




G.K. Chemical Specialties Co. Inc.
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SAFETY DATA SHEET (SDS)

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| PRODUCT NAME: GERM-DESTROYER 24 LIQUID Disinfectant-Cleaner-Fungicide-Deodorizer | |
| HEALTH HAZARD RATING: | (1)- SLIGHT HAZARD NFPA Rating |
| FLAMMABILITY HAZARD RATING: | (0)- MINIMAL HAZARD |
| REACTIVITY HAZARD RATING: | (0)- MINIMAL HAZARD |
| PERSONAL PROTECTION: | B (GLASSES, GLOVES) |
| HAZARD ALERT SIGN: |  |

SECTION 1 – IDENTIFICATION

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| PRODUCT IDENTIFIER | |
| PRODUCT NAME | GERM-DESTROYER 24 LIQUID Disinfectant-Cleaner-Fungicide-Deodorizer (Lemon scent) |
| MANUFACTURER'S NAME AND ADDRESS EMERGENCY PHONE NO. | G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605/ 416-526-4037 |
| SUPPLIER'S NAME AND ADDRESS EMERGENCY PHONE NO. | |
| CHEMICAL NAME | N/A |
| CHEMICAL FAMILY | Quaternary Ammonium Chloride Germicidal Detergent |
| TRADE NAME AND SYNONYMS | GERM-DESTROYER 24 |
| MATERIAL USE | Cleaning |

G.K. Chemical Specialties Co. Inc. has compiled the information and recommendations contained in this Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation.

G.K. Chemical Specialties Co. Inc. extends no warranty and assumes no responsibility as to the accuracy of the content or sufficiency of the information and expressly disclaims all liability for reliance thereon. This SDS provides guidelines for the safe handling of this product. It does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

G.K. Chemical Specialties Co. Inc. assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.

INGREDIENTS. This SDS, under section of Ingredients, contains all ingredients listed under INGREDIENT DISCLOSURE LIST P.C. 1987-2719, 20/1/88 CANADA GAZETTE PART II VOL. 122, No 2 of HAZARDOUS PRODUCT ACT.

Percentage range of concentration of ingredients is expressed as percentage by weight of the total weight of the product. Ingredient List does not necessarily list all ingredients in the formulation and does not necessarily list all ingredient range of concentration, other than ingredients under the Disclosure List.

T.L.V. (units) or Threshold Limit Values refer to the limiting concentrations recommended by the Ministry of Labour. These values were adopted by the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.). The figures refer to time-weighted average concentrations as P.P.M. (V/V) or mg/m³ for a normal working day or at any time for some materials.

“C.A.S REG. No.” means the identification number assigned to a chemical substance by the Chemical Abstracts Service Division of the American Chemical Society.

“LC 50” means the concentration of a substance in air that when administered by means of inhalation over a specified length of time in an animal assay, is expected to cause the death of 50 per cent of a defined animal population.

“LD 50” means the single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause death of 50 per cent of a defined animal population.

FLASH POINT. The minimum temperature at which a substance gives off flammable vapors which in contact with spark or flame will ignite.

NIOSH- National institute for occupational safety and health

STEL- Short term exposure limit

TWA- Time-weighted average

PEL- Permissible exposure limit

ACGIH- American conference of governmental industrial hygienist

OSHA- Occupational safety and health act

SECTION 2 – HAZARD IDENTIFICATION

Dangerous Goods-**WHMIS**: NOT REGULATED
OSHA HAZARDS: Irritant

GHS CLASSIFICATION- (Product as Sold)

Acute Toxicity Oral- Category 4
Acute Toxicity Dermal- Category 4
Serious Eye Damage/Eye Irritation- Category 1
Skin Corrosion/ Irritation- Category 1

GHS Label Elements, including precautionary statements: Hazard Statements
Signal word-DANGER

HAZARD STATEMENTS

H318- Causes serious eye damage
H315-Causes skin irritation
H302- Harmful if swallowed

PREVENTION (see also section 4 –First aid and measures)

P280: Wear protective gloves and eye protection
P264: Wash skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P405: Store locked up

RESPONSE:

P305 + P351 + P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical advice/ attention
P303 + P361 +P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water. Shower.
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

POTENTIAL HEALTH EFFECTS

EYE: Will cause irritation
SKIN: May cause skin irritation
INGESTION: May be harmful if swallowed

GHS CLASSIFICATION (Product at Use Dilution)

Acute Toxicity (Dermal)- Category 5
Eye Irritation- Category 2B



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| SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS | | | | |
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| HAZARDOUS INGREDIENTS | APPROXIMATE CONCENTRATION % | C.A.S., N.A. OR U.N. NUMBERS | LD50 {SPECIFY SPECIES & ROUTE} | LC 50 {SPECIFY SPECIES & ROUTE} |
| Quaternary ammonium compounds, benzyl-C12-C16-alkyldimethyl, chlorides | 2.4 | 68424-85-1 | Oral(Rat): 344 mg/kg Dermal (Rabbit): 3,340 mg/kg | |
| Alcohols, C9-C11, Ethoxylated | 1 - 3 | 68439-46-3 | Oral (Rat): 1,400 mg/kg Dermal(Rabbit):>2,000 mg/kg | |
| Sodium Carbonate Anhydrous | 1 - 3 | 497-19-8 | Oral (Rat): 4,090 mg/kg Dermal(mouse): 2,210mg/kg | |
| Triphosphoric acid, sodium salt | 1 - 3 | 7758-29-4 | Oral (Rat): 3,120 mg/kg Dermal (Rabbit): >4,640mg/kg | |
| Water, Perfume, inert and other non -hazardous ingredients | Balance | | | |
| <p>Product at Use Dilution (Based at the highest Dilution for Hospital Disinfection at 34 ml/ litre) will contain</p> <p>CAS 68424-85-1: 0.0816 % CAS 68439-46-3: 0.0816 % CAS 497-19-8: 0.0424 % CAS 7758-29-4: 0.0594 %</p> | | | | |

| SECTION 4 – FIRST AID MEASURES | |
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| SKIN CONTACT | For product as sold contact will cause irritation. In case of contact rinse with plenty of water. For product at use dilution contact may cause mild irritation to some people, but no specific risk when handled in accordance with safety practice. In case of contact rinse with plenty water. |
| EYE CONTACT | For product as sold Immediately hold eyelids open and flush with water for at least 15 minutes. Seek medical attention if required. Product at use dilution can cause mild discomfort. Immediately hold eyelids open and flush with water for at least 15 minutes. |
| INHALATION | No known significant effects or critical hazards |
| INGESTION | May be harmful if swallowed. Do not induce vomiting. Drink 1 or 2 glasses of water. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person. If vomiting occur spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Take container, label or product name and Drug Identification Number with you |

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| | when seeking medical attention |
| NOTES TO PHYSICIAN | Treatment based on sound judgment of physician and individual reaction of patient. If swallowed Symptoms may include nausea, vomiting and diarrhea. EYE CONTACT: Symptoms may include stinging, tearing, redness, swelling, and blurred vision. |

| SECTION 5 – FIRE-FIGHTING MEASURES | |
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| FLASH POINT (°C) | Not applicable |
| FLASH POINT METHOD | Not applicable |
| AUTOIGNITION TEMPERATURE (°C) | Not applicable |
| UPPER FLAMMABLE LIMIT (% VOL.) | Not applicable |
| LOWER FLAMMABLE LIMIT (% VOL.) | Not applicable |
| HAZARDOUS COMBUSTION PRODUCTS | Carbon Dioxide (CO ₂), Carbon monoxide (CO) and other toxic gasses or vapors |
| UNUSUAL FIRE/ EXPLOSION HAZARDS | None known |
| SENSITIVITY TO MECHANICAL IMPACT | Not sensitive |
| SENSITIVITY TO STATIC DISCHARGE | Not sensitive |
| EXTINGUISHING MEDIA | Water spray, foam, dry powder or Carbon Dioxide. Use media appropriate for surrounding fire. Product does not support combustion. |
| SPECIAL FIRE FIGHTING PROCEDURES | Fire fighters should wear full protective clothing, including self-contained breathing equipment |

