Richest Group
No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Tel: 0086 21 5017 5386
E-mail: inquiry@richest-group.com
Web: www.richest-group.com

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	MDJ / Methyl Dihydrojasmonate	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	MDJ / Methyl Dihydrojasmonate
Synonyms	MDJ; Hedione; Methyl 3-oxo-2-pentylcyclopentaneacetate; Methyl dihydrojasmonate, mixture of cis and trans
CAS No.	24851-98-7
EC No.	246-495-9
Molecular formula	C13H22O3
Molecular weight	226.31 g/mol
Relevant identified uses	Fragrance ingredient with a floral, jasmine, sweet and green odor profile for fragrance-formulation use.
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	0086 21 5017 5386
E-mail	inquiry@richest-group.com
Website	www.richest-group.com
Emergency telephone number	0086 21 5017 5386

SECTION 2: Hazards identification

GHS Classification	Acute aquatic toxicity Category 2
Pictogram(s)	None
Signal word	None
Hazard statement(s)	H401 Toxic to aquatic life.
Precautionary statement(s)	P273 Avoid release to the environment.; P501 Dispose of contents/container to an approved waste disposal plant.
Other hazards	No other hazards were identified in the reviewed sources.

SECTION 3: Composition/information on ingredients

Component	MDJ / Methyl Dihydrojasmonate
CAS No.	24851-98-7
EC No.	246-495-9
Classification	Acute aquatic toxicity Category 2
Concentration	≥96% (GC, sum of isomers), HCSchem public commercial grade

SECTION 4: First-aid measures	
If inhaled	Move to fresh air; give artificial respiration if not breathing; consult a physician.
In case of skin contact	Wash with soap and plenty of water and consult a physician.
In case of eye contact	Flush eyes with water as a precaution.
If swallowed	Never give anything by mouth to an unconscious person; rinse mouth with water and consult a physician.
Most important symptoms and effects	No data available
Indication of immediate medical attention	No data available

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	Carbon oxides.
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Avoid breathing vapours, mist or gas and ensure adequate ventilation.
Environmental precautions	Prevent further leakage if safe; do not let product enter drains and avoid discharge into the environment.
Methods for containment and cleaning up	Keep in suitable closed containers for disposal.

SECTION 7: Handling and storage	
Precautions for safe handling	Follow the GHS precautions in Section 2.2 of the selected SDS; prevent environmental release and use suitable closed containers for residues.
Conditions for safe storage, including incompatibilities	Keep container tightly closed in a dry, well-ventilated place; reseal opened containers carefully and keep upright to prevent leakage.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	The reviewed SDS states that the product does not contain substances with occupational exposure limits.
Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Use good industrial hygiene and safety practice; wash hands before breaks and at the end of the workday.
Eye/face protection	Use eye protection tested and approved under applicable NIOSH or EN 166 standards.
Skin and body protection	Use inspected gloves with proper removal technique and impervious clothing selected for workplace concentration and amount.
Respiratory protection	Respiratory protection not required; for nuisance exposures the SDS lists OV/AG (US) or ABEK (EU EN 14387) cartridges.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties	
Physical state	Colorless to light yellow liquid
Colour	Colourless liquid (Takasago Jasmodione and public SDS).
Odour	Lemon-like fruity jasmine aroma
Melting point / freezing point	<-20 °C at approximately 1,013 hPa, OECD Test Guideline 102 (public SDS).
Boiling point / boiling range	110 °C at 0.3 hPa (0.2 mmHg), lit.
Flammability	No data available
Explosion / flammability limits	No data available
Flash point	113 °C, closed cup
Auto-ignition temperature	Approximately 259 °C at 980 hPa (public SDS).
Decomposition temperature	No data available
pH	No data available
Viscosity	No data available
Solubility	Very slightly soluble in water, soluble in ethanol and oils
Partition coefficient n-octanol/water	log Pow 2.93 at 22 °C
Vapour pressure	0.158 Pa at 25 °C (Takasago Jasmodione TDS).
Density and/or relative density	No data available
Relative vapour density	No data available
Particle characteristics	Not applicable (liquid).
Melting freezing point	< -20 °C at ca. 1,013 hPa, OECD Test Guideline 102
Relative density	0.998 g/mL at 25 °C
Water solubility	ca. 0.574 g/L at 20 °C, OECD Test Guideline 105
Auto ignition temperature	ca. 259 °C at 980 hPa
Other properties	No data available for odour threshold, evaporation rate, flammability limits, vapour pressure, vapour density, decomposition temperature, viscosity, explosive properties and oxidizing properties.
Refractive index	No data available
Acid value	No data available

SECTION 10: Stability and reactivity	
Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides may be formed under fire conditions (public SDS).

