



SUBSIDIARY OF MERCK & CO., INC.

TEKTAMER®

TO INHIBIT THE GROWTH OF MICROORGANISMS IN AQUE

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER! CORROSIVE
CAUSES EYE DAMAGE AND SKIN IRRITATION.
HARMFUL OR FATAL IF SWALLOWED.
MAY CAUSE ALLERGIC SKIN REACTION.

DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.
WEAR GOGGLES OR FACE SHIELD AND RUBBER GLOVES WHEN HANDLING.
WASH THOROUGHLY AFTER HANDLING.

STATEMENTS OF PRACTICAL TREATMENT

EYES: IN CASE OF CONTACT, FLUSH EYES IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.

SKIN: IN CASE OF CONTACT, WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE.

INTERNAL - IF SWALLOWED, INDUCE VOMITING BY ADMINISTERING IPECAC SYRUP OR BY STICKING FINGER DOWN THROAT. REPEAT UNTIL VOMIT IS CLEAR. CALL A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTICE:

SELLER MAKES NO WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE USE OF THIS PRODUCT OTHER THAN INDICATED ON THE LABEL. BUYER ASSUMES ALL RISK OF USE AND/OR HANDLING OF THIS MATERIAL WHEN SUCH USE AND/OR HANDLING IS CONTRARY TO LABEL INSTRUCTION.

(NOT TO BE USED IN THE STATE OF CALIFORNIA TO PRESERVE METAL WORKING FLUIDS)

DIRECTIONS FOR USE:
IT IS A VIOLATION OF FEDERAL LAW TO USE THIS IN A MANNER INCONSISTENT WITH ITS LABELING.

THE AMOUNT NECESSARY FOR DESIRED PROTECTION DEPENDING ON EXPOSURE CONDITIONS. FOR FURTHER APPLICATION INFORMATION, REFER TO THE PRODUCT BULLETIN.

ACTIVE INGREDIENT:
1,2-DIBROMO-2,4-DICYANOBUTANE 91
INERT INGREDIENTS

ACCEPTED

MAY - 2 1996

**KEEP OUT OF REACH
OF CHILDREN
DANGER**

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 10445-33

EPA REGISTRATION NO. 10445-33
EPA ESTABLISHMENT NO. 10445-PA-01

NET WT: 30 LB.

(30 X 1 LB. WATER SOLUBLE BAGS)

CALGON CORPORATION
CALGON CENTER • PITTSBURGH, PA

Made in U.S.A.

TK388AG/03-94

MEER[®] 38

01-7166-N5

PRODUCT CODE

MICROORGANISMS IN AQUEDUS SYSTEMS

THE STATE OF CALIFORNIA
(AL WORKING FLUIDS)

BE:
FEDERAL LAW TO USE THIS PRODUCT
IN ACCORDANCE WITH ITS LABELING.

FOR DESIRED PROTECTION VARIES,
DEPENDENT ON OPERATING CONDITIONS. FOR FURTHER
INFORMATION, REFER TO THE PRODUCT

ENVIRONMENTAL HAZARDS

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 DISCHARGE. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PRODUCT TO SEWER SYSTEMS WITHOUT PREVIOUSLY NOTIFYING THE LOCAL SEWAGE TREATMENT PLANT AUTHORITY. FOR GUIDANCE CONTACT YOUR STATE WATER BOARD OR REGIONAL OFFICE OF THE EPA.

STORAGE AND DISPOSAL:

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE AND DISPOSAL.

CONTAINERS OF TEKTAMER 38 SHOULD BE STORED OUT OF DIRECT SUNLIGHT TO MAINTAIN THE PRODUCT BELOW ITS MELTING POINT. IF PRODUCT IS EXPOSED TO SUSTAINED TEMPERATURES ABOVE 50 DEGREES C, CAKING WILL OCCUR WITH ASSOCIATED HANDLING PROBLEMS. PRODUCT EFFICACY WILL NOT BE AFFECTED. HOWEVER, DISSOLUTION TIME WILL INCREASE.

CONTAINER SHOULD BE KEPT DRY AND TIGHTLY CLOSED.

WHEN THE WATER-SOLUBLE BAGS HAVE BEEN REMOVED, DISPOSE OF CORRUGATED BOX IN A SANITARY LAND-FILL, BY INCINERATION, OR, IF ALLOWED BY STATE AND LOCAL AUTHORITIES, BY BURNING. IF BURNED, STAY OUT OF SMOKE.

WASTES RESULTING FROM THE USE OF THIS PRODUCT MAY BE DISPOSED OF ON SITE OR AT AN APPROVED WASTE DISPOSAL FACILITY.

CONTENTS:
2,4-DICYANOBUTANE 98%
RESIDUES 2%

**KEEP OUT OF REACH
OF CHILDREN
AND ANIMALS**

REGISTRATION NO. 10445-33
EPA REGISTRATION NO. 10445-PA-01

NET WT. 30 LB.
(30 WATER SOLUBLE BAGS)

TEK CORPORATION
PITTSBURGH, PA 15230

Information concerning human and environmental exposure may be reviewed on the Material Safety Data Sheet for this product.

For additional information regarding incidents involving human and environmental exposure, call 412-771-3000 and ask for the Health and Environmental Affairs Department.

TEKTAMER 38

TECHNICAL DATA BULLETIN

TEKTAMER 38 is a preservative which effectively inhibits the growth of microorganisms in aqueous systems, including paints, emulsions, adhesives, joint cements, pigment dispersions, metalworking fluids, inks, polishes, and waxes. The chemical name of TEKTAMER 38 is 1,2-dibromo-2,4-dicyanobutane*.

