 8 for safety precautions for disposal personnel.

## Section 14 - Transport Information

**United Nations dangerous goods number：** No data available
**UN transport name：** No data available
**United Nations Classification of Hazards：** No data available
**Packaging group:** Packaging in accordance with the manufacturer's recommended method, for example: open steel drums. Plastic buckets, etc.
**Marine pollutants (yes/no):** No data available
**Transportation considerations：**Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and leakage emergency treatment equipment. It is strictly prohibited to mix with oxidants and edible chemicals. The exhaust pipe of the vehicle carrying the article must be equipped with a fire retarder. When the tank (tank) truck is used for transportation, there should be a grounding chain, and a hole partition can be provided in the tank to reduce static electricity generated by shock. It is prohibited to use mechanical equipment and tools that are prone to spark. It is best to transport early and early in summer. During transportation, it should be protected from sun exposure, rain and high temperature. Stay away from fire, heat source and high temperature area during stopover. Road transport should follow the prescribed route, do not stay in residential areas and densely populated areas. It is forbidden to slip them in railway transportation. It is strictly prohibited to use wooden or cement ships for bulk transport. Danger signs and announcements shall be posted on the means of transport in accordance with relevant transport requirements.

## Section 15 - Regulatory Information

**Regulatory Information：** The following laws, regulations, rules and standards shall make corresponding provisions for the management of the chemical:
SComponents 2,2,6,6-tetramethylpiperidin-4-yl dodecanoate CAS:101238-01-1

**Occupational Disease Prevention Law of the People's Republic of China:**
Classification of occupational hazard factors (2015): not included
**Regulations on the Safety Management of hazardous Chemicals:**
Hazardous Chemicals List (2015): Not included
List of Explosive Hazardous Chemicals (2017): Not included
**List of hazardous chemicals under key supervision:**
List of the first and second batch of hazardous chemicals under key supervision: not included
Measures for the Environmental Management Registration of hazardous Chemicals (trial):
List of key hazardous chemicals for environmental management: not included
Regulations on the Control of Narcotic Drugs and psychotropic Substances:
List of narcotic drug varieties: not included
List of psychotropic drugs: not included
**New environmental management measures for chemical substances:**
List of existing chemical substances in China (2013): Not included

## Section 16 - Other Information

**Latest revision date:** 2025-03-10
**Modify the description:** This SDS is prepared in accordance with the "Contents and Project Sequence of Chemical Safety Data Sheets" (GB/T16483).
**Training recommendations:** Provide sufficient information and instructions for the trainers.
**Disclaimer:** This SDS provides all relevant information in a comprehensive and authentic manner, but does not guarantee its absolute breadth and accuracy, and is intended as a guide only. This SDS is based on our current knowledge and safety precautions applicable to this product and does not represent any guarantee of product performance. We are obliged to describe and inform the product of any hazards and preventive measures. The user who obtains the SDS must make an independent judgment on the applicability of the SDS under special conditions of use. Our company will not be responsible for the damage caused by the use of this SDS in special use situations.