SECTION 11: Toxicological information	
Acute oral toxicity	LD50 oral, rat: >5,000 mg/kg.
Acute inhalation toxicity	LC50 inhalation, rat, male and female, 4 h: >4.93 mg/L (OECD 403).
Acute dermal toxicity	LD50 dermal, rabbit: >5,000 mg/kg.
Skin corrosion irritation	Rabbit, 4 h: no skin irritation (OECD 404).
Serious eye damage irritation	Rabbit: no eye irritation (OECD 405).
Skin sensitisation	Guinea-pig maximisation test: does not cause skin sensitisation (OECD 406).
Germ cell mutagenicity	Ames test, S. typhimurium: negative; OECD 486 rat male: negative.
Carcinogenicity	No component present at ≥0.1% is identified as a probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP or OSHA in the selected SDS.
Reproductive developmental toxicity	Developmental toxicity, rat, oral: no adverse effect observed in chronic toxicity tests; other reproductive toxicity data not available.
Repeated dose toxicity	Rat, male and female, oral NOAEL: >100 mg/kg; no adverse effect observed in chronic toxicity tests.
Rtecs	GY2453800

SECTION 12: Ecological information	
Toxicity to fish	Semi-static LC50, Oryzias latipes, 96 h: 19 mg/L (OECD 203).
Toxicity to daphnia	Static EC50, Daphnia magna, 48 h: 8.25 mg/L (OECD 202).
Toxicity to algae	Static EC50, Pseudokirchneriella subcapitata, 72 h: 45.9 mg/L (OECD 201).
Persistence degradability	Aerobic biodegradability, 28 days: 89%, readily biodegradable (OECD 301F).
Pbt vpvb	Assessment not available because chemical safety assessment was not required/conducted.
Other adverse effects	An environmental hazard cannot be excluded with unprofessional handling or disposal; toxic to aquatic life.
Aquatic hazard classification	GHS aquatic-hazard classification: Acute aquatic toxicity Category 2; H401 Toxic to aquatic life.

SECTION 13: Disposal considerations	
Product disposal methods	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information	
UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards / Marine pollutant	See cited public SDS
Special precautions for user	Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	SARA_302: No chemicals are subject to SARA Title III Section 302 reporting.; SARA_313: No components with known CAS numbers exceed the De Minimis reporting levels.; SARA_311_312: No SARA Hazards.; Massachusetts_Right_to_Know: No components are subject to the Act.; Pennsylvania_New_Jersey_Right_to_Know: Methyl 3-oxo-2-pentylcyclopentaneacetate, CAS 24851-98-7, is listed in the SDS.; California_Proposition_65: The SDS states that the product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Full text of H-Statements	H401 Toxic to aquatic life.
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: Hedione — PubChem CID 102861: https://pubchem.ncbi.nlm.nih.gov/compound/102861 | Methyl Dihydrojasmonate public commercial specification: https://hcschem.com/en/products/methyl-dihydrojasmonate/ | Hedione product, packaging and tariff information: https://www.vigon.com/product/hedione/ | Safety Data Sheet W340804 — Methyl dihydrojasmonate, mixture of cis and trans: https://www.chemblink.com/MSDSFiles/24851-98-7Sigma-Aldrich.pdf | Jasmodione — Technical Data Sheet: https://assets.takasago.com/prod/default/s3fs-public/2022-02/22_Jasmodione.pdf | Jasmodione — product and technical data page: https://www.takasago.com/en/node/679 | Methyl Dihydrojasmonate, product D1431 — specifications and reference properties: https://www.tcichemicals.com/TW/en/p/D1431 | Methyl dihydrojasmonate — Safety Data Sheet, CAS 24851-98-7: https://www.chemicalbook.com/msds/methyl-dihydrojasmonate.htm
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.