| SECTION 6 – ACCIDENTAL RELEASE MEASURES | |
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| LEAK AND SPILL PROCEDURE | Stop leak. Move containers from spill area. Dilute with water and mop up. Material can create slippery conditions. Use non-slip safety shoes in areas where spills or leaks can occur |
| ENVIRONMENTAL PRECAUTIONARY | Prevent entry into sewers or streams. Do not rinse spill onto the ground, into storm sewers or bodies of water. |
| PERSONAL PRECAUTIONARY MEASURES | Wear protective clothing during cleanup. Avoid contact with skin, eyes or clothing. |

| SECTION 7 – HANDLING AND STORAGE | |
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| HANDLING PROCETURES | Avoid contact with eyes and skin. Avoid ingestion. Use good industrial hygiene practices in handling this product. Wash thoroughly after handling. Keep container closed when not in use. |
| STORAGE NEEDS | Keep container tightly closed. Keep away from children. Do not store in unlabeled containers. Do not store with strong oxidizing agents. |

| SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION | |
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| VENTILATION REQUIREMENTS | General ventilation is recommended. |
| PROTECTIVE EQUIPMENT | Ensure that eyewash stations are proximal to the work-station location |
| EYE/TYPE | Safety glasses |
| RESPIRATORY/TYPE | None required with expected use. |
| GLOVE/TYPE | Nitrile, Vinyl, latex, Butyl impervious gloves |
| FOOTWEAR/TYPE | No special footwear is required |
| BODY/TYPE | No special protective clothing is required |

| SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES | |
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| APPEARANCE – PHYSICAL STATE | Clear yellow liquid |
| ODOUR | Lemon scent |
| ODOUR THRESHOLD (PPM) | Not available |
| PH | 11.85 ±0.50 in water concentrate, 9.55 ± 0.5 2% solution in water |
| MELTING POINT (°C) | Not applicable |
| BOILING POINT (°C) | 100°C |
| FREEZING POINT (°C) | 0°C |
| EVAPORATION RATE | As water |
| FLAMMABILITY | Not applicable |
| FLASH POINT (°C) | Not applicable |
| AUTO IGNITION TEMPERATURE | Not applicable |
| DECOMPOSITION TEMPERATURE | Not available |
| VAPOUR DENSITY | 17.3 gm / m ³ @ 20 ⁰ C |
| VAPOUR PRESSURE | 17.54 mmHg @ 20 ⁰ C |
| SOLUBILITY | Soluble in water |
| VISCOSITY | Thin liquid |
| % VOLATILE BY VOLUME | 93 ± 1 |
| SPECIFIC GRAVITY | 1.02 ± 0.02 gm / cm ³ |

| SECTION 10 – STABILITY AND REACTIVITY | |
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| REACTIVITY | The product is stable |
| CHEMICAL STABILITY | Stable |
| POSSIBILITY OF HAZARDOUS REACTIONS | Not applicable |
| CONDITIONS TO AVOID | No specific data |
| INCOMPATIBLE MATERIALS | Strong Oxidizing agents, Acids, Chlorinated products |
| HAZARDOUS DECOMPOSITION PRODUCTS | Carbon Dioxide (CO ₂), Carbon Monoxide (CO), Oxides of Nitrogen |

| SECTION 11 –TOXICOLOGICAL INFORMATION | |
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| TOXICITY EFFECTS ON ANIMALS | <p>For Quaternary ammonium compounds, benzyl- C12-C16- Alkyldimethyl, chlorides (68424-85-1): Acute Oral Toxicity LD50 (Rat): 344 mg/kg. Acute Dermal Toxicity LD50 (Rabbit): 3,340 mg/kg.</p> <p>For Alcohols, C9-C11, Ethoxylated (68439-46-3): Acute Oral Toxicity LD50 (Rat):</p> |

