

# Material Safety Data Sheet

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Version 1.70

## Section 1 - Product and Company Information

**Product Name** COUMARIN 311 FLUORESCENCE STANDARD, 125 NM  
**Product Number** C2974  
**Brand** Sigma Chemical

**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052

**Emergency Phone:** 314-776-6555

## Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
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COUMARIN 311 FLUORESCENCE STANDARD	None	No		
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<u>Ingredient Name</u>	<u>CAS #</u>	<u>Percent</u>	<u>SARA 313</u>
COUMARIN 311	87-01-4	< 1.000 %	
ETHYL ALCOHOL, NON-DENATURED, 200 PROOF	64-17-5	>= 19.000 %	
WATER	7732-18-5	<= 20.000 %	
		>= 79.000 %	
		<= 80.000 %	

**Formula**  
**Synonyms**

## Section 3 - Hazards Identification

### Emergency Overview

Combustible (USA) Flammable (EU). Irritant.  
Irritating to eyes, respiratory system and skin.  
Target organ(s): Liver. Nerves.

### HMIS Rating

Health: 2\*                      Flammability: 2                      Reactivity: 0

### NFPA Rating

Health: 2                      Flammability: 2                      Reactivity: 0

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

### **Inhalation Exposure**

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

### **Dermal Exposure**

In case of contact, immediately wash skin with soap and copious amounts of water.

### **Eye Exposure**

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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## **Section 5 - Fire Fighting Measures**

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**Flash Point:** 104 °F 40 °C

**Autoignition Temp:** N/A

### **Extinguishing Media**

#### **Suitable**

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### **Firefighting**

#### **Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### **Specific Hazard(s)**

Combustible liquid. Emits toxic fumes under fire conditions.

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## **Section 6 - Accidental Release Measures**

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### **Procedure to be Followed in Case of Leak or Spill**

Evacuate area.

### **Procedure(s) of Personal Precaution(s)**

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

### **Methods for Cleaning Up**

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

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## **Section 7 - Handling and Storage**

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### **Handling**

#### **User Exposure**

Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### **Storage**

#### **Suitable**

Keep tightly closed. Keep away from heat and open flame. Store at 2-8°C

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## **Section 8 - Exposure Controls / PPE**

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### **Engineering Controls**

Use only in a chemical fume hood. Safety shower and eye bath.

### **Personal Protective Equipment**

#### **Respiratory**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**Skin-Specific**

Chemical resistant apron.

**General Hygiene Measures**

Wash thoroughly after handling.

**Exposure Limits**

<u>Country</u>	<u>Type</u>	<u>Value</u>
Poland	NDS	1900 MG/M3
<u>Remarks:</u> ETHANOL Poland	NDSCh	-
<u>Remarks:</u> ETHANOL Poland	NDSP	-
<u>Remarks:</u> ETHANOL		

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**Section 9 - Physical/Chemical Properties**

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Appearance	Color	Form
Physical State	White	Faintly turbid
Liquid		

**Molecular Weight:** N/A

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Freezing Point N/A

Vapor Pressure N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

SG/Density 0.989 g/cm3

Bulk Density N/A

Odor Threshold N/A

Volatile% N/A

VOC Content N/A

Water Content N/A

Solvent Content N/A

Evaporation Rate N/A

Viscosity N/A

Partition Coefficient N/A

Decomposition Temp. N/A

Flash Point °F 104 °F

Flash Point °C 40 °C

**Explosion Limits** N/A**Flammability** N/A**Autoignition Temp** N/A

Solubility N/A

N/A = not available

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## Section 10 - Stability and Reactivity

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### Stability

Stable

Stable.

### Conditions to Avoid

Moisture.

### Materials to Avoid

Oxidizing agents, Peroxides, Acids, Acid chlorides, Acid anhydrides, Alkali metals, Ammonia.

### Hazardous Decomposition Products

#### Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide.

### Hazardous Polymerization

#### Hazardous Polymerization

Will not occur.

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## Section 11 - Toxicological Information

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### Route of Exposure

#### Skin Contact

May cause skin irritation.

#### Skin Absorption

May be harmful if absorbed through the skin.

#### Eye Contact

May cause eye irritation.

#### Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

#### Ingestion

May be harmful if swallowed.

### Target Organ(s) or System(s)

Nerves. Liver.

### Signs and Symptoms of Exposure

Can cause CNS depression. Exposure can cause: Nausea, headache, and vomiting. Narcotic effect. Damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: N/A

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## Section 12 - Ecological Information

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No data available.

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## Section 13 - Disposal Considerations

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### Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.

Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: Flammable liquids, n.o.s.

UN#: 1993

**Class:** 3  
**Packing Group:** Packing Group III  
**Hazard Label:** Flammable liquid  
**PIH:** Not PIH

**IATA**

**Proper Shipping Name:** Flammable liquid, n.o.s.  
**IATA UN Number:** 1993  
**Hazard Class:** 3  
**Packing Group:** III

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**Section 15 - Regulatory Information**

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**EU Additional Classification**

**Risk Statements** R: 10

Flammable.

**Safety Statements** S: 7 16

Keep container tightly closed. Keep away from sources of ignition - no smoking.

**US Classification and Label Text**

**Indication of Danger**

Combustible (USA) Flammable (EU). Irritant.

**Risk Statements**

Irritating to eyes, respiratory system and skin.

**Safety Statements**

Keep container tightly closed. Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**US Statements**

Target organ(s): Liver. Nerves.

**United States Regulatory Information**

**SARA Listed:** No

**Canada Regulatory Information**

**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** Yes

**NDSL:** No

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**Section 16 - Other Information**

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**Disclaimer**

For R&D use only. Not for drug, household or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2006 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.