




# Safety Data Sheet

Section 1. Identification	
<b>Product Identification and Item Numbers:</b>	Chlorazol Black E Stain Solution (C/1, C/2)
<b>Product Description:</b>	Chlorazol Fungal Stain
<b>Recommended use and restrictions on use:</b>	N/A
<b>Supplier:</b>	Delasco 608 13 <sup>th</sup> Avenue Council Bluffs, IA 51501 1-712-323-3269 <a href="http://www.delasco.com">www.delasco.com</a> <a href="mailto:questions@delasco.com">questions@delasco.com</a>
<b>In Case of Emergency, Contact:</b>	Chemtrec (24 hour) 1-800-424-9300

Section 2. Hazard(s) Identification	
<b>Classification:</b>	
Carcinogen (Category 1B) Reproductive Toxicity (Category 2) Skin corrosion (Category 1A) Serious eye damage (Category 1)	Flammable liquids (Category 4) Corrosive to metals (Category 1) Acute toxicity, Oral (Category 4) Acute aquatic toxicity (Category 3)
<b>Labeling:</b>	
<b>Hazard symbol(s):</b>	  
	GHS07: irritant      GHS08: health hazard      GHS05: corrosive
<b>Signal word:</b> <span style="margin-left: 150px;"><b>Danger!</b></span>	
<b>Hazard statements:</b>	
H290: May be corrosive to metals. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage.	H227: Combustible liquid H350: May cause cancer H361: Suspected of damaging the unborn child H402: Harmful to aquatic life.
<b>Precautionary statements:</b>	
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P234 Keep only in original container. P260 Do not breathe dust or mist. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P390 Absorb spillage to prevent material damage. P403 + P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/ container to an approved waste disposal plant.	

<b>Section 3. Composition/Information on Ingredients</b>		
<b>Chemical Name and Concentration:</b>	Water	84.9%
	Dimethylsulfoxide	10.0%
	Potassium Hydroxide	5.0%
	Chlorazol Black E powder	0.1%
<b>Other Names, Common Names, Synonyms:</b>	N/A	
<b>CAS Number, other unique identifiers:</b>	Mixture:	
	Water	CAS# 7732-18-5
	Dimethylsulfoxide	CAS# 67-68-5
	Potassium Hydroxide	CAS# 1310-58-3
	Chlorazol Black E powder	CAS# 1937-37-7
<b>Other classified impurities or stabilizers:</b>	N/A	
<b>Other ingredients posing health hazards:</b>	N/A	
<b>Concentration of other hazardous ingredients:</b>	N/A	

<b>Section 4. First-aid Measures</b>	
<b>Inhalation exposure:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical attention.
<b>Skin exposure:</b>	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Get medical attention.
<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
<b>Ingestion:</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention.

<b>Section 5. Fire Fighting Measures</b>	
<b>Suitable / unsuitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Specific hazards / combustion products:</b>	Flammable. Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Sodium oxides.
<b>Special protective equipment and precautions for fire-fighters:</b>	Use recommended personal protective equipment.
<b>NFPA Hazard Classification</b>	Health – 3 Flammability – 2 Instability – 0
	0-Minimal 1-Slight 2-Moderate 3-Serious 4-Severe

<b>Section 6. Accidental Release Measures</b>	
<b>Personal precautions and protective equipment:</b>	<ul style="list-style-type: none"> <li>Do not touch spilled material. Use appropriate tools to collect material and dispose of in waste disposal container. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Wear appropriate personal protective equipment listed in section 8.</li> </ul>
<b>Environmental Precautions:</b>	<ul style="list-style-type: none"> <li>Prevent leakage or spillage if safe to do so. Do not let product enter drains.</li> <li>Discharge into the environment must be avoided.</li> </ul>
<b>Containment / clean up methods:</b>	Small spill: Collect material with inert material. Keep in suitable, closed containers for disposal according to local regulations.

