

Cayman Chemical Company
 1180 E. Ellsworth Rd.
 Ann Arbor, MI 48108



1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 9001203

Product Name: JWH 424

Synonyms: (8-bromonaphthalen-1-yl)(1-pentyl-1H-indol-3-yl)methanone;

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

2. Hazards Identification

GHS Classification	Placard	Key word	GHS Hazard
Flammable Liquids, Category 2	Flame	Danger	Highly flammable liquid and vapor
Acute Toxicity: Oral, Category 3	Skull and crossbones	Danger	Toxic if swallowed
Acute Toxicity: Skin, Category 3	Skull and crossbones	Danger	Toxic in contact with skin
Acute Toxicity: Inhalation, Category 3	Skull and crossbones	Danger	Toxic if inhaled
Target Organ Systemic Toxicity (single exposure), Category 1	Health hazard	Danger	Causes damage to organs {eyes}

GHS Hazard Phrases:

H225: Highly flammable liquid and vapor

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

H370: Causes damage to organs {eyes}

GHS Precaution Phrases:

P210: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.

P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.

P264: Wash hands thoroughly after handling.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

GHS Response Phrases:

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P363: Wash contaminated clothing before reuse.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.

P361: Remove/Take off immediately all contaminated clothing.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P307+311: IF exposed: Call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases:	Please refer to Section 7 for Storage and Section 13 for Disposal information.
Route(s) of Entry:	Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection
Potential Health Effects (Acute and Chronic):	Cannot be made nonpoisonous. Harmful vapors. Material may be irritating to the mucous membranes and upper respiratory tract. May be fatal or cause blindness if swallowed. May cause eye, skin, or respiratory system irritation. Toxic if swallowed, inhaled, or absorbed through the skin. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Target Organs:	Central nervous system, Eyes, Gastrointestinal System, Respiratory system, Skin.
LD 50 / LC 50:	Please refer to Section 11.
Signs and Symptoms Of Exposure:	Overexposure may cause: confusion, dermatitis, headache, drowsiness, dizziness, gastrointestinal disturbance, optic nerve damage (blindness), nausea, unconsciousness, vomiting, visual disturbance, weakness. May cause convulsions. Once methanol is absorbed into the body, it is very slowly eliminated. To the best of our knowledge, the toxicological properties have not been thoroughly investigated.
Medical Conditions Generally Aggravated By Exposure:	No data available.

3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	Risk Phrases	RTECS #
1. JWH 424	NA	1.0 %	NA	No phrases apply.	NA
2. Methanol	67-56-1	99.0 %	200-659-6	R11-23/24/25-39/23 /24/25	PC1400000

4. First Aid Measures

Emergency and First Aid Procedures:	
In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.
In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

5. Fire Fighting Measures

Suitable Extinguishing Media:	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
Unsuitable Extinguishing Media:	A solid water stream may be inefficient.
Flammable Properties and Hazards:	Can release vapors that form explosive mixtures at temperatures at or above the flashpoint. Container explosion may occur under fire conditions. Emits toxic fumes under fire conditions. Sensitive to static discharge. Vapors can travel to a source of ignition and flash back.
Hazardous Combustion Products:	No data available.

Flash Pt:	11.00 C Method Used: Closed Cup
Autoignition Pt:	385.00 C
Explosive Limits:	LEL: 6.0% at 25.0 C UEL: 36.0% at 25.0 C
Fire Fighting Instructions:	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes. Note: Flammable as diluted in methanol.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures:	Avoid breathing vapors and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
Steps To Be Taken In Case Material Is Released Or Spilled:	Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Handling:	Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure. Keep away from sources of ignition. Take precautionary measures against static discharge.
Precautions To Be Taken in Storing:	Keep away from heat, sparks, and flame. Keep container tightly closed. Store in accordance with information listed on the product insert.
Hazard Label Information:	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TWA	Other Limits
1. JWH 424	NA	No data.	No data.	No data.
2. Methanol	67-56-1	PEL: 200 ppm	TLV: 200 ppm STEL: 250 ppm	No data.
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe
1. JWH 424	NA	No data.	No data.	No data.
2. Methanol	67-56-1	TWA: 266 mg/m3 (200 ppm) STEL: 333 mg/m3 (250 ppm)	TWA: 260 mg/m3 (200 ppm) STEL: 1300 mg/m3 (1000 ppm)	TWA: 260 mg/m3

Protective Equipment Summary - Hazard Label Information:	Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood
Engineering Controls (Ventilation etc.):	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Eye Protection:	Safety glasses
Protective Gloves:	Compatible chemical-resistant gloves
Other Protective Clothing:	Lab coat
Respiratory Equipment (Specify Type):	NIOSH approved respirator, as conditions warrant.
Work/Hygienic/Maintenance Practices:	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. Wash thoroughly after handling.

