



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

MATERIAL SAFETY DATA SHEET

Biostar 601 Oven cleaner

MANUFACTURER:

German metal surface treatment (SUGEST)

P.O. Box 2951,Riyadh 11461,K.S.A.

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1. Product and Company Identification

NAME	Biostar 601
USE	Oven cleaner
LABEL	Biostar 601
Company	German metal surface treatment chemicals co.

2. Product Description

Biostar 601 is a powerful oven cleaner liquid to make your oven sparkle. It works by removing grease, fat, food and spills from oven which allows you to simply wipe it away with a damp cloth - no scraping required.

3. Hazards Identification

Emergency Overview

Major Health Hazards: causes severe burns, harmful if swallowed.

This product is classified as: Xn, Harmful. N, Dangerous to the environment. C, Corrosive. Hazardous according to the criteria of SWA.

Dangerous according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R22, R35, R52. Harmful if swallowed. Causes severe burns. Harmful to aquatic organisms.

Safety Phrases: S20, S23, S26, S28, S46, S61, S24/25, S36/37/39. When using, do not eat or drink. Do not breathe mists or spray. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. After contact with skin, wash immediately with plenty of water. If swallowed, contact a doctor or Poisons Information Centre immediately and show this MSDS or label. Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection.

SUSMP Classification: S6

ADG Classification: Class 8: Corrosive Substances.

UN Number: 1719, CAUSTIC ALKALI LIQUID, N.O.S.





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Potential Health Effects

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

Inhalation:

- **Short Term Exposure:** Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.
- **Long Term Exposure:** No data for health effects associated with long term inhalation.

Skin Contact:

- **Short Term Exposure:** Available data indicates that this product is very corrosive to the skin. Capable of causing severe burns with deep ulceration, and can penetrate to deeper layers of skin resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.
- **Long Term Exposure:** No data for health effects associated with long term skin exposure.

Eye Contact:

- **Short Term Exposure:** This product is very corrosive to eyes. It will quickly cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is immediately treated, permanent blindness and facial scarring will occur.
- **Long Term Exposure:** No data for health effects associated with long term eye exposure.

Ingestion:

- **Short Term Exposure:** Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product is very corrosive to the gastrointestinal tract. Capable of causing severe burns with deep ulceration, and can penetrate to deeper layers of skin resulting in third degree burns. Corrosion will continue until product is removed or neutralized. Severity depends on concentration and duration of exposure.
- **Long Term Exposure:** No data for health effects associated with long term ingestion.

4. Chemical Composition

Ingredient	CAS No	Percent
Potassium Hydroxide	1310-58-3	10 - 30
Nonionic surfactant	Property	1 – 10
Diethylene glycol	111-46-6	1 - 10
Distilled water	7732-18-5	To 100



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5. Physical and Chemical Properties

Test	Specification
Description	Clear pale yellow liquid
pH as it is at 20 °C	12.5 to 13.5
Density g/cm ³	1.02 to 1.13

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 for at least 60 minutes,. 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 60 minutes, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available, and seek immediate medical attention.

Ingestion:

Seek medical advice. DO NOT induce vomiting unless directed to do so by medical personnel. Give 2 to 4 glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions.

7. Fire Fighting Measures

Specific hazards: Not flammable, but may give off toxic fumes if involved in a fire.

Suitable extinguishing media: Extinguish with water, CO₂, foam or dry chemical. Fire fighters.

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating.

Hazards from decomposition products: Burning can produce CO₂, CO, water vapour.

8. Accidental Release Measures

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



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

Environmental precautions

Large spillages or uncontrolled discharges into rivers or streams must be reported to The Environment Agency or other regulatory body.

Spill cleanup methods

Small quantities may be flushed to drains with plenty of water. Large Spillages Absorb in vermiculite, dry sand or earth and place into containers. Send for disposal as special waste.

9. Handling and Storage

Usage precautions

Wear suitable protective clothing, gloves and eye/face protection.

Storage precautions

Store at moderate temperatures in dry, well ventilated area. Keep in original container. Store away from Oxidising material and acid material.

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

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Engineering measures: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Personal protection equipment:

When handling bulk product wear safety glasses and protective gloves.

