

Safety Data Sheet

1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone

CAS No. 66346-01-8 · C₁₃H₁₇ClO

Prepared in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Ninth Revised Edition.

Section 1 — Identification

Product identifier

Product name	1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone
CAS No.	66346-01-8
EC No.	—
Molecular formula	C ₁₃ H ₁₇ ClO

Relevant identified uses of the substance and uses advised against

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

Details of the supplier of the safety data sheet

Supplier	Inner Mongolia Joyantek Technology Co., Ltd.
Address	No. 125 Jiaye Avenue, Intersection of Puwei 4th Road and Pujing 4th Road, Putudun Zone, Tenggeri Economic and Technological Development Zone, Alxa League, Inner Mongolia Autonomous Region, P.R. China
Post code	750336
Telephone	+86 512 5858 9995
E-mail	sales@joyantek.com

Emergency phone number

Emergency telephone	+86 512 5858 9995
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Section 2 — Hazards Identification

Hazard class and label elements of the product according to GHS (Ninth Revised Edition):

GHS hazard class

Hazard class	Category
Skin corrosion/irritation	Category 2
Eye damage/irritation	Category 2A
Hazardous to the aquatic environment — long-term (chronic) hazard	Category 2

GHS label elements

Pictogram



GHS07 — exclamation mark | GHS09 — environment

Signal word

Warning

Hazard statements

H315	Causes skin irritation
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention	P264+P265 — Wash hands and other contact area thoroughly after handling. Do not touch eyes. P273 — Avoid release to the environment. P280 — Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Response	P321 — Specific treatment (see measures on this label). P391 — Collect spillage. P302+P352 — IF ON SKIN: Wash with plenty of water. P332+P317 — If skin irritation occurs: Get medical help. P337+P317 — If eye irritation persists: Get medical help. P362+P364 — Take off contaminated clothing and wash it before reuse. P305+P351+P338 — IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Not applicable.
Disposal	P501 — Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 — Composition / Information on Ingredients

Component	CAS No.	EC No.	Concentration (weight percent, %)
1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone	66346-01-8	—	98.5

Section 4 — First Aid Measures

Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if you feel uncomfortable.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if you feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

1. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Indication of any immediate medical attention and special treatment needed

1. Treat symptomatically.
2. Symptoms may be delayed.

Section 5 — Fire Fighting Measures

Extinguishing media

Suitable extinguishing media	Dry chemical, carbon dioxide or alcohol-resistant foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter or spread fire.

Specific hazards arising from the substance or mixture

1. Containers may explode when heated.
2. Fire-exposed containers may vent contents through pressure relief valves.
3. May expand or decompose explosively when heated or involved in a fire.

Advice for firefighters

1. As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2. Fight fire from a safe distance, with adequate cover.
3. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 — Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

1. Ensure adequate ventilation. Remove all sources of ignition.
2. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3. Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

Environmental precautions

1. Prevent further leakage or spillage if safe to do so.
2. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

1. Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
2. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
3. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7 — Handling and Storage

Precautions for handling

1. Handling is performed in a well-ventilated place.
2. Wear suitable protective equipment.
3. Avoid contact with skin and eyes.
4. Keep away from heat/sparks/open flames/hot surfaces.
5. Take precautionary measures against static discharges.

Precautions for storage

1. Keep containers tightly closed.
2. Keep containers in a dry, cool and well-ventilated place.
3. Keep away from heat/sparks/open flames/hot surfaces.
4. Store away from incompatible materials and foodstuff containers.

Section 8 — Exposure Controls / Personal Protection

Control parameters

Occupational exposure limit values	No information available.
Biological limit values	No information available.
Monitoring methods	1. EN 14042 — Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. 2. GBZ/T 160 — Determination of toxic substances in workplace air (series of effective standards) and GBZ/T 300 — Determination of toxic substances in workplace air (series of standards).

Engineering controls

1. Ensure adequate ventilation, especially in confined areas.
2. Ensure that eyewash stations and safety showers are close to the workstation location.
3. Use explosion-proof electrical/ventilating/lighting equipment.
4. Set up emergency exits and the necessary risk-elimination area.

