

Effective Date July 2012

1. IDENTIFICATION

Product identifier	2000 Series Part B Coating and Lining (All Colors)
Other means of identification	PANSEAL, 2000PB, 2000PC, 2000CTR, 2000PG
Recommended use	Not available
Recommended restrictions	None known
Manufacturer/Importer/Supplier/Distributor information	
Company Name:	Dynesic Technologies, Inc.
	Phone: 972-692-0962
After hours telephone number	Phone: 972-692-0962
Website	www.dynesic.com
Email	sphillips@dynesic.com
Emergency 24 hour telephone	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887
Operation hours information	7:00 a.m. to 7:00 p.m.

2. HAZARD(S) IDENTIFICATION

Physical hazards	Not classified
Health hazards	
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Sensitization, respiratory	Category 1
Sensitization, skin	Category 1
Specific target organ toxicity, single exposure	Category 1
Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified
OSHA defined hazards	Not classified
Label elements	



Signal word	Warning
Hazard statement	Causes eye irritation. Causes skin irritation.
Prevention	Wear protective gloves. Wear eye/face protection. Wash thoroughly after handling.
Response	Specific treatment see Section 4 of this SDS. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. <u>IF ON SKIN:</u> Wash with plenty of soap and water. <u>IF IN EYES:</u> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Store in accordance with local/regional/national regulations.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known
Supplemental information	Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical name	CAS number	%
BENZYL ALCOHOL	100-51-6	0 - 20
TRIETHYLENETETRAMINE	112-24-3	1 - 6
3-AMINOPROPYLTRIETHOXYSILANE	919-30-2	0 - 3
ETHYLENEDIAMINE	107-15-3	0 - 1
* Other components below reportable levels		59.84

4. FIRST AID MEASURES

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEETHODS

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. HANDLING and STORAGE

Precautions for safe handling

Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
ETHYLENEDIAMINE (CAS 107-15-3)	PEL	25 mg/m ³
US. ACGIH Threshold Limit Values		
ETHYLENEDIAMINE (CAS 107-15-3)	TWA	10 ppm
US. NIOSH: Pocket Guide to Chemical Hazards		
ETHYLENEDIAMINE (CAS 107-15-3)	TWA	25 mg/m ³ 10 ppm
US. AIHA Workplace Environmental Exposure Level (WEEL) Guides		
BENZYL ALCOHOL (CAS 100-51-6)	TWA	44.2 mg/m ³
TRIETHYLENETETRAMINE (CAS 112-24-3)	TWA	10 ppm 6 mg/m ³ 1 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

ETHYLENEDIAMINE (CAS 107-15-3) Can be absorbed through the skin.

US WEEL Guides: Skin designation

TRIETHYLENETETRAMINE (CAS 112-24-3) Can be absorbed through the skin.

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Other

Wear suitable protective clothing.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance

Liquid

Physical state

Liquid

Form

Liquid

Color

Golden to Light Amber

Odor

Ammoniacal, Amine-like

Odor threshold

Not available

pH

Alkaline

Melting point/freezing point

4.64 °F (-15.2 °C) estimated

Initial boiling point/boiling range

401.54 °F (205.3 °C) estimated

Flash point

> 199.4 °F (> 93.0 °C) estimated

Evaporation rate

Not available

Flammability (solid, gas)

Not available

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

3 % estimated

Flammability limit upper (%)

10 % estimated

Explosive limit - lower (%)

Not available

Explosive limit - upper (%)

Not available

Vapor pressure

Not available

Vapor density

Not available

Relative density

Not available

Solubility(ies) Solubility (water)

Partial

Partition coefficient (n-octanol/water)

Not available

Auto-ignition temperature

640 °F (337.78 °C) estimated

Decomposition temperature

Not available

Viscosity

Not available

Other information

Specific Gravity

0.95

10. STABILITY and REACTIVITY

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
2000 Series Part B Coating and Lining (All Colors) (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	5757.0889 mg/kg estimated
Inhalation		
LC50	Rat	2942.2148 mg/l, 8 Hours estimated
Oral		
LD50	Mouse	4648.6997 mg/kg estimated
	Rabbit	5707.897 mg/kg estimated
	Rat	3548.4497 mg/kg estimated
Other		
LD50	Mouse	2691.874 mg/kg estimated
	Rat	894.0341 mg/kg estimated

