

Coatings2Go

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Emergency Assistance

For emergency assistance involving this product call – 978-369-7411

Section 1: Product Identification
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Product Name: Patented Antithrombogenic Coating

MSDS #: 1003

Date Issued: September 17, 2008

Original **Update**

Reason For Change: Added EU Classifications

Section 2: Hazardous Ingredients

Hazardous Ingredients	CAS Number	OSHA PEL (Permissible exposure limit)	ACGIH TLV (Threshold limit value)	% By Weight	EU Symbol/ Classifications
Heparin salt	Trade Secret	Not established	Not established	0.1-2.0	Not classified
Triethylamine	121-44-8	25 ppm (skin)	1 ppm (skin)	0.1-2.0	Xi; R36/37/38
Ammonium hydroxide (>25%)	1336-21-6	50 ppm	Not established	0.1-2.0	C, N, R34, R50

Note: All health hazard components above 1% composition and all carcinogens above 0.1% (1000 ppm) composition are listed.

Section 3: Hazard Identification

EMERGENCY OVERVIEW: WARNING! This product is HAZARDOUS by OSHA Hazard Communication definition. May cause skin, eye and respiratory tract irritation. May be harmful if swallowed. Contains heparin. Heparin and its salts act as anti-coagulants. Risk of effects depends on duration and level of exposure.

Hazard Rating: NFPA

HMIS

Health: 1*

Flammability: 0

Reactivity: 0

PPE: B

Hazard Rating Scale:

0= Minimal

1= Slight

2= Moderate

3= Serious

4= Severe

Note: NFPA and HMIS ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the specific hazard. To deal adequately with the safe handling of this, or any, material, all the information in the MSDS must be considered and interpreted by a trained professional.

Potential Health Effects:

This material has **not been** tested as a whole. The data contained below is based on the properties of the individual components.

This material has been tested as a whole. The data below is based on the properties of the mixture.

Main Routes of Exposure:

Inhalation

Ingestion

Skin Absorption

Skin or Eye Contact

Effects of Acute (Immediate) Exposure:

Eye Contact	May cause eye irritation.
Ingestion.....	Swallowing may cause irritation of mouth, throat and gastrointestinal tract.
Inhalation.....	Can cause irritation to nose, throat, mucous membranes and lungs.
Skin Contact.....	Skin irritant. Prolonged contact can cause de-fatting of skin rendering it susceptible to irritation by other substances.
Other.....	Triethylamine: May cause effects on the liver, kidney, heart and exposure to vapor may cause temporary blurred vision. Heparin: Heparin and its salts may act as anti-coagulants.

Effects of Chronic(Long Term) Exposure:

Inhalation.....	Chronic exposure to organic solvents has been associated with various nervous system damage including permanent memory loss, loss of intellectual ability and loss of coordination. Exposure to triethylamine may cause minor transient blurring of vision against a general bluish haze and the appearance of halos around bright objects. The effect disappears spontaneously within a few hours of the end of an exposure. Animal studies showed that repeated or prolonged exposure caused kidney and liver damage at 50 ppm. Heart tissue was affected at 100 ppm.
Ingestion.....	May cause harmful disorders of the liver, heart and gastrointestinal tract.
Skin Contact.....	Prolonged contact may cause dermatitis by de-fatting of skin from prolonged or repeated contact.

Medical Conditions Aggravated by Exposure :

Any pre-existing disorders or diseases of the respiratory system, central nervous system, skin, eyes, and liver.

Target Organs Affected:

Central Nervous System, respiratory system, skin, eyes and blood

The components of this material are considered Carcinogenic by:

Not Known

National Toxicology Program (NTP)

The International Agency for Research on Cancer (IARC)

The Occupational Health and Safety Administration (OSHA)

Section 4: First Aid Measures

Eye Contact.....	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open to rinse completely. Get medical aid.
Ingestion.....	DO NOT INDUCE VOMITING. Potential for aspiration if

swallowed. Give plenty of water to drink. Get medical aid immediately. Never give anything by mouth to an unconscious person.

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

Skin Contact..... In case of contact, flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical aid if irritation, redness, swelling or skin pain develops and persists. Wash clothing before re-use.

**** Note to the Physician:.....** Heparin and its salts may act as anti-coagulants.

Section 5: Fire Fighting Measures

Flash Point Deg. C F Not determined. Lowest flashing component = 200°

Auto – Ignition Temperature..... Not determined

Upper Flammable Limit (% Vol)..... Not determined

Lower Flammable Limit (% Vol)..... Not determined

Extinguishing Media..... Use water spray, dry chemical, carbon dioxide or foam. Cool containers with water until well after the fire is out.

Hazardous Combustion Products..... Oxides of carbon and nitrogen and other toxic vapors

General Information:

Firefighters should wear full protective equipment and positive pressure self-contained breathing apparatus in pressure-demand mode. Vapors may form an explosive mixture with air. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low areas. Use water spray to cool fire-exposed container surfaces.

