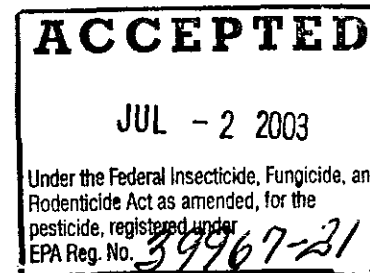


Preventol CMK-Na Preservative

FOR USE IN THE MANUFACTURE OF ADHESIVES AND GLUES, POLYMER DISPERSIONS AND EMULSIONS, LEATHER, LUBRICOLANTS AND MINERAL OIL BASED PRODUCTS, MATERIALS IN THE PRINTING INDUSTRY, MATERIALS IN THE BUILDING INDUSTRY (E.G. CONCRETE ADDITIVES, JOINT CEMENTS), PAINT AND COATINGS, MATERIALS IN THE OIL INDUSTRY, PIGMENT SLURRIES (KAOLIN-, CALCIUM CARBONATE-, AND OTHERS), POLISHES, WAXES, PROTEIN SOLUTIONS, CERAMIC GLAZES, FIRE EXTINGUISHING MATERIALS, CLEANING SOLUTIONS AND DETERGENTS.

ACTIVE INGREDIENTS:
Sodium p-chloro-m-cresolate -----71.0%
INERT INGREDIENTS -----29.0%

**KEEP OUT OF REACH OF CHILDREN
DANGER!**



39967-21
7-2-2003

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER ! CORROSIVE: Causes irreversible eye damage and skin burns. Do not get on skin in eyes or clothing. Harmful if swallowed or absorbed through skin. Wear goggles or face shield, protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid breathing dust, vapor or spray mist.

First Aid
If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a Poison Control Center or doctor for treatment advice.
If swallowed: Call a Poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told by a Poison Control Center or doctor.
If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice.
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate gastric lavage.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Detailed information on physical and chemical properties and other detailed directions for use can be found in the Preventol CMK-NA Preservative Technical Information Sheet. Obtain and read this information before undertaking the use of Preventol CMK-NA Preservative in order to avoid process mistakes.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal. Protect products from exposure to light and moisture.
Pesticide disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Region Office for guidance.

Container disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds, and dispose of as directed above.

DISCLAIMER

Seller (whether manufacturer, distributor, or other) makes no warranty express or implied, including the implied warranty of merchantability, regarding this product except the composition as set forth in the ingredient statement herein, and shall not be liable for special or consequential damages, the exclusive remedy being the replacement of the product. Buyer or user assumes all risk of possession, handling or use of this material when such use and/or handling is contrary to label instructions.

In case of emergency call: CHEMTREC: 1-800-424-9300 INTERNATIONAL 703-527-3887

Bayer Corporation Emergency Response Telephone#: 412-923-1800

Have the product container or label with you when calling a Poison Control Center or doctor when going in for treatment.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Bayer Corporation
Industrial Chemicals Division
100 Bayer Road

EPA Reg. No: 39967-21
EPA Est. No.: 39967-SC-003
39967-DEU-01

Preventol is a registered trademark of Bayer AG, Germany

117

2/7

Reason for Issue: To register a sodium salt versionPCMC
. For end use
Date of Draft: May 21, 2003

EPA Registration No: 39967-22

Product Information

Preventol CMK-Na Preservative

FOR USE AS A PRESERVATIVE IN THE MANUFACTURE OF ADHESIVES AND GLUES, POLYMER DISPERSIONS AND EMULSIONS, LEATHER, LUBRICOLANTS AND MINERAL OIL BASED PRODUCTS, MATERIALS IN THE PRINTING INDUSTRY, MATERIALS IN THE BUILDING INDUSTRY (E.G. CONCRETE ADDITIVES, JOINT CEMENTS), PAINT AND COATINGS, MATERIALS IN THE OIL INDUSTRY, PIGMENT SLURRIES (KAOLIN-, CALCIUM CARBONATE- AND OTHERS), POLISHES, WAXES, PROTEIN SOLUTIONS, CERAMIC GLAZES, FIRE EXTINGUISHING MATERIALS, CLEANING SOLUTIONS AND DETERGENTS.