(NOT TO BE USED IN THE STATE OF CALIFORNIA TO PRESERVE METAL WORKING FLUIDS)

TYPICAL PROPERTIES

| | |
|---|-------------------------------|
| Active ingredient..... | 98% minimum |
| Appearance..... | Off-white to light tan powder |
| Bulk Density (lb/ft ³)..... | Approximately 48 |
| Melting point..... | 50-53°C |
| Odor..... | Mildly pungent |
| Water solubility @ 20°C..... | 0.212 gm/100 ml |

TYPICAL USE LEVELS

Laboratory testing and customer use show TEKTAMER 38 is typically effective when applied at concentrations shown below. All concentrations are based on total formulation weight.

| | Effective Concentration |
|--|----------------------------|
| Aqueous paints..... | 0.025-0.075% |
| Latex emulsions..... | 0.01-0.05% |
| Joint cements | |
| Paste type, vinyl latex & protein..... | 0.05-0.1% |
| Reconstituted powder type, vinyl latex & protein..... | 0.1-0.2% |
| Adhesives | |
| Starch..... | 0.01-0.025% |
| Epoxy & polyester..... | 0.01-0.075% |
| Polyvinyl acetate, styrene butadiene, methyl cellulose & acrylic..... | 0.025-0.075% |
| Polyvinyl alcohol & hydroxyethyl cellulose..... | 0.05-0.075% |
| Dextrin..... | 0.075-0.1% |
| Casein..... | 0.1-0.15% |
| Dispersed pigments | |
| Titanium dioxide, calcium carbonate & clay..... | 0.01-0.025% |
| Metalworking fluids | |
| Concentrates..... | 1-4% |
| Dilute fluids..... | 0.025-0.1% |
| Waxes and polishes..... | 0.01-0.1% |
| Inks..... | 0.01-0.075% |

TEKTAMER is a registered trademark of Merck & Co., Inc. *U.S. Patent No.:
3,833,731, 3,873,597, 3,877,922, 3,929,858
FDA acceptance under 21 CFR 176.170 & 175.105.

DIRECTIONS FOR USE

Aqueous Paints:

TEKTAMER 38 should be incorporated into the make-up water during the grind.

Latex Emulsions:

TEKTAMER 38 should be added using moderate agitation immediately following the cool-down of the emulsion and prior to entering the storage tank facilities.

Joint Cements:

TEKTAMER 38 should be incorporated with agitation into the make-up water blend.

Adhesives:

TEKTAMER 38 should be incorporated with agitation into the make-up water blend. However, where the adhesive is heated, TEKTAMER 38 should be added during the cool-down cycle.

Dispersed Pigments:

TEKTAMER 38 should be added using moderate agitation immediately following the cool-down of the dispersed pigment and prior to entering the storage tank facilities.

Metalworking Fluids:

TEKTAMER 38 can be readily incorporated into metalworking fluid formulations by addition to the concentrate with moderate agitation.

Waxes, Polishes, and Inks:

TEKTAMER 38 should be incorporated into the make-up water blend with moderate agitation.

COMPATIBILITY

TEKTAMER 38 is compatible with typical ingredients in end-use formulations. However, it should be added separately from amine-containing and strong nucleophilic agents during product formulation. Mixing TEKTAMER 38 with these agents may cause a reaction between the ingredients which can de-activate TEKTAMER 38.

TEKTAMER 38 is most active over a pH range of 2-9.5. In some formulations, product has shown efficacy in higher pH formulations. Laboratory testing is recommended.

CORROSION PROPERTIES

TEKTAMER 38 is compatible with materials such as PVC, polyethylene, polypropylene, Tygon, Teflon, and glass. The product is corrosive to carbon steel.

PACKAGING

TEKTAMER 38 is available in 1/2-lb. water soluble bags, packed 50 to a carton, 25-lb. net; and 110 lb. net plastic drums.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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CAUSES EYE DAMAGE AND SKIN IRRITATION

HARMFUL OR FATAL IF SWALLOWED

MAY CAUSE ALLERGIC SKIN REACTION

Do not get in eyes, on skin or clothing. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly after handling.

STATEMENTS OF PRACTICAL TREATMENT

EYES: In case of contact, flush eyes immediately with water for at least 15 minutes and get medical attention.

SKIN: In case of contact, wash with soap and water. If irritation persists, call a physician. Wash contaminated clothing before reuse.

INTERNAL: If swallowed, induce vomiting by administering ipecac syrup or by sticking finger down throat. Repeat until vomit is clear. Call a physician. Never give anything by mouth to an unconscious person.

ENVIRONMENTAL HAZARDS

Do not discharge into lakes, streams, or public waters unless in accordance with an NPDES permit. For guidance, contact your Regional Office of the EPA.

STORAGE AND DISPOSAL

Do not contaminate food or feed by storage, disposal, or cleaning of equipment.

Containers of TEKTAMER 38 should be stored out of direct sunlight to maintain the product below its melting point. If product is exposed to sustained temperatures above 50°C, caking will occur with associated handling problems. Product efficacy will not be affected. However, dissolution time will increase.

Container should be kept dry and tightly closed.

DRUMS: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

WATER SOLUBLE BAGS: Carton and bag should be protected from freezing. If exposed to temperature $< 40^{\circ}\text{F}$, bags become brittle and may break if handled roughly. Carton and bags must be kept dry.

NOTICE

Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instruction.

Information concerning human and environmental exposure may be reviewed on the Material Safety Data Sheet and label for this product. For additional information regarding incidents involving human and environmental exposure, call 412-777-8000.

Produced and sold by Calgon Corporation. For further information, write to:

**Calgon Corporation
Specialty Chemicals Group
P. O. Box 1346
Pittsburgh, PA 15230
Phone: 412-777-8000**