

## \*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

4-HYDROXYCOUMARIN, 98%

## \*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: 4-HYDROXYCOUMARIN, 98%

Catalog Numbers:

12110-0000, 12110-0050, 12110-1000, 12110-5000

Synonyms:

Company Identification (Europe): Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

Company Identification (USA): Acros Organics  
 One Reagent Lane  
 Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For information in Europe, call: 0032(0) 14575211

For emergencies in the US, call CHEMTREC: 800-424-9300

For emergencies in Europe, call: 0032(0) 14575299

## \*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS#	Chemical Name	%	EINECS#	Haz Symbols	Risk Phrases
1076-38-6	4-HYDROXYCOUMARIN, 98%	98%	214-060-2		

Hazard Symbols: None Listed.

Risk Phrases: None Listed.

## \*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

## EMERGENCY OVERVIEW

Not available.

## Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation.

Chronic:

Not available.

## \*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:

Flush eyes with plenty of water for at least 15 minutes,  
 occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15  
 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not  
 breathing, give artificial respiration. If breathing is difficult,  
 give oxygen. Get medical aid.

Notes to Physician:

## \*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\*

## General Information:

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

## Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

## \*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

General Information: Use proper personal protective equipment as indicated in Section 8.

## Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

## \*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

## Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

## Storage:

Store in a cool, dry place. Store in a tightly closed container. Poison room locked.

## \*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

## Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

## Personal Protective Equipment

## Eyes:

Wear safety glasses and chemical goggles if splashing is possible.

## Skin:

Wear appropriate protective gloves to prevent skin exposure.

## Clothing:

Wear appropriate protective clothing to prevent skin exposure.

## Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## \*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State:	Chunks
Color:	yellow
Odor:	odorless
pH:	Not available.
Vapor Pressure:	Not available.
Viscosity:	Not available.
Boiling Point:	Not available.
Freezing/Melting Point:	210-215 deg C
Autoignition Temperature:	Not available.
Flash Point:	Not available.
Explosion Limits, lower:	Not available.
Explosion Limits, upper:	Not available.
Decomposition Temperature:	
Solubility in water:	practically insoluble
Specific Gravity/Density:	
Molecular Formula:	C9H6O3
Molecular Weight:	162.14

## \*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

## Chemical Stability:

Not available.

## Conditions to Avoid:

Incompatible materials.

## Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases.

## Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

## \*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

## RTECS#:

CAS# 1076-38-6: DJ3100000

## LD50/LC50:

CAS# 1076-38-6: Oral, mouse: LD50 = 2 gm/kg.

## Carcinogenicity:

4-HYDROXYCOUMARIN, 98% -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

## \*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

## \*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Dispose of in a manner consistent with federal, state, and local regulations.

## \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

## IATA

No information available.

## IMO

No information available.

## RID/ADR

No information available.

## \*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

## European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

## WGK (Water Danger/Protection)

CAS# 1076-38-6: No information available.

## United Kingdom Occupational Exposure Limits

## United Kingdom Maximum Exposure Limits

## Canada

CAS# 1076-38-6 is listed on Canada's NDSL List.

CAS# 1076-38-6 is not listed on Canada's Ingredient Disclosure List.

## Exposure Limits

## US FEDERAL

## TSCA

CAS# 1076-38-6 is listed on the TSCA inventory.

## \*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 9/25/1996 Revision #0 Date: Original.

The information above 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. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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