

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Antithrombogenic Coating

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Coating

#### 1.3. Details of the supplier of the safety data sheet

Coatings2Go  
399 Concord Street  
Carlisle MA, 01741 - USA  
T 1-978-369-7411 - F 978-371-9940  
[info@coatings2go.com](mailto:info@coatings2go.com) - [COATINGS2GO.COM](http://COATINGS2GO.COM)

#### 1.4. Emergency telephone number

Emergency number : 1-978-369-7411

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. Label elements

##### GHS-US labelling

No labelling applicable

#### 2.3. Other hazards

Other hazards not contributing to the classification : Not expected to produce significant adverse health effects when the recommended instruction for use are followed.

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Ammonia (Constituent)	(CAS No) 7664-41-7	< 0.6	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400
Triethylamine (Constituent)	(CAS No) 121-44-8	< 0.5	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air. Respiratory problems: consult a doctor/medical service.  
First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.  
First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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First-aid measures after ingestion : Do NOT induce vomiting. Give one or two glasses of water to drink. If swallowed, contact a poison control center or physician immediately. Never give anything by mouth to an unconscious person.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Inhalation of vapours may cause respiratory irritation.  
Symptoms/injuries after skin contact : May cause skin irritation.  
Symptoms/injuries after eye contact : May cause eye irritation.  
Symptoms/injuries after ingestion : May be harmful if swallowed.  
Chronic symptoms : Repeated or prolonged skin contact may cause irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>), water spray.  
Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NO<sub>x</sub>).  
Explosion hazard : Not determined.

### 5.3. Advice for firefighters

Firefighting instructions : The material will not support combustion unless the water has evaporated.  
Protection during firefighting : Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and full protective equipment. In case of contact with eyes or skin, rinse immediately with plenty of water.  
Other information : Irritating and highly toxic gases may be generated by thermal decomposition or combustion in a fire. Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NO<sub>x</sub>).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : No action shall be taken involving any personal risk without suitable training.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing vapors.  
Emergency procedures : Evacuate unnecessary personnel. Use personal protective equipment as required.

#### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection.  
Emergency procedures : Avoid breathing vapors. Ventilate area. Wear recommended personal protective equipment.

### 6.2. Environmental precautions

Stop spill if without risk. Clean up any spills as soon as possible, using an absorbent material to collect it. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Refer to all applicable national, international and local regulations or provisions.

### 6.3. Methods and material for containment and cleaning up

For containment : Stop spill if without risk. Move containers from spill area. Clean up any spills as soon as possible, using an absorbent material to collect it.  
Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.  
Other information : Collect all waste in suitable and labelled containers and dispose according to local legislation.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Use only with adequate ventilation.

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- Precautions for safe handling : This product which contains an aqueous dispersion of a polymer may be difficult to remove without injuring the skin if allowed to dry. Do not eat, drink or smoke when using this product. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
- Hygiene measures : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove/Take off immediately all contaminated clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Prevent freezing . Keep container tightly closed. Store in a cool, well-ventilated place. Store away from direct sunlight or other heat sources. Store away from incompatible materials.
- Incompatible materials : Strong oxidizing agents.
- Storage temperature : > 0 °C

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Triethylamine (121-44-8)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	4.1 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	12.4 mg/m <sup>3</sup>
USA ACGIH	ACGIH STEL (ppm)	3 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	25 ppm
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	60 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (STEL) (ppm)	15 ppm

  

Ammonia (7664-41-7)		
USA ACGIH	ACGIH TWA (ppm)	25 ppm
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	27 mg/m <sup>3</sup>
USA ACGIH	ACGIH STEL (ppm)	35 ppm 15 minutes
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	35 mg/m <sup>3</sup>

### 8.2. Exposure controls

- Appropriate engineering controls : No ACGIH TLV or OSHA PEL is assigned to this mixture. . Control of exposure to below the PEL for the ingredients may not be sufficient.
- Personal protective equipment : Personal protective equipment should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling the product. Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.



- Materials for protective clothing : Nitrile rubber.
- Hand protection : Wear suitable gloves resistant to chemical penetration.
- Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. . Chemical goggles or safety glasses.
- Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous
Colour	: Milky
Odour	: Amine-like
Odour threshold	: No data available
pH	: 7.5 - 9.5
Relative evaporation rate (butylacetate=1)	: < 1
Melting point	: No data available
Freezing point	: No data available
Boiling point	: ≈ 100 °C
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 1 g/ml
Solubility	: Miscible with water. Water:
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

Minimum ignition energy : <

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Prevent freezing.

