

Version: 3.0

Revision date: 01/01/2025

Product Name: 2, 3-PENTANEDIONE NATURAL

## **Section 1: Identification of the Substance/Mixture and of the Company**

### **Product identifier**

Product Name 2, 3-PENTANEDIONE NATURAL

Product Number 771-3108

### **Relevant identified use of the substance/mixture and uses advised against**

Use of Substance/Mixture Flavor and fragrance agents.

### **Details of supplier of the SDS**

Company O'Laughlin Corporation Limited

Address Suite 903, The Chinese Bank Building, 61-65 Des Voeux Road, Central, Hong Kong

Telephone (852) 2527 1031

Fax (852) 2529 0231

Website [www.olaughlinco.com](http://www.olaughlinco.com)

### **Emergency telephone number**

(852) 2527 1031

## **Section 2: Hazards Identification**

### **Classification of the substance or mixture**

#### **Classification according to Regulation (EC) No 1272/2008**

Flammable liquids, Category 2, H225

Acute toxicity, Oral, Category 4, H303

Sensitisation – skin, Category 1, H317

Specific target organ toxicity - repeated exposure, Category 2, H373

Hazardous to the aquatic environment – acute toxicity, Category 2, H402

### **Labelling elements**

#### **Labelling according to Regulation (EC) No 1272/2008**



### **Pictogram**

### **Signal word**

**Danger**

### **Hazard Statement**

H225 - Highly flammable liquid and vapour.

H303 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

H373 - May cause damage to organs through prolonged or repeated exposure.

H402 - Toxic to aquatic life.

### **Precautionary statement**

#### **Prevention**

P210 - Keep away from heat/ sparks/ open flames/ hot surfaces. – No smoking.

P233 - Keep container tightly closed.

website: [www.olaughlinco.com](http://www.olaughlinco.com)



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P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ ventilating/ lighting/ .../ equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 - Wash ... thoroughly after handling.

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

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

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

### Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P314 - Get medical advice/attention if you feel unwell.

P330 - Rinse mouth.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention.

P363 - Wash contaminated clothing before reuse.

P370 + P378 - In case of fire: Use ... for extinction.

### Storage

P403 + P235 - Store in a well-ventilated place. Keep cool.

### Disposal

P501 - Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.

**Hazards Not Otherwise Classified** No information available

**Supplemental Hazard Information** No information available

### Section 3: Composition/information on ingredients

Substance Name	2, 3-PENTANEDIONE NATURAL
CAS Number	600-14-6
EC Number	209-984-8
% (w/w)	100

Remarks: The rest unspecified ingredients are impurities, and they are not hazard.

### Section 4: First Aid Measures

#### Description of first aid measures

**Skin contact** Wash off with soap and plenty of water. Consult a physician.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.



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**Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Inhalation** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### General information

Consult a physician. Show this safety data sheet to the doctor in attendance.

**Indication of any immediate medical and special treatment needed:** No information available.

## **Section 5: Fire-fighting Measures**

### **Flammable properties**

Flash point 19°C

### **Firefighting**

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguish media Do not use a solid water stream as it may scatter and spread fire.

### **Protective equipment and precautions for firefighters**

Specific hazards during firefighting Carbon oxides.

Specific protective equipment for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighter's protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode when fighting fires.

Specific methods Use water spray to cool unopened containers

**General fire hazards** Static charges generated by emptying package in or near flammable vapor may cause flash fire.

## **Section 6: Accidental Release Measures**

**Personal precautions** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

**Environmental precautions** Do not let product enter drains.

**Methods for cleaning up** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## **Section 7: Handling and Storage**

**Storage** Cold storage in a closed container, protected from heat and light. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**Handling** Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged



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exposure. Wash thoroughly after handling.

**Specific end use(s)**

No information available.

### **Section 8: Exposure Controls/Personal Protection**

**Control parameters:** Components with workplace control parameters.

#### **Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hand protection**

Type of gloves recommended: Butyl rubber. Minimum breakthrough time/ gloves: 480 min. Minimum thickness/ gloves 0.11 mm.

**Body protection**

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Thermal hazards**

Wear suitable protective clothing to prevent heat.

**Environmental exposure controls**

Avoid discharge into the environment. According to local regulations, Federal and official regulations.