Bayer Product Code/Technical Information Sheet
EPA Registration Number 39967-22
CAS Number [15733-22-9]

Chemical and Physical Data

Common Name:	Parachlorometacresol, sodium salt	
Chemical Name:	4-chloro-3-methylphenol	
Minimum Purity:	71%	
Density (20°C):	1.36 g/cm ³	
Vapor Pressure (60°C):	approx. 1.6 x 10 ⁻⁴ hPa (at 21°C)	
Melting Point:	approx. 94°C	
Flash Point:	> 185°C	
Ignition Temperature:	approx. 468°C	
Solubility of Active	water	580 g/l (20°C)
	water	700 g/l (50°C)
	ethanol	approx. 2000 g/l
	acetonitrile	approx. 2400 g/l
	ethyl acetate	approx. 10 g/l.9%
	toluene	<0.5 g/l

Storage

If correctly stored and kept in original sealed container, the shelf life of Preventol CMK-Na Preservative is 1 year.

3/7

Directions for use

ADHESIVES AND GLUES

The weight of Preventol CMK-Na Preservative be used is based on the total weight of the adhesive formulation. Preventol CMK-Na Preservative can be metered directly into the products to be preserved following the concentrations as indicated above. To achieve fast and homogeneous distribution throughout the entire product, stirring is recommended. In the production of dry glues, Preventol CMK-Na Preservative should be added toward the end of thickening in order to minimize any losses of active substance.

EFFECTIVE CONCENTRATION

Bone glues	0.15 – 0.30 %
Skin glues	0.25 - 0.50 %
Casein containing glues	0.30 – 0.60 %
Other animal glues	0.15 – 0.60 %
Starch based glues (liquid)	0.15 – 0.40 %
Starch based glues (solid)	0.40 – 2.00 %
Methyl Cellulose adhesives	0.25 – 0.40 %
Other plant based adhesives	0.15 – 0.40 %
Polyvinyl alcohol adhesives	0.15 – 0.40 %
Acrylic adhesives	0.15 – 0.40 %
Styrene butadiene adhesives	0.15 – 0.40 %
Other adhesive emulsions	0.15 – 0.40 %
Gumarabic and similar adhesives	0.20 – 0.35 %

POLYMER DISPERSIONS AND EMULSIONS

Preventol CMK-Na Preservative should be added immediately after the preparation of the polymer dispersion or emulsion during the cooling process. Losses of active ingredient caused by elevated temperatures should be taken into account and avoided by suitable measures. Good stirring is recommended to ensure fast and even distribution of the preservative throughout the products.

EFFECTIVE CONCENTRATION

Acrylic	0.15 – 0.40 %
Polyvinylacetate (PVAc)	0.15 – 0.40 %
Styrene Butadiene (SBR Latex)	0.15 – 0.40 %
Other polymer emulsions	0.15 - 0.40 %

4/7

LEATHER

The weight of Preventol CMK-Na Preservative to be used is based on total weight of the product to be protected. Preventol CMK-Na Preservative can be metered directly into the products to be preserved following the concentrations as indicated above. Good stirring is recommended to ensure fast and even distribution of the preservative throughout the products.

In the case of chrome leather, an effective protection against mold attack may be obtained by incorporation of Preventol CMK-Na Preservative into the basifying solution

EFFECTIVE CONCENTRATION

Pickle solutions and pickled hides	0.25 – 0.40 %
Chrome leather (on pelt weight)	0.15 – 0.35 %
Leather pasting adhesives	0.10 – 0.20 %
Leather pigment finishes	0.30 – 0.65 %

METAL WORKING FLUIDS

Preventol CMK-Na Preservative can be incorporated into the original concentrate of metalworking fluids (the compatibility with the fluid to be preserved should be evaluated before this method is attempted). Preventol CMK-Na Preservative is equally suitable for tank side addition.

To achieve fast distribution within the ready-to-use dilution of the metalworking fluid, the preservative should be dosed at a point in the system where good circulation is given. Pre-dissolution in water may be favorable.

EFFECTIVE CONCENTRATION

Metal working fluids-Mineral oil based

Metalworking fluids (concentrates)	2.00 – 5.00 %
Metalworking fluids (ready for use)	0.20 – 0.50 %

Metalworking fluids-Non-Mineral Oil Based

Metalworking fluids (concentrates)	2.00 – 5.00 %
Metalworking fluids (ready for use)	0.20 – 0.50 %

MATERIALS IN THE PRINTING INDUSTRY

The weight of Preventol CMK-Na Preservative to be used is based on total weight of the product to be protected. Preventol CMK-Na Preservative can be metered directly into the products to be preserved following the concentrations as indicated above. Good stirring is recommended to ensure fast and even distribution of the preservative throughout the products.

5/7

EFFECTIVE CONCENTRATION

Inks	0.10 - 0.35 %
Fount solutions	0.10 - 0.35 %
Printing pastes	0.30 - 0.50 %
Other printing materials and auxiliaries	0.10 - 0.50 %

MATERIALS IN THE BUILDING INDUSTRY

The weight of Preventol CMK-Na Preservative to be used is based on the total weight of the product to be preserved. The preservative is best incorporated into the materials just following the initial addition of water or other liquid components sufficient to dissolve the preservative. If incorporation happens at later production stages, stirring is recommended to ensure homogeneous distribution of the preservative throughout the product.

