

## Material Safety Data Sheet

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Version 1.2  
According to 91/155/EEC

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1 - Product and Company Information

Product Name	HYDROXYPROPYL METHYL CELLULOSE (VISC. 2% AQ. SOLN. = 4,000CPS)
Product Number	423203
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
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## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
(HYDROXYPROPYL)METHYL CELLULOSE	9004-65-3	None	None
Synonyms	Goniosol * Hpmcd * Isopto alkaline * Isopto plain * Isopto tears * Methocel E,F,K * Methocel HG		

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## 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Not hazardous according to Directive 67/548/EEC.

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## 4 - First Aid Measures

## AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## AFTER SKIN CONTACT

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

## AFTER EYE CONTACT

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.

## AFTER INGESTION

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

## 5 - Fire Fighting Measures

## EXPLOSION DATA

**Dust Potential:** This material, like most materials in powder form, is capable of creating a dust explosion.

#### CONDITIONS OF FLAMMABILITY

Static charges generated by emptying package in or near flammable vapors may cause flash fire.

#### EXTINGUISHING MEDIA

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

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

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

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### 6 - Accidental Release Measures

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#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

#### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

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#### HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed. Store under argon. Incompatible Materials: Moisture.

SPECIAL REQUIREMENTS: Store under inert gas. Hygroscopic.

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### 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Wear dust mask.  
Hand Protection: Protective gloves.  
Eye Protection: Chemical safety goggles.

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### 9 - Physical and Chemical Properties

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#### Appearance

Physical State: Solid  
Color: Faintly beige  
Form: Powder

#### Property

#### Value

At Temperature or Pressure

pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	15 Pas	2% in H <sub>2</sub> O, 25°C
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions of Instability: Moisture sensitive.

Materials to Avoid: Cellulose and its derivatives may react vigorously with calcium oxide, bleaching powder, perchlorates, perchloric acid, sodium chlorate, fluorine, nitric acid, sodium nitrite, and sodium nitrate, Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: NF9125000

### ACUTE TOXICITY

LD50 LD50

Intraperitoneal Intraperitoneal

Rat Rat

5200 MG/KG 5200 MG/KG

LD50 LD50

Intraperitoneal Intraperitoneal

Mouse Mouse

5 GM/KG 5 GM/KG

LD50

Oral

Mammal

> 10000 mg/kg

LD50  
Intraperitoneal  
Mammal  
>2 GM/KG

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

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#### 12 - Ecological Information

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No data available.

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#### 13 - Disposal Considerations

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##### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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#### 14 - Transport Information

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##### RID/ADR

Non-hazardous for road transport.

##### IMDG

Non-hazardous for sea transport.

##### IATA

Non-hazardous for air transport.

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#### 15 - Regulatory Information

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Not hazardous according to Directive 67/548/EEC.

#### COUNTRY SPECIFIC INFORMATION

Germany  
WGK: 1

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#### 16 - Other Information

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##### 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

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