An Important Raw Material for Multiple Chemical Applications

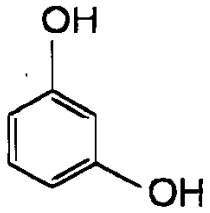
Sumitomo Chemical is a leading producer of resorcinol worldwide. Hydroperoxidation Process, developed by Sumitomo, is applied to its production. With the growing public awareness of global environmental quality, this process is attracting renewed attention as a chemical process which is desired from an environmental standpoint.

Resorcinol formaldehyde resin, a reaction product of resorcinol and formaldehyde is finding a wide-spread use as key raw materials for dipping adhesives for tire cords and compounding bonding agent for tire carcass rubber.

Resorcinol is also used for wood adhesives for laminated beams and waterproof plywood. Other important applications of resorcinol include ultraviolet rays absorbers for plastics, color-formers, agrochemicals and pharmaceuticals.

Sumitomo Chemical manufactures and markets not only resorcinol but also its variety of derivatives, such as bonding agents, ultraviolet rays absorbers and intermediates for various fields.

Structural Formula;



Synonym:	Resorcin Meta-Dihydroxybenzene 1,3-Dihydroxybenzene
Emplrical Formula:	$C_6H_6O_2$
Molecular Weight:	110.11

QUALITY SPECIFICATIONS

Appearance:	White or Pale Yellow Flakes
Purity: (G.C. method)	99.5 (% Minimum)
Melting Point:	Beginning Stage 108 (°C Minimum) Range within 4°C
Light Transmission: at 470nm	85 (% Minimum)

Sumitomo Chemical
Specialty Intermediates

RESORCINOL

OTHER PROPERTIES

Color Molten: (N.P.A Standards)	2.0 (Maximum)
Other Aromatics:	0.5 (% Maximum)
Ash:	0.005 (% Maximum)
Water Insolubles:	0.005 (% Maximum)
Moisture:	0.2 (% Maximum)
Water Solubility:	Soluble
Boiling Point:	281°C/760 mmHg
Flash Point: (Seta closed cup)	164°C

HEALTH HAZARD DATA

1. Threshold Limit Value

In 1980, the American Conference of Governmental Industrial Hygienists (ACGIH) set the TLV for resorcinol at 10 ppm (45mg/m³).

2. Acute Toxicity

LD_{50}	Oral-rat	301 mg/kg
LD_{50}	Oral-mouse	200 mg/kg
LD_{50}	Dermal-guinea pig	3360 mg/kg

NIOSH; "Registry of Toxic effects of Chemical Substances" (1993)

3. Irritation

Eye-rabbit	strong
Skin-rabbit	moderate

NIOSH; "Registry of Toxic effects of Chemical Substances" (1993)

PACKING

- 25 kgs net in a multiply paper bag with polypropylene woven bag and inner polyethylene bag.
- 500 kgs net in a polyethylene big bag.

PRECAUTIONS IN HANDLING RESORCINOL

HANDLING AND STORAGE CAUTIONS

RESORCINOL is hygroscopic by its nature. By absorbing moisture, it tends to cake and get discolored to brown, and its freezing point is lowered. Therefore, it should be stored sealed in a cool, dry and dark place.

When exposed to sunlight and chemical vapors, or contacted with metals such as iron or copper (other than aluminum or stainless steel), RESORCINOL may be discolored. A suitable container is necessary to keep it in.

RESORCINOL being one of phenols, take due caution against dusting; use protective mask, rubber gloves, goggles, etc.

EMERGENCY CAUTIONS

1. Leakage

Sweep up and remove.

2. Fire

Extinguish with water, carbon dioxide and chemical-foam fire extinguisher.

3. Skin Contact

Wash immediately with soap and plenty of water.

4. Eye Contact

Rinse immediately with plenty of water and seek medical advice.

5. Inhalation

Move to a place allowing fresh air and seek medical advice immediately.

6. Swallow

Give plenty of water or milk to induce vomiting and seek medical advice immediately.

PROTECTIVE EQUIPMENT

- Hard hat
- Safety goggles
- Dust proof mask
- Rubber gloves
- Rubber boots