



Guaranteed Specifications for Resorcinol

(analyzed by Mitsui Petrochemical method)

Item	Specifications
Appearance	White, light-yellowish or light-pink flakes
Purity (%)	Above 99.5
Moisture (%)	0.2 or less
Nonvolatile Matter (%)	0.2 or less

Packaging

This compound is packaged in 25-kg four-ply moisture-proof kraft outer bags and one-ply polyethylene inner bags.

Note: Store in a cool, dark place.

PRECAUTIONS IN HANDLING RESORCINOL

1. Industrial hygienic care

1) Acute Toxicity

a. LD₅₀ (lethal dose 50%)

Oral Administration to Rat:	980 mg per kg ^{*1)}
	301 mg per kg ^{*2)}

b. Effects on the human body^{*3)}

Resorcinol affects the skin, mucous membranes and central nervous system. It is less toxic than isomers such as hydroquinone and pyrocatechol.

Also, resorcinol has stronger bactericidal power, while being far less toxic, than phenol and similar chemicals, making it suitable for use as a germicide for external application. It is reported that when an adult inadvertently swallowed 8 g of resorcinol, he immediately developed symptoms of hypothermia, reduction in blood pressure, and slowing respiration rate. Direct absorption of this compound through the human skin is almost negligible, but care should be exercised to prevent the vapor or fine powder coming into contact with the eyes and the skin, and to avoid inhalation.

*References

- 1) American Industrial Hygiene Association Journal **37**, 596 (1976)
- 2) BIO FAX Industrial Bio-Test Laboratories Inc., data sheets
- 3) Industrial Hygiene and Toxicology, 2nd Revised Edition Vol. II, F. A. Patty, Interscience Publishers

2) Allowable concentrations

The following concentrations of resorcinol are weighted averages recommended in 1979 by the American Conference of Governmental Industrial Hygienists: 45 mg/m³ air over long periods (8 hours/day or 40 hours/week) and 90mg/m³ air for short exposures (15 min). The allowable concentration is a concentration which is considered to have no appreciable effect on the average worker, under ordinary working conditions. Utmost care should, however,

be given to control of the working environment, since the effect of chemical substances differs from person to person and also varies with working conditions.

3) Protective devices

a. Mask and safety goggles

It is recommended that protection against resorcinol dust be provided through provision of proper equipment. A dust mask and safety goggles should be worn for temporary work.

b. Protective gloves

4) First aid

a. Inhalation

Have the affected person recline face up in fresh air. If his symptoms do not abate immediately, have him examined by a physician.

b. Eye contact

Wash the eyes with running water for approx. 15 min., then see an oculist for treatment.

c. Skin contact

Immediately wash the areas affected with copious amounts of warm water and soap.

2. Precautions against fire

Flash point: 127°C (measured by an airtight flash point measuring apparatus)

Ignition point: 607°C

The flash point of resorcinol is 127°C. If heated near an open flame, it can cause fires. Use in proximity to open flames and electric sparks should be avoided.

Procedure to extinguish resorcinol fire:

Use water, CO₂, dry chemical, or carbon tetrachloride extinguisher.