



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

MATERIAL SAFETY DATA SHEET

Biostar 9X Hand sanitizer

MANUFACTURER:

German metal surface treatment (SUGEST)

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1. Product and Company Identification

NAME Biostar 9X
USE Hand sanitizer
LABEL Biostar 9X
Company German metal surface treatment chemicals co.

2. Product Description

Biostar 9X is a highly effective synergetic blend of alcohol and glycerin for hand sanitizer .

3. Hazards Identification

Emergency Overview

When used according to instructions, the product applicable to this MSDS is safe and presents no immediate or long-term health hazard. However, abnormal entry routes, such as gross ingestion, may require immediate medical attention.

Potential Health Effects

HMIS: Health 2 Flammability 3 Reactivity 0 Personal Protection None

Eye Contact: May cause eye irritation.
Skin Contact: No irritation or reaction expected.
Inhalation: Abnormal entry route
Ingestion: May cause upset stomach, nausea (Abnormal entry route).
Carcinogenicity: Not listed as a carcinogen by NTP, IARC, OSHA or ACGIH.
Physical Substance highly flammable liquid and vapor.





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4. Chemical Composition

Ingredient	CAS No	Percent
Ethanol	67 – 17 - 5	50 - 70
Glycerin	56 - 81-5	1 – 5

5. Physical and Chemical Properties

Appearance	Colored or colorless gel
Odor	Alcoholic
pH	5.5 - 7

6. First Aid Measures

Inhalation:

Remove person to fresh air. If breathing is difficult, give oxygen and get medical attention.

Skin contact:

If irritation is experienced, flush with water. If irritation persists, get medical attention.

Eye contact:

In case of contact with the eyes, remove contact lenses if easy to do, rinse immediately with plenty of water for 15 minutes, and 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.

7. Fire Fighting Measures

Fire: Flammable Liquid IB.

Explosion: unusual fire and explosion hazards: if heated, vapor may be flammable. can react vigorously with oxidizing materials

Fire Extinguishing Media: Use methods appropriate for the surrounding fire. Consider water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam.

Hazardous combustion products:

Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons.

Special information:

NFPA Rating: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



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Flash Point: 71°F (21.6°C)

Method Used: ASTM D-93

Lower Flammable Limit: 3.3 (Volume % in air)

Upper Flammable Limit: 19.0 (Volume % in air)

Auto Ignition: (Ethyl Alcohol) 363°C.

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

8. Accidental Release Measures

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

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools.

Environmental precautions:

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

Clean-up methods:

Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

9. Handling and Storage

Handling:

Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation.

Storage:

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat, store away from acids, store away from oxidizing agents, store away from reach of small children and avoid freezing conditions.

Temperature Limit: max 35 °C.

Maximum Storage Period: 24 Months under standard storage conditions.

This product has classified as a moderate oxidizing hazard (NFPA 430, 2000).

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

Hazardous components	ACGIH TLV	OSHA PEL	NIOSH
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Ethyl Alcohol	1,000 ppm TWA	1,000 ppm TWA	1000 ppm TWA ; 1900 mg/m ³ TWA 3300 ppm IDLH
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Engineering controls:

Ventilation Requirements provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product. Supply sufficient replacement air to make up for air removed by exhaust systems.

Emergency shower and eyewash should be in close proximity.

Respiratory protection: None required.

Eye/face protection: None required.

Skin protection: No chemical protective gloves are required.

11. Stability and Reactivity

Stability

Stable under normal use conditions.

Conditions to Avoid: keep away from open flam, hot sources and ignition sources

Incompatibilities

Do not mix with strong acids, oxidizable materials.

Reactivity Data

May develop static charge when poured and ignite vapors.

Hazardous decomposition products:

Products may include oxides of carbon

Hazardous Polymerization

Will not occur

12. Toxicological information

Acute Toxicity

Name Route Species Value

Ethyl alcohol w/w	Dermal Rabbit	LD50 > 15,800 mg/kg
Ethyl alcohol w/w	Inhalation- Vapor (4 hours) Rat	LC50 124.7 mg/l
Ethyl alcohol w/w	Ingestion Rat	LD50 17,800 mg/kg
Ethyl alcohol w/w	Oral Rat	LD50 7060 mg/kg

Chronic effects:

Component Ethyl Alcohol (64-17-5)

Carcinogenicity: ACGIH A4 – Not Classifiable as a Human Carcinogen

Neurotoxicity: This product contains ethyl alcohol, a central nervous system target.

Mutagenicity: No information available for product.

Reproductive: No information available for product.

Developmental: Ethyl alcohol is a developmental toxin when consumed during pregnancy.



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Target Organs: When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood and reproductive system.

Ecotoxicity:	Ethyl Alcohol (64-17-5)	
96 hour LC50	Oncorhynchus mykiss:	12,900 mg/L (flow-through) (30days old)
96 hour LC50	Pimephales promelas	14.2 mg/L
5 min EC50	Photobacterium phosphoreum:	35,470 mg/L
30 min EC50	Photobacterium phosphoreum:	34,634 mg/L
48 hour EC50	Daphnia magna:	9,268 mg/L
24 hour EC50	Daphnia magna:	10,800 mg/L

13. Disposal Considerations

Disposal method:

Dispose of in accordance with federal, state, and local regulations.

US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. Transport information

Shipping Name: Biostar 9X (contain Ethanol)

UN Number: UN1170

Hazard Class: Class 3

Packing Group: II

15. Other Information

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 64-17-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

WARNING:

This product contains Ethyl alcohol, a chemical known to the state of California to cause birth defects or other reproductive harm. California No Significant Risk Level: None of the chemicals in this product are listed.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.



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European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases: R 11 Highly flammable.

Safety Phrases:

S 16 Keep away from sources of ignition – No smoking.

S 33 Take precautionary measures against static discharges.

S 7 Keep container tightly closed.

S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 64-17-5: 0

CAS# 7732-18-5: No information available.

Canada - DSL/NDSL

CAS# 64-17-5 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D2A, D2B.

Canadian Ingredient Disclosure List

CAS# 64-17-5 is listed on the Canadian Ingredient Disclosure List.

16. Packing

Packaging type: HDPE containers and sealed cap.

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