Effective Date July 2012

1. IDENTIFICATION

Product identifier	2500 Series Part B Coating and Lining (All Colors)
Other means of identification	PANSEAL Paste Grade, 2500PG
Recommended use	Not available
Recommended restrictions	None known
Manufacturer/Importer/Supplier/Distributor information	
Company Name:	Dynesic Technologies, Inc.
After hours telephone number	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.

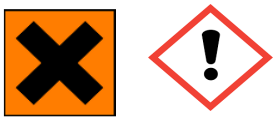
2. HAZARD(S) IDENTIFICATION

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

Prevention
Wear protective gloves. Wear eye/face protection. Wash thoroughly after handling.

Environmental hazards	Not classified
OSHA defined hazards	Not classified
Signal word	Warning

Label elements



Response
Specific treatment see Section 4 of this SDS. Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: 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
HIMS ® Rating:	Health:	1
	Flammability:	1
	Instability:	0

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

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.

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 MEATHODS

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 & 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/m3
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/m3 10 ppm
US. AIHA Workplace Environmental Exposure Level (WEEL) Guides		
BENZYL ALCOHOL (CAS 100-51-6)	TWA	44.2 mg/m3
TRIETHYLENETETRAMINE (CAS 112-24-3)	TWA	10 ppm 6 mg/m3 1 ppm

Biological limit values
No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls
Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
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 & 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 & 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.
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	Not available

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.

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.

** 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.
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 INFORMATION

Product	***Species***	***Test Results***
2500 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
Dermal		
LD50	Rabbit	5757.0889 mg/kg 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

Components	***Species***	***Test Results***
ETHYLENEDIAMINE (CAS 107-15-3)		
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

Ecotoxicity: This 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 (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: DISPOSAL CONSIDERATIONS

DOT Not regulated as dangerous goods.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.

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) Not listed
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

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
ETHYLENEDIAMINE (CAS 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	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	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.