



German metal Surface treatment Chemicals Co.
Research and Development Department.
Detergent and disinfectants Division.

MATERIAL SAFETY DATA SHEET

Biostar DT

Phenolic base disinfectant

MANUFACTURER:

German metal surface treatment (SUGEST)

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1. Product and Company Identification

NAME Biostar DT
USE used as multi-purpose disinfectant.
LABEL Biostar DT
Company German metal surface treatment chemicals co.

2. Product Description

Biostar DT is antiseptic and disinfectant product effective in killing bacteria and microorganism.

3. Hazards Identification

Emergency Overview

Warnings: For external use only.

Do not use: in the eyes or over large areas of the body.

Ask a doctor before use if you have: deep wounds or puncture wounds, animal bites or serious burns.

Stop use and ask a doctor if: irritation, sensitization, or allergic reaction occurs. These may be signs of a serious condition.

Stop use and ask a doctor if: the condition gets worse or lasts more than one week.

KEEP OUT OF REACH OF CHILDREN.

Potential Health Effects

HMIS: Health 2 Flammability 3 Reactivity 0 Personal Protection: B
 4 = extreme 3 = high 2 = moderate 1 = slight

- **Inhalation:** No known significant effects or critical hazards.
- **Skin contact:** Discontinue use (as an antiseptic) if rash or irritation occurs. Do not use undiluted on skin.
- **Eye contact:** Moderately irritating to the eyes. Avoid contact with eyes.
- **Ingestion:** Harmful if swallowed, may cause irritation to mouth, throat and stomach.
- **Chronic effects:** The finished product is not expected to have chronic health effects.



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4. Chemical Composition

| Ingredient | CAS No | Percent |
|---------------|---------------|---------|
| Pine oil | 8002 – 09 - 3 | 1 - 10 |
| Chloroxylenol | 88 – 04 – 0 | 1 - 10 |
| Propan-2-ol | 67 - 63- 0 | 10 - 30 |
| Water | 7732 – 18 - 5 | To 100 |

5. Physical and Chemical Properties

| Test | Specification |
|-----------------------|---------------------------------|
| Description | Clear Caramel liquid |
| Odor | Pine |
| pH as it is at 20 °C | 7.5 to 9 |
| Density g/ml at 20 °C | 1.02 to 1.13 |
| Solubility | milky after dilution with water |

6. First Aid Measures

Inhalation:

Remove to fresh air.

Skin contact:

Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. irritation persists seek immediate medical attention.

Eye contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and if irritation persists, seek immediate medical attention.

Ingestion:

Seek medical advice. DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.



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Notes to physician

Contains pine oil.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep out of reach of children.

7. Fire Fighting Measures

Flammable properties Combustible by OSHA criteria.

Suitable extinguishing media Dry chemical. Foam. Carbon dioxide.

Protective equipment for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products May include and are not limited to: Oxides of carbon.

8. Accidental Release Measures

Use personal protection recommended in Section 10 , isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:

Do not flush into surface water or sanitary sewer system.

Clean-up methods:

Eliminate all ignition sources. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

9. Handling and Storage

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing mists or aerosols of this product. Provide adequate ventilation. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water.

KEEP OUT OF REACH OF CHILDREN AND PETS. Use only as directed.

Keep away from heat and sources of ignition.

Storage:

Storage Conditions: Store in a cool, dry and good ventilated place. Keep container tightly closed after opening. Prevent direct sun light or ignition sources.

Temperature Limit: max 35 °C.

Maximum Storage Period: 24 Months under standard storage conditions.

Container Type Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001.

For information on product shelf life, please review labels on container.

10. Exposure Controls/Personal Protection



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| Hazardous components | ACGIH TLV | OSHA PEL |
|----------------------|---------------------------|--------------------|
| Propan-2-ol | 200 ppm STEL | 400 ppm TWA |
| Chloroxylenol | N/A | N/A |
| Pine oil | Mist: 5 mg/m ³ | N/A |

Engineering controls:

Ventilation Requirements No special ventilation requirements General room ventilation is adequate.

Respiratory protection:

Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.

Eye/face protection:

Safety glasses.

Skin protection:

For prolonged or repeated handling, use gloves. Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.

General hygiene considerations Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

11. Stability and Reactivity

Stability: Stable

Polymerization: Hazardous polymerization does not occur

Hazardous decomposition products: Ammoniacal vapors.

Materials to avoid: Do not mix with chlorinated products.

Conditions to avoid: Do not mix with any other product or chemical, Acid, Strong oxidizers .

Hazardous Decomposition Products: carbon oxides (CO, CO₂)

12. Toxicological information

Component analysis - LC50

Ingredient(s)

| | | |
|---------------|-------------|-------------------|
| Chloroxylenol | LC50 | 6.29 mg/l/4h rat |
| Isopropanol | LC50 | 16970 mg/l/4h rat |
| Pine oil | | Not available |

Component analysis - LD50

Ingredient(s)

| | | |
|---------------|-------------|----------------|
| Chloroxylenol | LD50 | 3830 mg/kg rat |
| Isopropanol | LD50 | 4396 mg/kg rat |
| Pine oil | LD50 | 3200 mg/kg rat |

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae Data

| | | |
|-------------|-------------------------------------|-------------|
| Isopropanol | 96 Hr EC50 Desmodesmus subspicatus: | >1000 mg/L; |
| | 72 Hr EC50 Desmodesmus subspicatus: | >1000 mg/L |

Ecotoxicity - Freshwater Fish Species Data



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Chloroxylenol 96 Hr LC50 Oncorhynchus mykiss: 0.13-1.0 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 1.3-2.1 mg/L [static]
Isopropanol 96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 11130 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: >1400000 µg/L

Ecotoxicity - Water Flea Data

Chloroxylenol 48 Hr EC50 Daphnia magna: 6.7 - 9 mg/L [Static]
Isopropanol 48 Hr EC50 Daphnia magna: 13299 mg/L
Pine oil 48 Hr EC50 Daphnia magna: 17 - 28 mg/L [Flow through]

13. Disposal Considerations

Disposal method:

Industrial setting: Disposal is according to all federal, state and local authorities for restrictions on disposal of chemical waste, manage chemical waste through an approved waste treatment facility, do not reuse empty container in accordance with current local community codes please recycle empty container whenever possible.

Household setting: Consumer may discard empty container in trash, or recycle where facilities exist.

14. Transport information

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information

Land, Sea **IMDG (Marine Transport)**, **IATA/ICAO (Air)** Transport

UN Number: 1993

Shipping Name: Biostar DT

Packing Group: III

Flammable Liquid N.O.S (Isopropyl alcohol, Pine Oil), Class 3

15. Other Information

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Isopropanol 67-63-0 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous Yes chemical

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes



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State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Isopropanol 67-63-0 Present

U.S. - Massachusetts - Right To Know List

Isopropanol 67-63-0 Present

U.S. - Minnesota - Hazardous Substance List

Isopropanol 67-63-0 Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Isopropanol 67-63-0 sn 1076
Pine oil 8002-09-3 sn 2684

U.S. - Pennsylvania - RTK (Right to Know) List

Isopropanol 67-63-0 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Isopropanol 67-63-0 Toxic; Flammable

16. Packing

Packaging type: HDPE containers and sealed cap.

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