**Industrial hygiene:**

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/ or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### **Section 9: Physical and Chemical Properties**

**Appearance**

Slight yellow to green liquid

**Odor**

Creamy, sweet, buttery, brown roasted, with a fruity nuance

**Flash point**

19 °C

**Specific Gravity**

0.952 - 0.962 at 25 °C

**Refractive Index**

1.402 - 1.406 at 20 °C

**Acid Value**

No information available.

**Solubility (ies)**

No information available.

**Auto ignition temperature**

No information available.

**Viscosity**

No information available.

### **Section 10: Stability and Reactivity**



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<b>Reactivity</b>	Stable under storage temperatures and pressures.
<b>Chemical stability</b>	Stable at cool temperature in closed containers under normal storage and handling conditions.
<b>Possibility of hazardous reactions</b>	No hazardous reactions known.
<b>Conditions to avoid</b>	Open flames, hot surfaces and sources of ignition.
<b>Incompatible materials</b>	Strong oxidizing agents, strong bases, mineral acids.
<b>Hazardous decomposition products</b>	No information available.

### **Section 11: Toxicological Information**

#### **Information on likely routes of exposure:**

<b>Inhalation</b>	Causes irritation to the respiratory system.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	No information available.
<b>Ingestion</b>	Harmful if swallowed.

#### **Information on toxicological effects:**

<b>Oral/Parenteral Toxicity</b>	Acute, LD50 Rat, 3000 mg/kg
<b>Dermal Toxicity</b>	Acute, LD50 Rabbit, > 2500 mg/kg
<b>Inhalation Toxicity</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.

#### **Carcinogenicity**

**OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity** No information available.

**TOST - single exposure** No information available.

**TOST - repeated exposure** No information available.

**Aspiration hazard** No information available.

### **Section 12: Ecological Information**

<b>Eco toxicity</b>	Fish: LC50 Golden orfe, 46~100 mg/l ( 96 h)
<b>Persistence and degradability</b>	Biodegradability: 80% - Readily biodegradable (OECD Test Guideline 302B). Chemical Oxygen Demand: 1810 mg/g Ratio BOD/ThBOD: 20~60%
<b>Bio accumulative potential</b>	No information available.
<b>Mobility in soil</b>	No information available.
<b>Results of PBT&amp;vPvB assessment</b>	No information available.
<b>Other adverse effects</b>	No information available.



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### Section 13: Disposal Considerations

<b>Disposal instructions</b>	Do not discharge into drains, water course or onto the ground. Do not allow this material to drain into sewers/ water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/ container in accordance with local/ regional/ national/ international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous water code</b>	No information available.
<b>Waste from residues/unused products</b>	Empty containers or liner may retain some product residues. This material and its container must be disposed of in a safe manner.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### Section 14: Transport Information

	ADN	ADR	RID	DOT BULK	DOT NON-BULK	IATA	IMDG
<b>UN Number</b>	1224						
<b>Shipping Name</b>	KETONES, LIQUID, N.O.S. (2,3-PENTANEDIONE)						
<b>Hazard Class</b>	3						
<b>Packing group</b>	II						
<b>Environmental Hazards</b>	No						

### Section 15: Regulatory Information

**US federal regulations:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA Hazards Substance List (40 CFR 302.4)	Not listed
OSHA Specifically Regulated Substance (29 CFR 1910.1001-1050)	Not listed
SARA 302 Extremely hazardous substances	Not listed
SARA 311/312 Hazard Chemical	Not listed
SARA 313 (TRI reporting)	Not regulated

#### Other federal regulations

CAA Section 112 Hazardous Air Pollutant List	Not regulated
CAA Section 112 (r) Accidental Release Prevention (40 CFR 68.130)	Not regulated
Safe Drinking Water Act (SDWA)	Not regulated

#### US State regulations

US. Massachusetts RTK-Substance List	Not listed
US. New Jersey Worker and Community Right-to-Know Act	Not regulated
US. Pennsylvania Worker and Community Right-to-Know Law	Not listed



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US. Rhode Island RTK

US. California Proposition 65

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Not regulated

Not listed

### International Inventories

Country or region	Inventory name	On inventory (yes/no)
Australia	AICS	Yes
Canada	DSL	Yes
Canada	NDSL	No
China	IECSC	Yes
Europe	EINECS	Yes
Europe	ELINCS	No
Japan	ENCS	Yes
Korea	ECL	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	PICCS	Yes
US and Puerto Rico	TSCA	Yes

### **Section 16: Other Information**

#### **Revision Information**

Date of this version: Jan.1, 2025

#### **Declaration to Reader**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. O'Laughlin Corporation Limited, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.