

Chemical Safety Data Sheet MSDS / SDS

RATJADONE A

Revision Date:2026-05-31 Revision Number:1

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

Product identifier

Product name : RATJADONE A

CBnumber : CB6204462

CAS : 163564-92-9

Synonyms : ratjadone,2H-Pyran-2-one, 5,6-dihydro-6-[(1E,3Z,5R,7E,9E,11R)-11-hydroxy-3,5,7-trimethyl-11-[(2S,4R,5S,6S)-tetrahydro-4-hydroxy-5-methyl-6-(1E)-1-propen-1-yl]-2H-pyran-2-yl]-1,3,7,9-undecatetraen-1-yl]-, (6R)-

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

Company Identification

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 010-86108875

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Danger

Precautionary statements

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

P233 Keep container tightly closed.

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

Hazard statements

H225 Highly Flammable liquid and vapour

H370 Causes damage to organs

SECTION 3: Composition/information on ingredients

Substance

Product name	: RATJADONE A
Synonyms	: ratjadone, 2H-Pyran-2-one, 5,6-dihydro-6-[(1E,3Z,5R,7E,9E,11R)-11-hydroxy-3,5,7-trimethyl-11-[(2S,4R,5S,6S)-tetrahydro-4-hydroxy-5-methyl-6-(1E)-1-propen-1-yl]-2H-pyran-2-yl]-1,3,7,9-undecatetraen-1-yl]-, (6R)-
CAS	: 163564-92-9
MF	: C28H40O5
MW	: 456.61

SECTION 4: First aid measures

First Aid Measures

General advice

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Eye contact

Wash with plenty of water.

Skin Contact

Wash off immediately with plenty of water.

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

Ingestion

Never give anything by mouth to an unconscious person. Clean mouth with water.

Self-protection of the first aider

Remove all sources of ignition.

Most important symptoms and effects, both acute and delayed

Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

SECTION 5: Firefighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None.

Specific hazards arising from the chemical**Specific hazards arising from the chemical**

No information available.

Hazardous combustion products

Carbon oxides.

Explosion data**Sensitivity to Mechanical Impact**

No information available.

Sensitivity to Static Discharge

No information available.

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

As in any fire, wear self contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures**Personal precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

Environmental precautions**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up**Methods for containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

SECTION 7: Handling and storage

Precautions for safe handling**Advice on safe handling**

Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Store at -80 °C.

Incompatible materials

None known based on information supplied.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Guidelines

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Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methanol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m3 (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m3 (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m3 (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m3 STEL: 250 ppm STEL: 325 mg/m3

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls

Showers

Eyewash stations

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear protective gloves and protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure

supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Physical State	liquid
Appearance	No information available
Odor	Alcohol
pH	No information available
Melting point/freezing point	-98 °C
Boiling point	64 °C
Flash point	11 °C
Density	0.79 g/mL
Evaporation rate	No information available
Upper flammability limits	44%
Lower flammability limit	5.5%
Vapor pressure	12.8
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	5.90
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Solubility	aqueous buffer: $\leq 100\mu\text{M}$ methanol: 20mg/mL

SECTION 10: Stability and reactivity

Reactivity

Not applicable

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

No information available.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation

Classified based on available data. For more details, see section 2.

Eye contact

Classified based on available data. For more details, see section 2.

Skin Contact

Classified based on available data. For more details, see section 2.

Ingestion

Classified based on available data. For more details, see section 2.

Information on toxicological effects

Symptoms

Classified based on available data. For more details, see section 2.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity

Classified based on available data. For more details, see section 2.

Numerical measures of toxicity - Product Information

Unknown acute toxicity

99.999% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 12: Ecological information

Ecotoxicity

Chemical	Algae/aquatic	Fish	Toxicity to	Crustacea
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Name	plants		Microorganisms
Methanol 67-56-1		28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	

99.999% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Methanol

28200: 96 h Pimephales - -

Pimephales promelas mg/L

LC50 static 13500

17600: 96 h Lepomis macrochirus

Oncorhynchus mykiss mg/L

LC50 flow-through 99.999% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability No information available. **Bioaccumulation** No information available. **Mobility** No information available.

Methanol

-0.77 67-56-1

SECTION 13: Disposal considerations

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

US EPA Waste Number

U154

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Methanol 67-56-1	Toxic Ignitable

Methanol

SECTION 14: Transport information

DOT

UN/ID no

UN1992

Hazard Class

3

Subsidiary class

6.1

Packing Group

II

Proper shipping name

Flammable liquid, poisonous, n.o.s

Description

UN1992, Flammable liquid, poisonous, n.o.s (Methanol), 3 (6.1), II

Emergency Response Guide Number

131

IMDG

UN/ID no

UN1992

Hazard Class

3

Subsidiary hazard class

6.1

Packing Group

II

Proper shipping name

Flammable liquid, toxic, n.o.s.

Description

UN1992, Flammable liquid, toxic, n.o.s. (Methanol), 3 (6.1), II, (11°C c.c.)

Special Provisions

274

EmS-No

F-E, S-D

IATA

UN/ID no

UN1992

Hazard Class

3

Subsidiary hazard class

6.1

Packing Group

II

Proper shipping name

Flammable liquid, toxic, n.o.s.

Description

UN1992, Flammable liquid, toxic, n.o.s. (Methanol), 3 (6.1), II

SECTION 15: Regulatory information

International Inventories

All of the components in the product are on the following Inventory lists

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methanol	X	X	-	X	-	X	X	X	X	X

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories**Acute health hazard**

No

Chronic Health Hazard

No

Fire hazard

Yes

Sudden release of pressure hazard

No

Reactive hazard

No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

U.S. State Right-to-Know Regulations

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.