Components	Species	Test Results
BENZYL ALCOHOL (CAS 100-51-6)		
Acute		
Dermal		
LD50	Rabbit	2000 mg/kg
Inhalation		
LC50	Rat	1000 mg/l, 8 Hours
Oral		
LD50	Mouse	1580 mg/kg
	Rabbit	1940 mg/kg
	Rat	1230 - 3100 mg/kg
Other		
LD50	Mouse	950 mg/kg
	Rat	314 mg/kg

ETHYLENEDIAMINE (CAS 107-15-3)

Components	Species	Test Results
Acute		
Dermal		
LD50	Rabbit	730 mg/kg
Oral		
LD50	Guinea pig	470 mg/kg
	Rat	500 mg/kg
Other		
LD50	Mouse	200 mg/kg
	Rat	76 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available

Skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. This product contains crystalline silica. Silica is a known carcinogen; however in this encapsulated form the normal routes of exposure are unavailable.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified

Specific target organ toxicity - repeated exposure Not classified

Aspiration hazard Not available

Chronic effects Prolonged inhalation may be harmful.

12. ECOLOGICAL

Ecotoxicity The product contains a substance which is toxic to aquatic organisms.

Product	Species	Test Results
2000 Series Part B Coating and Lining (All Colors) (CAS Mixture)		
Fish LC50	Fish	474.4284 mg/l, 96 hours estimated.

Components	Species	Test Results
BENZYL ALCOHOL (CAS 100-51-6)		
Aquatic		
Fish LC50	Bluegill (Lepomis macrochirus)	10 mg/l, 96 hours

ETHYLENEDIAMINE (CAS 107-15-3)		
Aquatic		
Fish LC50	Fathead minnow (Pimephales promelas)	98.6 - 131.6 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available

Partition coefficient n-octanol / water (log Kow)

BENZYL ALCOHOL 1.1

ETHYLENEDIAMINE 2.04, at pH 13

Mobility in soil No data available

Other adverse effects No other adverse environmental effects are expected from this component.

Bioaccumulative potential No data available

Mobility in soil No data available

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions

When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. PHYSICAL and CHEMICAL PROPERTIES

DOT Not regulated as dangerous goods.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
 Not available
Class 55

15. REGULATORY INFORMATION

US federal regulations All components are on the U.S. EPA
TSCA Inventory List. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
 Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)

ETHYLENEDIAMINE (CAS 107-15-3) Listed

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

Chemical name	CAS number	Quantity	
ETHYLENEDIAMINE	107-15-3	5000 lbs.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)			Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Quantity	Threshold Planning quantity
ETHYLENEDIAMINE	107-15-3	5000	10000 lbs.

SARA 311/312 No
SARA 313 (TRI reporting) Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
 Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

ETHYLENEDIAMINE (CAS 107-15-3)
Safe Drinking Water Act (SDWA) Not regulated

US state regulations

US. Massachusetts RTK - Substance List

BENZYL ALCOHOL (CAS 100-51-6)
 ETHYLENEDIAMINE (CAS 107-15-3)
 TRIETHYLENETETRAMINE (CAS 112-24-3)

US. New Jersey Worker and Community Right-to-Know Act

ETHYLENEDIAMINE (CAS 107-15-3) 500 lbs.

US. Pennsylvania RTK - Hazardous Substances

BENZYL ALCOHOL (CAS 100-51-6)
 ETHYLENEDIAMINE (CAS 107-15-3)
 TRIETHYLENETETRAMINE (CAS 112-24-3)

US. Rhode Island RTK

ETHYLENEDIAMINE (CAS 107-15-3)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins

International Inventories

Country(s) or region/Inventory name	On inventory (yes/no)
* Australia Australian Inventory of Chemical Substances (AICS)	Yes
Canada Domestic Substances List (DSL)	Yes
Canada Non-Domestic Substances List (NDSL)	No
China Inventory of Existing Chemical Substances in China (IECSC)	No
Europe European Inventory of Existing Commercial Chemical Substances	Yes
Europe European List of Notified Chemical Substances (ELINCS)	No
Japan Inventory of Existing and New Chemical Substances (ENCS)	No
Korea Existing Chemicals List (ECL)	No
New Zealand New Zealand Inventory	No

Philippines Philippine Inventory of Chemicals and Chemical Substances
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

No
Yes

**A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).*

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.