



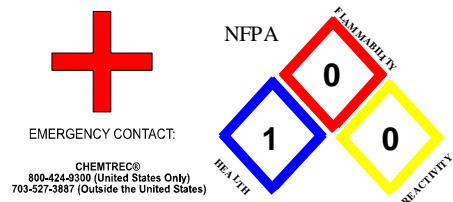
SURPASS 3000

CATIONIC PHOTORESIST ADHESION PROMOTER

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MATERIAL SAFETY DATA SHEET

SurPass 3000 MSDS



NFPA Hazard Rating

- 4 - Extreme
- 3 - High
- 2 - Moderate
- 1 - Slight
- 0 - Insignificant



SECTION 1-----MANUFACTURER AND ADDRESS

Manufacturer Information:

DisChem, Inc.
17295 Boot Jack Rd, Suite A
PO Box 267
Ridgway, PA 15853 USA

Tel: 814-772-6603
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Web Site: www.discheminc.com

EMERGENCY TELEPHONE NUMBER (CHEMTREK): + (800) 424 - 9300 (United States Only)

CALL TOLL FREE / COLLECT 24 HRS FOR CHEMICAL EMERGENCIES ++ (703) 527 - 3887 (Outside the United States)

SECTION II---CHEMICAL AND PHYSICAL PROPERTIES

<u>INGREDIENT NAME</u>	<u>APPROX. %</u>	<u>CAS #</u>	<u>EINECS #</u>
De-ionized Water	90-95% v/v	7732-18-5	231-791-2
Cationic organic surface active agent	3-5% v/v	Proprietary	Proprietary
Isopropyl Alcohol	< 0.1% v/v	67-63-0	200-661-7

All other ingredients are non-hazardous, non-regulated, or are present in concentrations less than 0.1 % by volume.

BOILING POINT: ~ 100°C

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

WATER SOLUBILITY: 100%

SPECIFIC GRAVITY: 1.013 - 1.163

EVAPORATION RATE: Approx. 1

COLOR: None to light yellow

APPEARANCE: Clear Liquid

ODOR: Slightly sweet

pH: 3.5 – 4.5

FLASH POINT: Non flammable

% VOLATILITY: 94%

HAZARDOUS DECOMPOSITION PRODUCTS:

Toxic fumes of NO_x and CO_x emitted when heated to decomposition (340°C).

CONDITIONS TO AVOID: Incompatible materials and conditions

STABILITY: Stable

INCOMPATIBILITY: Strong bases, reducing agents, organic solvents, ammonia, hydrochloric acid, excessive heat (340°C).

HAZARDOUS POLYMERIZATION PRODUCTS: None known

SECTION III--FIRE AND EXPLOSION DATA

FLASH POINT: Nonflammable

FLAMMABLE LIMITS: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

EXPLOSION LIMITS: Not applicable

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide or alcohol resistant foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SPECIAL FIRE EXTINGUISHING INSTRUCTIONS: As with any fire, fire fighters should wear self contained breathing apparatus with full face piece operated in pressure demand or positive pressure mode. Use full turnout gear.

SECTION IV---HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Skin, eyes, inhalation, swallowing

CARCINOGENICITY: No ingredients contained in this product are listed as carcinogens by IARC, NTP, or OSHA.

CHRONIC EXPOSURE: Exposure to skin may cause irritation or burn. Inhalation of vapors or mists may cause upper respiratory tract irritation. Ingestion may cause inflammation of mucous membranes, nausea, vomiting, unconsciousness, convulsions, neural disturbances, renal damage, and death in severe cases.

ACUTE TOXICOLOGY: Not established for product

GENERAL FIRST AID

EYE CONTACT: Flush eyes with flowing water for 15 minutes. Seek medical attention.

SKIN CONTACT: Immediately remove contaminated clothing and flush skin with flowing water for 15 minutes. If burns occur, cover with sterile dressing. Seek medical attention.

INHALATION: Remove to fresh air. Give oxygen if breathing is difficult. If not breathing, give artificial respiration. Seek medical attention immediately.

INGESTION: If victim is conscious, give large amounts of milk. Never give liquids to an unconscious victim. Do NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration. Seek medical attention immediately.

SECTION V---SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Wear NIOSHA approved respirator where exposure concentrations exceed the specified limits.

SKIN PROTECTION: Chemical resistant gloves should be worn.

EYE PROTECTION: Safety goggles should be used with this and any other chemical that may cause eye injury.

VENTILATION: Provide ventilation which is sufficient to maintain airborne concentrations below the specified exposure limits. Wear NIOSHA approved respirator where exposure concentration exceed the specified limits.

OTHER PROTECTIVE CLOTHING/EQUIPMENT: Chemical resistant gloves, eye protection.

HYGIENIC WORK PRACTICES: Do not eat, drink or smoke while using this product. Proper hygienic precautions should be observed to prevent ingestion or injury. Keep work area clean and always wear appropriate protective equipment when handling product.