#### 10.5. Incompatible materials

Strong oxidizers.

#### 10.6. Hazardous decomposition products

carbon oxides (CO and CO<sub>2</sub>). Nitrogen oxides.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified  
(Based on available data, the classification criteria are not met)

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Triethylamine (121-44-8)	
LD50 oral rat	730 mg/kg
LD50 dermal rabbit	580 mg/kg
LC50 inhalation rat (mg/l)	7.1 mg/l/4h
ATE US (oral)	730.00000000 mg/kg bodyweight
ATE US (dermal)	580.00000000 mg/kg bodyweight
ATE US (vapours)	7.10000000 mg/l/4h
ATE US (dust,mist)	1.50000000 mg/l/4h

Ammonia (7664-41-7)	
ATE US (oral)	500.00000000 mg/kg bodyweight
ATE US (gases)	700.00000000 ppmv/4h

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 7.5 - 9.5
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 7.5 - 9.5
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Symptoms/injuries after inhalation	: Inhalation of vapours may cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
Chronic symptoms	: Repeated or prolonged skin contact may cause irritation.
Other information	: Likely routes of exposure: inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : No known significant effects or critical hazards.

Triethylamine (121-44-8)	
LC50 fishes 1	43.7 mg/l Pimephales promelas - 96 h
EC50 Daphnia 1	200 mg/l 48 h
LC50 fish 2	150 mg/l Oncorhynchus mykiss
LOEC (chronic)	3202 mg/l Danio rerio - 7 d

### 12.2. Persistence and degradability

Antithrombogenic Coating	
Persistence and degradability	Readily biodegradable.

### 12.3. Bioaccumulative potential

Antithrombogenic Coating	
Bioaccumulative potential	Not established.

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Triethylamine (121-44-8)	
Log Pow	1.15

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer : No additional information available  
Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Collect all waste in suitable and labelled containers and dispose according to local legislation.  
Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations. Do not discharge into drains or the environment.  
Waste disposal recommendations : This material and its container must be disposed of in a safe way, and as per local legislation.  
Additional information : Do not re-use empty containers without proper cleaning or reconditioning. Empty containers contain product residue. Observe all hazard precautions. If container is to be disposed, ensure all product residues are removed prior to disposal. Remove all product residue from container and puncture or otherwise destroy the empty container before disposal.

## SECTION 14: Transport information

### DOT

Transport document description : Not regulated  
DOT NA no. : Not regulated  
DOT Proper Shipping Name : Not regulated

### Additional information

Other information : No supplementary information available.

### ADR

Transport document description :  
Class (ADR) : Not regulated

### Transport by sea

Class (IMDG) : Not subject

### Air transport

Class (IATA) : Not subject

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Antithrombogenic Coating	
EPA TSCA Regulatory Flag	All components are included or exempt from listing on the TSCA Inventory of Chemical Substances.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313	0.42 % Triethylamine, 0.56% Ammonia

### 15.2. International regulations

#### CANADA

All components of this product are listed on the Canada Domestic Substances List (DSL).

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

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### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

### 15.2.2. National regulations

#### Antithrombogenic Coating

All components of this product are listed on the Canada Domestic Substances List (DSL).

### 15.3. US State regulations

#### Triethylamine (121-44-8)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### Ammonia (7664-41-7)

U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Massachusetts - Right To Know List

## SECTION 16: Other information

Revision date	: 10/07/2014
Data sources	: SDS. Supplier.
Training advice	: Educate and train employees in the safe use and handling of this product. Follow all label instructions.
Other information	: The information contained in this Material Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications. We assigned HMIS ratings to this product based on the hazard(s) of its ingredients.

Full text of H-phrases: see section 16:

Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Gas 2	Flammable gases, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H221	Flammable gas
H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H400	Very toxic to aquatic life

### HMIS III Rating

Health	: 1* Slight hazard, chronic effect
Flammability	: 1 Slight Hazard
Physical	: 0 Minimal Hazard
Personal Protection	: X

SDS US (GHS HazCom 2012)

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