

Safety Data Sheet

#67214708 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
3-Methyl-1,2-cyclopentanedione (Maple lactone)	765-70-8	C6H8O2	10	17 Aug 2026

SECTION 1

Identification

Product name	3-Methyl-1,2-cyclopentanedione (Maple lactone)
CAS number	765-70-8
Chemical formula	C6H8O2
Molecular weight	112.13
SMILES	<chem>CC1CCC(=O)C1=O</chem>
EC / EINECS number	212-154-8
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification



WARNING

CODE	HAZARD STATEMENT
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
CODE	PRECAUTIONARY STATEMENT
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+350	IF ON SKIN: Gently wash with soap and water
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
Other hazards (e.g. PBT / vPvB, not classified)	Not applicable

SECTION 3

Composition / information on ingredients

Purity / concentration	~100%
Impurities / stabilising additives	Not applicable

SECTION 4

First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing; give oxygen or artificial respiration if necessary; get medical advice if difficulties persist.
Skin contact	Take off immediately all contaminated clothing and wash immediately with plenty of water; consult a doctor if irritation persists.
Eye contact	Rinse immediately with plenty of water; remove contact lenses if present and easy to do; continue rinsing; get medical advice if irritation persists.
Ingestion	Rinse mouth out with water; do not induce vomiting; get medical advice.
Symptoms / effects & medical attention	Not expected to present a significant hazard under normal use; dust may cause respiratory, skin, or eye irritation; ingestion may cause digestive tract irritation, abdominal pain, or nausea. Treat symptomatically..

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, carbon dioxide, dry powder or water fog
Unsuitable extinguishing media	No specific firefighting procedure given
Special hazards	Carbon monoxide (CO), Carbon dioxide (CO ₂).
Advice for firefighters	Use water spray or fog for cooling exposed containers; wear proper protective equipment including respiratory protection.

SECTION 6

Accidental release measures

Personal precautions & PPE	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.
Containment & clean-up methods	Collect spillage with shovel, broom or the like.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature Ambient

Precautions for safe handling Avoid creating or spreading dust; provide local exhaust or general room ventilation; wash hands before eating, drinking, or smoking.

Conditions for safe storage (incompatibilities) *Not applicable*

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

Eye / face protection Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Gloves: Nitrile Rubber, 0.11mm (480 mins).

Respiratory protection Full-face respirator
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	1.07 g/mL DERIVED FROM: LITERATURE
Flash point	100 °C DERIVED FROM: LITERATURE
Acidity	Base DERIVED FROM: LITERATURE
Appearance / physical state	Solid DERIVED FROM: LITERATURE
Colour	white. Cream. Yellow. DERIVED FROM: LITERATURE
Odour	Odourless DERIVED FROM: LITERATURE
Melting / freezing point	105 - 110 °C DERIVED FROM: LITERATURE
Boiling point	<i>Not applicable</i>
Solubility (water)	Soluble in water DERIVED FROM: LITERATURE
pH	<i>Not applicable</i>
Vapour pressure	<i>Not applicable</i>
Partition coefficient (log Pow)	Log Pow: 0.53 DERIVED FROM: LITERATURE
Auto-ignition / decomposition temp	<i>Not applicable</i>

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under normal conditions.
Conditions to avoid	Heat sources, direct sunlight, sources of ignition.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides (CO, CO ₂). See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	LD50 Oral >2000 mg/kg (female Rat)
Skin corrosion / irritation	<i>No data available</i>
Eye corrosion / irritation	<i>No data available</i>
Respiratory / skin sensitisation	<i>No data available</i>
Carcinogenicity	<i>No data available</i>
Mutagenicity	<i>No data available</i>
Reproductive toxicity	<i>No data available</i>
STOT (single / repeated exposure)	<i>No data available</i>
Aspiration hazard	<i>No data available</i>
Endocrine disruptors	This product does not contain any known or suspected Endocrine disruptors.

SECTION 12

Ecological information

Aquatic toxicity	<i>No data available</i>
Persistence & degradability	<i>No data available</i>
Bioaccumulative potential	<i>No data available</i>
Mobility in soil	<i>No data available</i>
PBT / vPvB assessment	This substance/mixture does not meet the PBT or vPvB criteria of REACH regulation, annex XIII.

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of in accordance with local/national regulations
---	--

SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	no
Special precautions for user	Not applicable

SECTION 15

Regulatory information

REACH code	Y110
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	Not required

SECTION 16

Other information

Revision notes / other information	This SDS replaces Version number: 1 Issued: 14.05.2020
------------------------------------	--

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.