SECTION VI---HANDLING OF SPILLS OR LEAKS

SPILL OR RELEASE HANDLING: In case of accidental spill or release, isolate contaminated area. Wear protective equipment including chemical resistant boots, gloves, apron, and goggles. Contain spill and gradually neutralize to a pH of 7.0 with lime or soda ash. After neutralizing, absorb spill with vermiculite or other inorganic absorbent. Place residues in DOT approved container. Do not allow spill to run into drain sewers.

WASTE DISPOSAL METHOD: Dispose of product in accordance with local, state and federal regulations.

HMIS RATING (Hazardous Material Identification System)

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

PERSONAL PROTECTION: B (Safety glasses, gloves)

0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe

SECTION VII---HANDLING AND STORAGE PRECAUTIONS

STORAGE: Store in tightly closed containers. Store in dry, cool, place away from incompatible substances.

SHELF LIFE: This product is rated with a two-year shelf life. As this product is biodegradable, the shelf life may be significantly reduced if the container is opened and contaminated. The product color may vary from lot to lot, ranging from clear to light yellow.

HANDLING: Wash thoroughly after handling. Remove and wash any contaminated clothing before re-wearing. Use only in properly ventilated area. Never transfer to an unmarked container.

HYGIENIC WORK PRACTICES: Do not eat, drink or smoke while using this product. Proper hygienic precautions should be observed to prevent ingestion or injury. Keep work area clean and always wear appropriate protective equipment when handling product.

VENTILATION: Use adequate ventilation or local exhaust to maintain airborne concentrations below the permissible exposure limits.

EXPOSURE LIMITS

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
Chemical Ingredients (proprietary)	none listed	none listed	none listed

OSHA Vacated PELs: There are no OSHA Vacated PELs for any ingredients contained in this product.

PERSONAL PROTECTIVE EQUIPMENT

EYES: Wear appropriate protective eyeglasses or chemical safety goggles as described in OSHA's eye and face protection regulations 29 CFR 1910.133, or European Standard EN166.

SKIN: Wear appropriate protective gloves to prevent skin exposure.

CLOTHING: Wear appropriate protective clothing to prevent skin exposure.

RESPIRATORS: Follow the OSHA respirator regulations 29 CFR 1910.134 or European Standard EN149. Respirators are not normally required when using this product.

PRECAUTIONS FOR HANDLING AND STORAGE: Do not swallow. Avoid eye contact. Wash thoroughly after handling. Avoid contact with clothing; if contact occurs, remove and wash before reuse. Keep away from food products. Keep out of reach of children. Store in tightly closed containers away from incompatible materials when not in use. Protective clothing including face shield and chemical resistant apron and gloves should be worn when mixing product. Caution should be taken to avoid splashing. Protect product from freezing. Store away from incompatible materials.

SECTION VIII--TRANSPORTATION DATA

DOT PROPER SHIPPING NAME: Not Regulated

DOT HAZARD CLASS: N/A

UN IDENTIFICATION NO.: N/A

PACKAGE GROUP: N/A

DOT REPORTABLE QUANTITY: N/A

TRANSPORT LABEL / NOTES: Not Regulated. Chemicals, N.O.S.

HS# / DESCRIPTION: 3402.12.5000 / Cationic organic surface active agent. Waterborne photoresist adhesion promoter. Chemical, liquid, non-hazardous.

SECTION IX--ENVIRONMENTAL/SAFETY REGULATIONS

US FEDERAL:

TSCA: All chemical ingredients contained in this product are listed on the TSCA Inventory List. Health and Safety Reporting List: None of the chemicals in this product are listed on the Health and Safety Reporting List.

Chemical Test Rules: None of the chemicals in this product are under a Chemicals Test Rule.

Section 12b: None of the chemicals in this product are listed under TSCA Section 12b.

SARA

Section 302(RQ): None of the materials contained in this product have a reportable quantity.

Section 302 (TPQ): None of the materials contained in this product have a TPQ.

SARA Codes: None

Section 313: No materials contained in this product are reportable under SARA

Section 313.

Clean Air Act:

This material does not contain any Hazardous Air Pollutants (HAPs)
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

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.

OSHA:

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

STATE**FL, MA, PA**

No chemical ingredients are listed on the Right to Know List.

CA, FL, MA, MN, NJ, PA:

None

CA

No Significant Risk Level:

No chemical ingredients in this product are listed on the CA Significant Risk Level.

EUROPEAN / INTERNATIONAL REGULATIONS:**European Labeling in Accordance with EC Directives**

Hazard Symbols: Not available.

Risk Phases: R 22 Harmful if swallowed.

Safety Phases: S 2 Keep out of reach of children.
S 24/25 Avoid contact with skin and eyes.

Water Danger / Protection (WGK): None

Canada

WHMIS: Not available.

No ingredients contained in this product are listed on Canada's Ingredient Disclosure List.

SECTION X--MANUFACTURER'S DISCLAIMER

The information supplied by the manufacturer has been gathered through testing and reliance on various technical publications. While compiled in good faith with accuracy to the best of the manufacturers knowledge, no suggestions of accuracy or completeness are guaranteed or implied. This product is designed with the expectation that it will be handled only skilled persons with technical knowledge and experience in chemical handling. As use of the supplied information is at the discretion of the user, DisChem makes no warranties, expressed or implied, and assumes no liability therein with connection to any use of this information.

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