Personal protection equipment

Eye protection	Tightly fitting safety goggles (approved by EN 166 (EU) or NIOSH (US)).
Hand protection	Wear protective gloves (such as butyl rubber), passing the tests according to EN 374 (EU), US F739 or AS/NZS 2161.1 standard.
Respiratory protection	A full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387). If exposure limits are exceeded or if irritation or other symptoms are experienced, use respirator cartridges.
Skin and body protection	Wear fire/flamm resistant/retardant clothing and antistatic boots.

Section 9 — Physical and Chemical Properties

Appearance	Light yellow liquid
Odour	No information available.
Odour threshold	No information available.
pH	No information available.
Melting point / freezing point (°C)	18
Initial boiling point and boiling range (°C)	No information available.
Flash point (°C), closed cup	178.9
Evaporation rate	No information available.
Flammability	Not applicable.
Upper/lower explosive limits [% (v/v)]	Upper limit: No information available; lower limit: No information available.
Vapour pressure (kPa)	No information available.
Relative vapour density (Air=1)	No information available.
Relative density (Water=1)	1.05
Solubility	No information available.
n-Octanol/water partition coefficient	No information available.
Auto-ignition temperature (°C)	No information available.
Decomposition temperature (°C)	No information available.
Kinematic viscosity (mm ² /s)	No information available.
Particle characteristics	Not applicable.

Section 10 — Stability and Reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	No information available.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	No information available.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 — Toxicological Information**Acute toxicity**

Component	CAS No.	LD50 (oral)	LD50 (dermal)	LC50 (inhalation, 4 h)
1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone	66346-01-8	3145 mg/kg (Rat)	>5000 mg/kg (Rat)	>1.37 mg/L (Rat)

Skin corrosion/irritation

Causes skin irritation (Category 2) — 1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone.

Serious eye damage/irritation

Causes serious eye irritation (Category 2A) — 1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone.

Carcinogenicity

Component	CAS No.	IARC	NTP
1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone	66346-01-8	Not Listed	Not Listed

Skin sensitization	No information available.
Respiratory sensitization	No information available.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
Reproductive toxicity (additional)	No information available.
STOT — single exposure	No information available.
STOT — repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12 — Ecological Information

Acute aquatic toxicity	No information available.
Chronic aquatic toxicity	No information available.
Persistence and degradability	No information available.
Bioaccumulative potential	No information available.
Mobility in soil	No information available.
Results of PBT and vPvB assessment	1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Section 13 — Disposal Considerations

Waste chemicals	Before disposal, refer to the relevant national and local laws and regulations.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to waste chemicals and contaminated packaging.

Section 14 — Transport Information

Transporting label



Class 9 — miscellaneous dangerous goods; marine pollutant mark

Marine pollutant	Yes
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class	9
Transport subsidiary hazard class	NONE
Packing group	III

(Description: The graphic "fish and tree" is transport marking.)

Section 15 — Regulatory Information**International chemical inventory**

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
1-(4-Chlorophenyl)-4,4-dimethyl-3-pentanone			x		x	x	√	x	

"√" Indicates that the substance is included in the regulations.

"x" No data, or not included in the regulations.

Inventory definitions

EINECS	European Inventory of Existing Commercial Chemical Substances.
TSCA	Toxic Substances Control Act (United States).
DSL	Canadian Domestic Substances List.
IECSC	China Inventory of Existing Chemical Substances.
NZIoC	New Zealand Inventory of Chemicals.
PICCS	Philippines Inventory of Chemicals and Chemical Substances.
KECI	Korea Existing Chemicals Inventory.
AICS	Australia Inventory of Chemical Substances.
ENCS	Existing and New Chemical Substances (Japan).

Section 16 — Additional Information

Creation date	April 30, 2026
Revision date	October 2, 2026
Reason for revision	Re-issued on company letterhead; supplier contact details updated. Technical content unchanged.
Reference basis	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Ninth Revised Edition; Regulation (EC) No 1907/2006 (Annex XIII).

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. It relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Users must satisfy themselves that the material is suitable for their particular purpose and comply with all applicable laws and regulations.