<b>Section 7. Handling and Storage</b>	
<b>Precautions for safe handling:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Prevent the build up of electrostatic charge.
<b>Conditions for safe storage:</b>	Keep container tightly closed in a dry and well-ventilated place.
<b>Incompatibilities to avoid:</b>	Oxidizing agents, acids, bases, alkali metals, acid chlorides, acid anhydrides, potassium t-butoxide, boron compounds, sodium isopropoxide, dinitrogen tetraoxide, carbonyl diisothiocyanate, acetanilide, many acyl, aryl, and nonmetal halides (eg acetyl chloride, benzenesulfonyl chloride, bromobenzoyl actanilide, cyanuric chloride, iodine pentafluoride, Mg(ClO <sub>4</sub> ) <sub>2</sub> , CH <sub>3</sub> Br, NiO <sub>4</sub> , oxalyl chloride, P <sub>2</sub> O <sub>3</sub> , phosphorus trichloride, phosphoryl chloride, silver fluoride, silver difluoride, sodium hydride, sulfur dichloride, disulfur dichloride, sulfonylchloride, tetrachlorosilane, and thionyl chloride), organic materials, metals, moisture, nitro compounds (nitrobenzene, nitromethane, nitrogen trichloride), acid anhydrides, acid chlorides, magnesium, peroxidized tetrahydrofuran, trichlorethylene, chlorine dioxide, maleic dicarbide, sugars. Attacks metals such as aluminum, tin, lead, and zinc.

<b>Section 8. Exposure Controls and Personal Protection</b>	
<b>OSHA Permissible Exposure Limit (PEL):</b>	Not available.
<b>Threshold Limit Value (TLV):</b>	Not available.
<b>Other exposure limits:</b>	Dimethyl sulfoxide TWA 250 ppm Workplace Environmental Exposure Levels (WEEL)
<b>Engineering controls:</b>	Handle under good industrial safety practices. Wash hands when done working with this product.
<b>Personal protective equipment:</b>	<p><b>Respiratory Protection:</b> Use in a well-ventilated area.</p> <p><b>Eye Protection:</b> Appropriate safety glasses with side-shields.</p> <p><b>Skin Protection:</b> Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.</p>
<b>Other personal protection measures:</b>	Provide nearby eyewash station and safety shower.

<b>Section 9. Physical and Chemical Properties</b>	
<b>Appearance (physical state, color, etc.):</b>	Black, liquid, water-like consistency, slight garlic/sulfur odor (from DMSO)
<b>Odor:</b>	Odorless.
<b>Odor threshold:</b>	Data not available for this mixture.
<b>pH:</b>	Data not available for this mixture.
<b>Melting point / freezing point:</b>	Data not available for this mixture.
<b>Initial boiling point and boiling range:</b>	Data not available for this mixture.
<b>Flash point:</b>	Data not available for this mixture.
<b>Evaporation rate:</b>	Data not available for this mixture.
<b>Flammability</b>	Data not available for this mixture.
<b>Upper / lower flammability or explosive limits:</b>	Data not available for this mixture.
<b>Vapor Pressure:</b>	Data not available for this mixture.
<b>Vapor density:</b>	Data not available for this mixture.
<b>Relative density:</b>	Data not available for this mixture.
<b>Solubility:</b>	Data not available for this mixture.
<b>Partition coefficient: n-octanol/water:</b>	Data not available for this mixture.
<b>Auto-ignition temperature:</b>	Data not available for this mixture.
<b>Decomposition temperature:</b>	Data not available for this mixture.
<b>Viscosity:</b>	Data not available for this mixture.