EFFECTIVE CONCENTRATION

Joint cements materials	0.15 - 0.40 %
Bitumen emulsions	0.25 - 0.65 %
Concrete additives	0.35 - 0.65 %
Other materials and auxiliaries	0.20 - 0.65 %

MATERIALS IN THE COATINGS INDUSTRY

The weight of Preventol CMK-Na Preservative to be used is based on the total weight of the coating material. The preservative is best incorporated into the products just following the initial addition of water or other liquid components sufficient to dissolve the preservative. If incorporation happens at later production stages, stirring is recommended to ensure homogeneous distribution of the preservative throughout the product.

EFFECTIVE CONCENTRATION

Dyestuff paste, knifing fillers and plastic putty	0.15 - 0.30 %
Casein based coatings	0.35 - 0.65 %
Synthetic resin dispersions	0.15 - 0.40 %
Other auxiliaries and coating materials	0.15 - 0.65 %

MATERIALS IN THE PAPER INDUSTRY

Preventol CMK Na can be metered directly into the products to be preserved following the concentrations as indicated above. If necessary, pre-dissolution in water is easily possible due to good water solubility of

6/7

the preservative. Good stirring is recommended to ensure fast and even distribution of the preservative throughout the entire product.

EFFECTIVE CONCENTRATION

Filler suspensions and coating compounds	0.10 - 0.35 %
Rosin paper sizes	0.20 - 0.40 %
Starch slurries	0.20 - 0.50 %
Other materials and auxiliaries	0.10 - 0.50 %

MATERIALS IN THE TEXTILE INDUSTRY

Preventol CMK Na can be metered directly into the products to be preserved following the concentrations as indicated above. If necessary, pre-dissolution in water is easily possible due to good water solubility of the preservative. Good stirring is recommended to ensure fast and even distribution of the preservative throughout the entire product.

In the production of dry printing thickeners, Preventol CMK-Na Preservative should be added toward the end of thickening to minimize any losses of active substance.

EFFECTIVE CONCENTRATION

Printing thickeners (liquid)	0.20 - 0.30 %
Printing thickeners (solid)	1.00 - 4.00 %
Sizes and finishing agents	0.20 - 0.40 %
Yarn humidifiers	0.15 - 0.35 %
Other materials and auxiliaries	0.15 - 0.40 %

MATERIALS IN THE OIL INDUSTRY

The weight of Preventol CMK-Na Preservative to be used is based on the total weight of the product to be preserved. To ensure fast and even distribution of the preservative throughout the product, stirring is recommended. In the production of dry products, Preventol CMK-Na Preservative should be added toward the end of thickening to minimize any losses of active substance.

EFFECTIVE CONCENTRATION

Biopolymers, solid (starch, xanthan, galactomannan etc.)	1.00 - 4.00 %
Biopolymers, liquid (drilling muds)	0.15 - 0.40 %
Other materials and auxiliaries	0.15 - 0.40 %

7/7

PIGMENTS LURRIES

The weight of Preventol CMK-Na Preservative to be used is based on the total weight of the product to be preserved. The preservative is best incorporated into the materials just following the initial addition of water or other liquid components sufficient to disperse the preservative. If incorporation happens at later product stages, stirring is recommended to ensure homogeneous distribution of the preservative throughout the product.

EFFECTIVE CONCENTRATION

(Kaolin-, Calciumcarbonate-Talcum-, Ironoxide etc.)	
Kaolinslurry	0.025 – 0.125 %
Calciumcarbonateslurry	0.020 – 0.10 %
Talcumslurry	0.025 – 0.125 %
Ironoxideslurry	0.020 – 0.125 %

ADDITIONAL MATERIALS

The concentration of Preventol CMK-Na Preservative as indicated is based on the total weight of the products to be preserved. For satisfactory results, the preservative must be distributed evenly throughout the product.

EFFECTIVE CONCENTRATION

Polishing and wax materials	0.20 – 0.60 %
Protein solutions	0.30 – 0.50 %
Ceramic glazes	0.20 – 0.30 %
Fire extinguishing materials	0.20 – 0.50 %
Cleaning solutions, detergents	0.15 – 0.30 %

Bayer Corporation
Industrial Chemicals Division
100 Bayer Road
Pittsburgh, PA 15205-9741

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety and environmental standpoint. Such testing has not necessarily been done by Bayer Corporation. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases Bayer from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind Bayer. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.