

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

Product identifier

Product Name	2,3 Pentanedione
Product Number	772-2044

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

Use of Substance/Mixture	Flavor and fragrance agent.
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Details of supplier of the SDS

Company	O'Laughlin Corporation Limited
Address	Suite 1704 Chinachem Tower 34 – 37 Connaught Road, Central, Hong Kong
Telephone	(852) 2527 1031
Fax	(852) 2529 0231
Website	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

Serious eye damage/eye irritation, Category 1, H317

Sensitization, skin, Category 1, H318

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

Labelling elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard Statement

H225 - Highly flammable liquid and vapor.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

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

Precautionary statement

Prevention

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

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

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

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P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

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

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

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

Response

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.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P370+P378 - In case of fire: use water spray, dry chemical, carbon dioxide, alcohol resistant foam or powder 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 Toxic to aquatic life with long lasting effects.

Section 3: Composition/information on ingredients

Substance Name	acetyl propionyl
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 Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Ingestion Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

Inhalation Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air.

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When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Most important symptoms and effects, both acute and delayed:

May be harmful if swallowed. May be harmful in contact with skin.

Indication of any immediate medical and special treatment needed:

Treat symptomatically.

Section 5: Fire-fighting Measures

Flammable properties

Flash point 18.89°C

Firefighting

Suitable extinguishing media Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

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

Protective equipment and precautions for firefighters

Specific protective equipment for firefighters As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form. An explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Containers may explode in the heat of a fire. Flammable Liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Hazardous combustion products Carbon monoxide. Unidentified organic compounds.

Specific protective equipment for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

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.

Environmental precautions Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Retain and dispose of contaminated wash water.

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 Store in cool place. 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.
Recommended storage temperature: 2 - 8 °C

Handling Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

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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 Use adequate general or local, explosion-proof ventilation to keep airborne levels to acceptable levels.

Personal protective equipment

Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards.

Hand protection Handle with gloves.

Body protection Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. 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 Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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 Yellow to yellow green clear liquid.

Odor Creamy, sweet, buttery, brown roasted, with a Fruity nuance.

Flash point 18.89 °C

Specific Gravity 0.952-0.980

Refractive Index 1.402-1.410

Vapor Pressure 20.000mm/Hg at 20.00 °C

Solubility (ies) Soluble 1 in 3 or more parts of alcohol.

Auto ignition temperature No information available.

Viscosity No information available.

Section 10: Stability and Reactivity

Reactivity The substance is stable.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions No hazardous reactions known.

Conditions to avoid Heat, flames and sparks.

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Incompatible materials

Oxidizing agents. Reducing agents. Strong bases.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

Section 11: Toxicological Information

Information on likely routes of exposure

Inhalation

May cause irritation to the respiratory system.

Skin contact

Skin - rabbit - Skin irritation - 24 h

Eye contact

Not determined.

Ingestion

May be harmful if swallowed.

Information on toxicological effects

Acute toxicity

LD50(Oral, Rat):

3000 mg/kg

LD50(Dermal, Rabbit):

> 2500 mg/kg

Skin corrosion/Irritation:

No information available.

Serious eye damage/irritation:

No information available.

Respiratory sensitization:

No information available.

Skin sensitization:

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

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 a carcinogen or potential carcinogen by OSHA.

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 OSHA.

NTP

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.

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

Eco toxicity

No information available.

Persistence and degradability

No information available.

Bio accumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT&vPvB assessment

No information available.

Other adverse effects

No information available.

Section 13: Disposal Considerations



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Disposal instructions

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.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous water code

No information available.

Waste from residues/unused products

Empty containers or liner may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging

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
UN Number	1224						
Shipping Name	KETONES, LIQUID, N.O.S. (ACETYL PROPIONYL)						
Hazard Class	3						
Packing group	II						
Environmental Hazards	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
US. Rhode Island RTK	Not regulated
US. California Proposition 65	Not listed



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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: Apr 19, 2023

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.