<b>Section 10. Stability and Reactivity</b>	
<b>Chemical stability:</b>	The product is stable.
<b>Possibility of hazardous reactions:</b>	Not available for this mixture.
<b>Conditions to avoid (static, shock, vibration...)</b>	Excess heat, flames, sparks.
<b>Incompatible materials:</b>	Acid chlorides, Phosphorus halides, Strong acids, Strong oxidizing agents, Strong reducing agents, Nitro compounds, Organic materials, Magnesium, Copper, Water, Metals, Light metals. Contact with aluminum, tin and zinc liberates hydrogen gas. Contact some nitro compounds causes formation of shock-sensitive salts. Reacts with alkali metals, halogens, azides, anhydrides.
<b>Hazardous decomposition products:</b>	Not available for this mixture.

<b>Section 11. Toxicological Information</b>	
<b>Routes of exposure:</b>	Absorbed through skin, inhalation, ingestion, eyes.
<b>Acute Symptoms (acute):</b>	Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant, corrosive), of ingestion, of inhalation. 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/mist 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.
<b>Symptoms (chronic): Chronic effects from short and long term exposure:</b>	Prolonged or repeated ingestion may cause nausea, vomiting, loss of appetite. Prolonged or repeated ingestion may affect the blood (changes in red blood cell count, and normocytic anemia). Prolonged or repeated ingestion may affect the kidneys (polyuria (increase in urine volume, hematuria (blood in the urine), tubular necrosis). Prolonged skin contact may cause skin irritation and/or dermatitis. Chronic exposure may cause drying and scaling of the skin. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust/mist can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust/mist can produce varying degree of respiratory irritation or lung damage.
<b>Numerical measures of toxicity (e.g., acute toxicity estimates): (NIOSH)</b>	<b>Acute Toxicity</b> - Chlorazol Black E powder LD50 Oral - Rat - 7,600 mg/kg  <b>Acute Toxicity</b> - DMSO LD50 Oral - Rat - 14,500 mg/kg LC50 Inhalation - Rat - 4 h - 40250 ppm LD50 Dermal - Rabbit - > 5,000 mg/kg  <b>Acute Toxicity</b> – Potassium Hydroxide LD50 Oral - Rat - 333 mg/kg
<b>NTP carcinogen:</b>	Known to be human carcinogen (Chlorazol Black E powder)
<b>EPA carcinogen:</b>	Not available
<b>ACGIH carcinogen:</b>	1 - Group 1: Carcinogenic to humans (Chlorazol Black E powder)
<b>IARC potential carcinogen:</b>	Not available
<b>OSHA carcinogen:</b>	Not available

<b>Section 12. Ecological Information (Non-mandatory)</b>	
<b>Ecotoxicity (aquatic and terrestrial, where available):</b>	<p><u>Chlorazol Black E powder</u> Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - &gt; 180 mg/l - 96 h</p> <p><u>Dimethylsulfoxide</u> Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 24,600 mg/l - 48 h Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 17,000 mg/l - 72 h</p> <p><u>Potassium Hydroxide</u> Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h</p>
<b>Persistence and degradability:</b>	Not readily biodegradable. (Dimethylsulfoxide )
<b>Bioaccumulative potential:</b>	Not available
<b>Mobility in soil:</b>	Not available
<b>Other adverse effects:</b>	Not available

<b>Section 13. Disposal Considerations (Non-mandatory)</b>	
<b>Safe methods of disposal:</b>	Contact a licensed professional waste disposal service to dispose of this material and contaminated packaging. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

<b>Section 14. Transport Information (Non-mandatory)</b>						
<b>US DOT</b>	UN number:	UN1814	Class:	8	Packing Group:	II
<b>UN proper shipping name:</b>			Potassium Hydroxide, Solution			
<b>Packing group, if applicable:</b>			II			
<b>Environmental hazards (marine pollutant, etc...)</b>			Not available			
<b>Special transport precautions:</b>			N/A			

<b>Section 15. Regulatory Information (Non-mandatory)</b>	
<b>Specific safety, health, and environmental regulations:</b>	N/A

<b>Section 16. Other information</b>	
<b>Date of preparation or last revision:</b>	September 14, 2018