



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

MATERIAL SAFETY DATA SHEET

Duracide 5971

MANUFACTURER:

German metal surface treatment (SUGEST)

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1. Product and Company Identification

NAME Dura cide 5971

USE Biocide

LABEL Dura cide 5971

Company German metal surface treatment chemicals co.

2. Description

Dura cide is a mixture of alkyldimethylbenzyl ammonium chlorides of the general formula $(C_6H_5CH_2N(CH_3)_2R)$

3. Chemical Composition

Ingredient	CAS No	Percent
Benzalkonium chloride	8001-54-5	25 - 50
Water	7732-18-5	45 - 75

4. Application

Duracide 5971 Rapid acting Bactericide, Algacide and Fungicide.

5. Physical & Chemical Properties

No.	Parameter	Range of values
1	Appearance	Clear colorless to yellowish colored liquid
2	Odor	Characteristic
6	pH (5%)	6 - 8



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6. Hazards Identification

This product is an irritant to eye and skin.

Emergency Overview

Chemical material cause irritant to eye and skin at concentrated liquid

Potential Health Effects

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE]. The substance may be toxic to kidneys, liver, heart, gastrointestinal tract, cardiovascular system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

7. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious



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person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

8. Fire Fighting Measures

Fire:

This product is non – combustible.

Explosion:

Not considered to be an explosion hazard at low concentration.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.(flood with water).

Special information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

9. Accidental Release Measures

A- Release note:

Dilute with large volume of water

B- Environmental precaution

Residual **Duracide 5971** is transferred to new empty can for the second use under restricted condition.

10. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities agents. Use only with appropriate protective equipment. Do not use in unventilated areas, walk in coolers or confined spaces. Observe all warnings and precautions listed for the product.

Duracide 5971 is stored only in vented containers and transferred only in a prescribed manner and never return unused **Duracide 5971** to original container, empty drums should be triple rinsed with water before discarding.

Storage: Store drum in cool area out of direct sunlight and away from combustible, for bulk storage refer to FMC technical bulletins

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.

11. Exposure Controls/Personal Protection

Exposure control avoid eye and skin contact.



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Personal protection wears gloves, goggles and overalls when handling the material.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Please refer to the ACGIH document, *Industrial Ventilation, a Manual of Recommended Practices*, most recent edition, for details.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. (Neoprene, polyvinyl chloride).

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

12. Stability and Reactivity

Stability:

stable at normal condition.

Reactivity Data

STABILITY: Stable under normal conditions

Corrosivity

Highly corrosive in presence of stainless steel(304). Slightly corrosive in presence of aluminum, of copper. Non-corrosive in presence of stainless steel (316).

Hazardous Polymerization: will not occur

Avoid mixing with alkaline.

13. Disposal Considerations

Disposal method: Undiluted product is regulated under environmental and transportation laws as irritants. Disposal 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, rinse empty container with water before discarding, container in accordance with current local community codes please recycle empty container whenever possible.

14. Transport information

Non hazard

15. Other Information

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED OR INHALED. **Label Precautions:**

Avoid contact with eyes, skin and clothing.

Avoid breathing fume.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.



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Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Give milk or water. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, wipe off excess material from skin then immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

16. Packing:

HDPE container and sealed cap

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.