



## Material Safety Data Sheet

**Product Name:** Agarose (All Types and Grades)

**Product Cat#s:** 20-100, 20-101, 20-102, 20-103, 20-104, 20-105, 20-106, 20-107, 20-238, 20-239, 20-240

### Product Information

**Chemical Description** Agarose is a neutral polysaccharide with very high gellifying power. Structurally, it is a linear polymer of high molecular weight (above 120,000 Daltons) formed by repetitive units of 1,4 linked 3,6 anhydro-L-galactose and 1,3 linked D-Galactose.

**Chemical Family** Polysaccharides.

**Product Uses** Diffusion, Immunodiffusion, electrophoresis, immunoelectrophoresis, agarose beads preparation, cell culture, cell and enzyme immobilization

**Applications** For laboratory use only. Not for drug, household or other uses.

### Precautionary Information

**Hazard Classification** Not hazardous by OSHA definition or WHMIS.

### Ingredients

**Chemical Abstracts  
Service Registry** 9012-36-6

### Physical Data

**Melting Point** Not applicable.  
**Boiling Point** Not applicable.  
**Vapor Pressure** Not applicable.  
**Vapor Density** Not applicable.  
**Room Temperature**  
**Appearance** Dry powder.  
**Odor** Slight marine odor.  
**Specific Gravity** Approximately 0.5gr/cm<sup>3</sup>  
**Solubility in Water** Not soluble in cold water.  
**% Volatiles by Volume** Not applicable.  
**Evaporation Rate** Not applicable.  
**pH, as is** Not applicable  
**pH, 1% Solution** 5.5-8.0  
**Odor Threshold** Not applicable.  
**Density** Not applicable.  
**Coeff. Water/Oil Distr.** Not applicable.

### Fire Explosion and Reactivity Data

Flashpoint	Not applicable.
Autoignition Temperature	Not available.
Flamable Limits	
Upper/Lower	Not applicable.
Extinguishing Media	Water, CO <sub>2</sub> , etc.
Firefighting Procedures	For fires involving material, do not enter any enclosed or confined fire space without proper protective equipment, such as self-contained breathing apparatus.
Hazard	No hazard compounds released upon burning.
Stability	Non-reactive.
Hazardous Polymerization	None
Conditions to avoid	None.
Contaminants that Contribute to Instability	None.
Hazardous Decomposition Products	None.
Sensitivity to Mech. Impact	Not applicable.
Sensitivity to static Discharge	Not applicable.

### Routes of Exposure

Inhalation	Not hazardous even in high exposures.
Skin Contact	Not hazardous even in high exposures.
Skin Absorption	Not hazardous even in high exposures.
Eye Contact	Not hazardous but may cause irritation in high exposures.
Ingestion	Not hazardous even in high exposures.

### Exposure Limits

None known.

### Acute Exposure

May cause small irritation in eyes.

### Chronic Exposure

Negative effects considered included:

Sensitivities, carcinogenicities, teratogenicities, mutagenicity, synergensitic products, and any medical conditions generally recognized as being aggravated by exposure.

Excessive concentration of dust in the workroom may seriously reduce visibility and may cause unpleasant deposits in the eyes, ears and nasal passages.

### Emergency and First Aid Procedures

Eyes	Flush with water for at least 15 minutes. If irritation occurs and persists, see a physician.
Skin	Flush with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention.
Inhalation	Remove to fresh air. If discomfort occurs, obtain medical attention.
Ingestion	If abdominal discomfort occurs, obtain medical attention.
Decontamination	Wash with water.
Note to Physician	This product has very low toxicity.

### **Special Product Information**

Ventilation Requirements Use only in systems, processes and procedures in which effective ventilation has been provided.

### **Recommended Personal Protection Equipment**

Respiratory	No significant hazard. In excessive concentration of dust, wear respiratory protection.
Eyes	Appropriate eye protection, such as chemical-type goggles should be worn to prevent eye contact.
Gloves	Not required.
Clothing or Equipment	No special clothing or equipment is required.
Footwear	Not applicable.

### **Storage and Handling**

Store in dry area at room temperature (18-26°C) for product quality assurance.

### **Leak Procedures**

Procedure for release	Maintain good housekeeping practices to minimize accumulation of settled dust. Sweep up the spilled material and dispose of in accordance the “waste disposal method” given below.
Waste Disposal Method	No special methods are suggested. It is the user’s responsibility to comply with all applicable local, state and federal laws, rule, regulation and standards.

### **Transportation Data**

Not listed as hazardous material.