9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid
Appearance and Odor:	Solution
Boiling Point:	No data.
Melting Point:	No data.
Autoignition Pt:	385.00 C
Flash Pt:	11.00 C Method Used: Closed Cup
Explosive Limits:	LEL: 6.0% at 25.0 C UEL: 36.0% at 25.0 C
Specific Gravity (Water = 1):	No data.
Vapor Pressure (vs. Air or mm Hg):	96 MM_HG at 20.0 C
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate:	No data.
Solubility in Water:	No data.
Other Information	
Percent Volatile:	No data.
Formula:	C ₂₄ H ₂₂ BrNO
Molecular Weight:	420.30

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Stability Note(s):	Stable if stored in accordance with information listed on the product insert.
Conditions To Avoid:	heat, flames and sparks
Polymerization:	Will occur [] Will not occur [X]
Incompatibility - Materials To Avoid:	acids acid anhydrides acid chlorides alkali metals oxidizing agents reducing agents
Hazardous Decomposition Or Byproducts:	carbon dioxide carbon monoxide

11. Toxicological Information

Toxicological Information:	The toxicological effects of this product have not been thoroughly studied.
	Methanol - Toxicity Data: Oral LD50 (rat): 5,600 mg/kg; Oral LD50 (rabbit): 14,200 mg/kg; Inhalation LC50 (rat): 64,000 ppm (4h); Inhalation LC50 (mouse): 61,100 ppm (134 m); Skin LD50 (rabbit): 15,800 mg/kg; Oral LDLO (human): 143 mg/kg;
	Methanol - Irritation Data: Skin (rabbit): 20 mg (24h) moderate; Eyes (rabbit): 40 mg moderate; Eyes (rabbit): 100 mg (24h) moderate;
Chronic Toxicological Effects:	Methanol - Investigated as a mutagen and reproductive effector. Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information. Methanol RTECS Number: PC1400000

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. JWH 424	NA	n.a.	n.a.	n.a.	n.a.
2. Methanol	67-56-1	n.a.	n.a.	n.a.	n.a.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information: Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

14. Transport Information

Globally Harmonized System of Classification and Labelling

Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor
 Acute Toxicity: Oral, Category 3 - Danger! Toxic if swallowed
 Acute Toxicity: Skin, Category 3 - Danger! Toxic in contact with skin
 Acute Toxicity: Inhalation, Category 3 - Danger! Toxic if inhaled
 Target Organ Systemic Toxicity (single exposure), Category 1 - Danger! Causes damage to eyes

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name: Methanol Solution
DOT Hazard Class: 3 (6.1)
DOT Hazard Label: FLAMMABLE LIQUID, POISON
UN/NA Number: 1230
Packing Group: II

LAND TRANSPORT (European ADR/RID)

ADR/RID Shipping Name: Methanol Solution
UN Number: 1230
Hazard Class: 3 (6.1) - FLAMMABLE LIQUID, POISON
Packing Group: II

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name: Methanol Solution
UN Number: 1230
Hazard Class: 3 (6.1) - FLAMMABLE LIQUID, POISON
Packing Group: II
IATA Classification: 3, 6.1

Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

European Community Hazard Symbol codes: F: Highly Flammable; T: Toxic

European Community Risk and Safety Phrases

R11 - Highly flammable.
 R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.
 R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
 S7 - Keep container tightly closed.
 S16 - Keep away from sources of ignition.
 S24/25 - Avoid contact with skin and eyes.
 S33 - Take precautionary measures against static discharges.



SAFETY DATA SHEET

JWH 424

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. JWH 424	NA	No	No	No	No
2. Methanol	67-56-1	No	Yes 5000 LB	Yes	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. JWH 424	NA	No	No	No	No
2. Methanol	67-56-1	HAP	No	Inventory	No

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Company Policy or Disclaimer

For research use only, not for human or veterinary use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required