Section 6: Accidental Release Measures

Spill / Leak..... Use proper personal protective equipment as indicated in Section 8. Stop flow of material. Absorb with inert material (e.g. “oil dry”, sand, earth or other suitable absorbent), then place into a suitable container. Clean up spills immediately. Provide ventilation. Remove all sources of ignition. Use a spark-proof tool. Prevent from entering floor drains or sewers. Do not release any chemicals of any type to sewers or any waterways without proper authorization from government agencies. Make appropriate notifications as required.

Section 7: Handling and Storage

Handling Procedures..... Maintain good personal hygiene. This product, which contains and aqueous dispersion of a polymer, may be difficult to remove without injuring the skin if allowed to dry. Wash hands and face thoroughly after handling, and before eating, drinking or using tobacco products. Remove contaminated clothing and wash before re-use. Avoid contact with eyes, skin and clothing. Keep containers tightly closed. Use only with adequate ventilation. Avoid breathing vapor or mist.

Storage Needs..... Observe local regulations. Store in a cool (<150°F), dry, well-ventilated area away from incompatible materials. Keep

containers closed when not in use. Keep away from direct sunlight, heat, sparks or open flames. Keep from freezing.

Section 8: Exposure Controls / Personal Protection

When selecting personal protective equipment and clothing, follow all manufacturer specifications and recommendations that apply to your specific operations and processing conditions. Take into consideration all working conditions and all chemicals to be handled or processed.

Eye / Type.....	Wear splash-proof chemical safety goggles. Contact lenses should not be worn when working with chemicals.
Respiratory /Type.....	A half-face or full-face NIOSH-approved respirator with organic vapor cartridge is recommended where exposures exceed TLV.
Gloves / Type.....	Wear chemical resistant gloves such as butyl rubber or nitrile.
Clothing / Type.....	Wear long sleeved garment such as a lab coat to prevent skin exposure.
Other / Type.....	Facilities using or storing this product should be equipped with an eyewash facility and safety shower within 100 feet from work area.
Ventilation Requirements.....	Local exhaust ventilation is required to keep exposures below TLV.

Section 9: Physical and Chemical Properties

Appearance/Odor.....	Milky liquid, amine odor
Specific Gravity.....	Not determined
Vapor Pressure	Not determined
Vapor Density	Heavier than air
Evaporation Rate.....	Not determined
Boiling Point	Not determined
Solubility in Water (%W/W).....	Miscible
Freezing Point (deg. C <input type="checkbox"/> F <input type="checkbox"/>).....	Not determined
Melting Point (deg. C <input type="checkbox"/> F <input type="checkbox"/>).....	Not determined

Section 10: Stability and Reactivity

Hazardous Polymerization.....	Will not occur
Stability.....	Stable
Incompatibility.....	Strong oxidizing and reducing agents, acids and alkalis
Conditions to Avoid.....	Ignition sources, excess heat
Hazardous Products of Decomposition....	Oxides of carbon and nitrogen and other toxic vapors

Section 11: Toxicology Information

Irritancy of Material.....	May cause skin, eye and respiratory tract irritation.
Sensitizing Capability of Material.....	Not known
Carcinogenicity of Material.....	See Section 3
Teratogenicity	Not known.
Mutagenicity.....	Not known
Reproductive Effects.....	Not known
Synergistic Materials.....	Not known

Section 12: Ecology Information
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Environmental.....	Volatile and water-soluble.
Biodegradability.....	Not known

Section 13: Disposal Considerations
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Waste Disposal (RCRA)	Waste generators must consult with federal, state and local hazardous waste regulations to ensure complete and accurate classification.
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Section 14: Transport Information
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U. N. #	Not applicable
D.O.T. Classification	ORM-D (if packaged in containers less than 1L)

Section 15: Regulatory Information

<input checked="" type="checkbox"/> TSCA	<input checked="" type="checkbox"/> Components of this product are listed on the TSCA Inventory or are exempt.
<input checked="" type="checkbox"/> CERCLA	<input checked="" type="checkbox"/> Triethylamine: 5000 pounds
<input checked="" type="checkbox"/> SARA TITLE III	<input checked="" type="checkbox"/> This product is considered, under applicable definitions, to meet the following categories: <u>Section 311/312:</u> Immediate/acute health hazard, delayed/chronic health hazard <u>Section 313:</u> This product contains a toxic chemical(s) for routine annual toxic chemical release reporting under Section 313 (40 CFR 372). This information must be included in all MSDSs copied or distributed for this material: Triethylamine - 0.4%
<input checked="" type="checkbox"/> CALIFORNIA PROPOSITION 65	<input checked="" type="checkbox"/> This product does not contain chemicals listed as carcinogens or reproductive toxins at levels which could be subject to Proposition 65.
<input checked="" type="checkbox"/> CANADA	<input checked="" type="checkbox"/> <u>Domestic Substances List:</u> All ingredients are on DSL or NDSL. <u>WHMIS Ingredient Disclosure List:</u> Not known

EUROPEAN INFORMATION C Corrosive

N Dangerous for the environment

Xi Irritating

R34 Causes burns.

R50 Very toxic to aquatic organisms.

R36/37/38 Irritating to eyes, respiratory system and skin.

Section 16: Other Information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. This information is based on the material as manufactured, it may not be valid for this material if used in combination with any other materials or in any process. Surface Solutions Labs/Coatings2Go shall not be held liable for any damage resulting from handling or from contact with the product(s).