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| | <p>1,400 mg/kg. LD50 Dermal (Rabbit): >2,000 mg/kg.</p> <p>For Sodium Carbonate Anhydrous (497-19-8): Acute Oral Toxicity LD50 (Rat): 4,090 mg/kg. Acute Dermal Toxicity LD50 (mouse): 2,210 mg/kg.</p> <p>For Triphosphoric acid, sodium salt (7758-29-4): Acute Oral Toxicity LD50 (Rat): 3,120 mg/kg. LD50 Dermal (Rabbit): >4,640 mg/kg</p> <p>For the mix estimated Acute Oral Toxicity is much >5,000 mg/kg. Therefore product is classified as non-toxic. Acute Dermal Toxicity for the mix is also estimated to be much >5,000 mg/ kg. Therefore the product is not toxic.</p> |
| TOXIC EFFECTS ON HUMANS | Product as sold will cause irritation of eyes, may cause skin irritation upon contact. No specific risk for product at use dilution when handled in accordance with safety practice. |
| CHRONIC EFFECTS ON HUMANS | No known significant effects |
| CARCINOGENICITY | No evidence |
| TERATOGENICITY | No evidence |
| MUTAGENICITY | No evidence |
| REPRODUCTIVE EFFECTS | No evidence |

| SECTION 12 –ECOLOGICAL INFORMATION | |
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| ECOTOXICITY DATA | <p>For Quaternary ammonium compounds, benzyl-C12-C16- Alkyldimethyl, chlorides (68424-85-1): Acute Toxicity to fish: LC50, Fathead minnow (Pimephales promelas): 0.28 mg /L /96 h. Acute Toxicity to aquatic invertebrates EC50 Daphnia magna (Water flea): <1.00 mg /L / 48 h. Biodegradability >99 %.</p> <p>For Alcohols, C9-C11, Ethoxylated (68439-46-3): Acute Toxicity to fish LC50, Fathead minnow (Pimephales promelas): 8.5 mg / L /96 h. EC50, Daphnia magna (Water flea): 5.3 mg /L /48 h. Ingredient readily BIODEGRADABLE.</p> <p>For Sodium Carbonate Anhydrous (497-19-8): Acute Toxicity to fish LC50, L. macrochius: 300 mg / L / 96 h. LC50, Pimephales promelas (Fathead minnow) (various age groups): 310- 1220 mg/ L /96 h. Acute Toxicity to aquatic invertebrates, EC50, Daphnia magna (Water flea): 265 mg / L / /48 h. This ingredient is readily degradable in the environment. Not bioaccumulative.</p> <p>For Triphosphoric acid, Sodium salt (7758-29-4): Acute Toxicity to fish LC50, Leuciscus idus: 1,650 mg / L /96 h. Biodegradable product. Non bioaccumulable. A Phosphorus based product. Formulation contains a small amount (0.72 % as P₂O₅)</p> |
| BIODEGRADABILITY | Readily biodegradable |
| PRODUCTS OF DEGRADATION | No data available |

| SECTION 13 – DISPOSAL CONSIDERATIONS | |
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| WASTE DISPOSAL | Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations |
| INFORMATION ON SAFE HANDLING FOR DISPOSAL INCLUDING ANY CONTAMINATED PACKAGING | Suitable waste facility |

| SECTION 14 – TRANSPORT INFORMATION | |
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| UN NUMBER | Not applicable |
| UN PROPER SHIPPING NAME | Not applicable |
| TRANSPORT HAZARD CLASS | Not regulated |
| PACKAGING GROUP | Not applicable |
| ENVIRONMENTAL HAZARDS | Nil |
| TRANSPORT IN BULK, if applicable | Not applicable |
| SPECIAL PRECAUTIONS | NIL |

| SECTION 15 – REGULATORY INFORMATION | |
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| SAFETY HEALTH & ENVIRONMENTAL REGULATIONS SPECIFIC TO THE PRODUCT | <p>U.S. TSCA inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) INVENTORY List or exempt.</p> <p>Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt.</p> |

| SECTION 16 – OTHER INFORMATION | |
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| PREPARED BY: | Gus Kaklamanos - Chemist |
| TELEPHONE NO.: | 416-261-7182 |
| DATE OF THE LATEST REVISION OF SDS: | October 5, 2021 |

NOTE: This controlled product by Health Canada is to be used in accordance with the directions on the label.

Drug Identification No.: 02278960