Avoid prolonged contact with skin.

Avoid excessive inhalation.

Wash hands before breaks and at end of shifts. Always wash hands before smoking, eating, drinking and using the toilet.

Eye Protection: Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used.

Skin Protection: Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, Viton, nitrile, butyl rubber, Barricade, neoprene, Teflon, polyethylene, PE/EVAL, Saranex, Responder.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



Ingredients	CAS	ACGIH	OSHA	Mexico
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Sodium hydroxide	1310-73-2	2 mg/m ³ (Ceiling)	2 mg/m ³ (TWA)	2 mg/m ³ (Ceiling)
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11. Stability and Reactivity

- **Stability:** Stable under normal use conditions.
- **Reactivity:** Most strong alkalis and bases react with inorganic and organic acids to form salts. They can also react with some metals liberating hydrogen gas. These reactions may be rapid and sometimes liberate much heat. They can also decompose many organic materials such as esters, in a reaction called hydrolysis.
- **Conditions to Avoid:** This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Containers should be kept dry. Handle and open containers carefully.
- **Corrosivity:** Extremely corrosive in presence of aluminum, brass. Corrosive in presence of copper, of stainless steel(304), of stainless steel(316). Non-corrosive in presence of glass.
Very caustic to aluminum and other metals in presence of moisture.
- **Incompatibilities:** acids, zinc, tin, aluminum and their alloys, other materials reactive with extremely alkaline liquids.
- **Hazardous Reactions** Polymerization is not expected to occur.

12. Toxicological information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation.

Other Toxic Effects on Humans:

Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (corrosive), of ingestion .

Special Remarks on Chronic Effects on Humans: Investigation as a mutagen (cytogenetic analysis), but no data available. (Sodium hydroxide)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May be harmful if absorbed through skin. Causes severe skin irritation and burns. May cause deep penetrating ulcers of the skin. Eyes: Causes severe eye irritation and burns. May cause chemical conjunctivitis and corneal damage. Inhalation: Harmful if inhaled. Causes severe irritation of the respiratory tract and mucous membranes with coughing, burns, breathing difficulty, and possible coma. Irritation may lead the chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract and mucous membranes. Ingestion: May be fatal if swallowed. May cause severe and permanent damage to the digestive tract. Causes.

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Local and state laws may differ from federal, so be sure to consult with appropriate agencies for specific rules.

Discharge used solutions to drain. Small amounts (less than 5 Litres) of unwanted product may be flushed with water to sewer. Larger volumes must be sent for disposal as special waste. Rinse out empty container with water and consign to normal waste.

14. Transport information



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Shipping Name:	Biostar 601
Hazard class:	8 corrosive
UN NO. SEA, AIR and ROAD	1824
PACK GROUP	II

15. Other Information

REGULATORY INFORMATION

Federal and State Regulations:

Illinois toxic substances disclosure to employee act: Sodium hydroxide Illinois chemical safety act: Sodium hydroxide
 New York release reporting list: Sodium hydroxide Rhode Island RTK hazardous substances: Sodium hydroxide
 Pennsylvania RTK: Sodium hydroxide Minnesota: Sodium hydroxide Massachusetts RTK: Sodium hydroxide New
 Jersey: Sodium hydroxide Louisiana spill reporting: Sodium hydroxide TSCA 8(b) inventory: Sodium hydroxide; Water
 CERCLA: Hazardous substances.:
 Sodium hydroxide: 1000 lbs. (453.6 kg);

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):

CLASS D-2A: Material causing other toxic effects (VERY TOXIC). CLASS E: Corrosive liquid.

16. Packing

Packaging type: HDPE containers and sealed cap.

DISCLAIMER: *The data contained herein are furnished for information only and are believed to be reliable. However, SUGEST and its affiliates ("SUGEST") does not assume responsibility for any results obtained by persons over whose methods SUGEST has no control. It is the user's responsibility to determine the suitability of SUGEST's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any SUGEST's products. In light of the foregoing, SUGEST specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of SUGEST's products. SUGEST further disclaims any liability for consequential or incidental damages of any kind, including lost profits.*