



Coumarin

Revision date: 30.05.2017

Product code: 4F-191

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

1.1. Product identifier

Coumarin

CAS No: 91-64-5

EC No: 202-086-7

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

Use of the substance/mixture

Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Company name: Waldeck GmbH & Co KG

Division Chroma

Street: Havixbecker Str. 62

Place: D-48161 Münster

Post-office box: 410180

D-48065 Münster

Telephone: +49(0)180/2247662

Telefax: +49(0)180/1247662

Responsible Department: Labor

Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr

1.4. Emergency telephone number:

+49(0)180/2247662

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 3

Hazard Statements:

Toxic if swallowed.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Danger

Pictograms:



Hazard statements

H301 Toxic if swallowed.

Precautionary statements

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

P330 Rinse mouth.

P405 Store locked up.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances



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Sum formula: C₉H₆O₂
Molecular weight: 146,14 g/mol

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
91-64-5	Coumarin			100 %
	202-086-7			
	Acute Tox. 3; H301			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO₂), Foam, Extinguishing powder

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Hazardous combustion products

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures



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Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid generation of dust.
Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on storage compatibility

No special measures are necessary.

Further information on storage conditions

storage temperature: at room temperature

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is



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recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	colourless
Odour:	characteristic

Test method

pH-Value:	not determined
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Changes in the physical state

Melting point:	68-71 °C
Initial boiling point and boiling range:	298-302 °C
Flash point:	162 °C

Flammability

Solid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidizing.

Vapour pressure: (at 106 °C)	1,3 hPa
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Density:	0,935 g/cm ³
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Water solubility: (at 20 °C)	1,7 g/L
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Solubility in other solvents

not determined

Partition coefficient:	not determined
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Vapour density:	not determined
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Evaporation rate:	not determined
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9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.



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10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with: Oxidising agent, strong. Strong acid. Strong alkali.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
91-64-5	Coumarin				
	oral	LD50 mg/kg	293	Rat	(RTECS)

Additional information on tests

Special hazards arising from the substance or mixture. Classification according to Regulation (EC) No. 1272/2008 [CLP]: dangerous health properties.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
91-64-5	Coumarin					
	Acute crustacea toxicity	EC50 mg/l	30,6	48 h	Daphnia pulex (water flea)	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
91-64-5	Coumarin	1,39

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.



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Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

UN 2811

14.2. UN proper shipping name:

TOXIC SOLID, ORGANIC, N.O.S. (2H-1-BENZOPYRAN-2-ON)

14.3. Transport hazard class(es):

6.1

14.4. Packing group:

III

Hazard label:

6.1



Classification code:

T2

Special Provisions:

274 614

Limited quantity:

5 kg

Excepted quantity:

E1

Transport category:

2

Hazard No:

60

Tunnel restriction code:

E

Inland waterways transport (ADN)

14.1. UN number:

UN 2811

14.2. UN proper shipping name:

TOXIC SOLID, ORGANIC, N.O.S. (2H-1-BENZOPYRAN-2-ON)

14.3. Transport hazard class(es):

6.1

14.4. Packing group:

III

Hazard label:

6.1



Classification code:

T2

Special Provisions:

274 614 802

Limited quantity:

5 kg

Excepted quantity:

E1

Marine transport (IMDG)

14.1. UN number:

UN 2811

14.2. UN proper shipping name:

TOXIC SOLID, ORGANIC, N.O.S. (2H-1-BENZOPYRAN-2-ON)

14.3. Transport hazard class(es):

6.1

14.4. Packing group:

III

Hazard label:

6.1



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Special Provisions: 223, 274
Limited quantity: 5 kg
Excepted quantity: E1
EmS: F-A, S-A

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2811
14.2. UN proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (2H-1-BENZOPYRAN-2-ON)
14.3. Transport hazard class(es): 6.1
14.4. Packing group: III
Hazard label: 6.1



Special Provisions: A3 A5
Limited quantity Passenger: 10 kg
Passenger LQ: Y645
Excepted quantity: E1
IATA-packing instructions - Passenger: 670
IATA-max. quantity - Passenger: 100 kg
IATA-packing instructions - Cargo: 677
IATA-max. quantity - Cargo: 200 kg

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Information according to 2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information



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Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H301 Toxic if swallowed.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.