

Safety Data Sheet

according to OSHA Hazard Communication 29 CFR Part 1910.1200

SECTION 1. Identification

Product Code 99-ABR-2001

Product Name: Urethane Brushing Activator

Supplied by: Engineered Marine Coatings, Inc

2134 Cainhoy Rd

Huger, SC 29450 United States

T 855 544 3648

E ask@quantumpaint.com www.quantumpaint.com

24 Hour Emergency:

CHEMTEL: 800-255-3924

NOTE: National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure

or accident involving chemicals

SECTION 2. Hazard(s) Identification

*** EMERGENCY OVERVIEW ***: Flammable liquid and vapor.

GHS Classification

Acute Tox. 4 Inhalation, Flam. Liq. 3, Skin Sens. 1, STOT SE 3 RTI

Symbol(s) of Product



Signal Word Warning

GHS HAZARD STATEMENTS

Acute Toxicity, Inhalation, category 4 H332 Harmful if inhaled.

Flammable Liquid, category 3 H226 Flammable liquid and vapor.

STOT, single exposure, category 3, RTI H335 May cause respiratory irritation.

Skin Sensitizer, category 1 H317 May cause an allergic skin reaction.

GHS PRECAUTIONARY STATEMENTS

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smokina.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor/physician if you feel unwell.
P321 Specific treatment (see first aid section on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use appropriate method to extinguish.
P403-P338

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

SECTION 3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Hexane, 1,6-Diisocyanato-,Homopolymer	28182-81-2	75-100	GHS07-GHS08	H317-332-334-335
Light aromatic solvent naphtha (petroleum)	64742-95-6	2.5-10	GHS02-GHS07-	H226-304-315-319-335-336-351
			GHS08	-373
Xylene	1330-20-7	0.1-1.0	GHS02-GHS07-	H226-304-315-319-332-335-351
			GHS08	-373
1,6-Hexamethylene Diisocyanate	822-06-0	0.1-1.0	GHS05-GHS06-	H302-314-317-330-334-335
			GHS08	

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

SECTION 4. First-Aid Measures



FIRST AID - EYE CONTACT: Remove contact lenses if worn. Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

FIRST AID - SKIN CONTACT: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately and clean shoes before reuse.

FIRST AID - INHALATION: Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

FIRST AID - INGESTION: Do not induce vomiting. Do not give liquids. Obtain emergency medical attention. Small amounts which accidentally enter mouth should be rinsed out until taste of it is gone.

SECTION 5. Fire-Fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid and vapor. Vapors/dust may cause flash fire or explosion. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning. Closed container may explode under extreme heat.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Do not use water. Water spray to cool containers or protect personnel. Use with caution. Avoid use of solid water streams.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Foq

SECTION 6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Recover by pumping (use an explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Collect spilled materials for disposal. Clean up spill area with a decontamination solution made up of 50% isopropyl alcohol, 45% water and 5% concentrated ammonia solution. The solution should cover the area for at least one hour then be collected for disposal. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)Wait at least 15 minutes after first application of neutralization solution. Cover the area with absorbent material and shovel this into approved metal container.. Check for residual surface contamination. Repeat applications of decontamination solution, with scrubbing, followed by absorbent until surface is decontaminated. Decontaminate the

spill area using a neutralization solution. Neutralization solution: mix equal amounts of the following to total two times the estimated spill volume: 1) mineral spirits 80%, VM&P naphtha 15% and houshold detergent 5% and 2) a 50/50 mixture of monoethanolamine and water. Absorb or pump off as much of the spilled material as possible. Allow the absorbent material to absorb the spill liquid. Shovel the absorbent material into an approved metal container. Do not fill the container more that 2/3 full to allow for expansion and do not tighten the lid on the container. Repeat application of absorbent material until all liquid has been removed from the surface. Apply lid loosely to metal waste container (do not tighten the lid because carbon dioxide and heat can be generated from the neutralization process). With lid still loosely in place, move container to an isolated, well ventialled area to allow the release of carbon dioxide. After 72 hours, seal the container and properly dispose of the waste and any contaminated equipment.

SECTION 7. Handling and Storage





HANDLING: Use only in a well ventilated area. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues. Avoid contact with eyes, skin, and clothing. Always open containers slowly to allow any excess pressure to vent. When transferring, follow proper grounding procedures. Use spark-resistant tools. Do not load into compartments adjacent to heated cargo. Material accumulates static charge (ignition source). Avoid breathing vapor, fumes or mist. After opening, purge container with nitrogen before reclosing. Use explosion proof equipment.

STORAGE: Containers can build up pressure if exposed to heat (fire). Keep away from heat, sparks, and flame. Keep container closed when not in use. Protect from direct sunlight. Store containers in a cool, well ventilated place. Material reacts with water. Storage under nitrogen atmosphere is recommended. Material is a static accumulator which has the potential of forming ignitable vapor-air mixtures in storage tanks.

SECTION 8. Exposure Controls/Personal Protection

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ingredients	with Occupational	Exposure	LIIIIIII
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Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Hexane, 1,6-Diisocyanato-,Homopolymer Light aromatic solvent naphtha (petroleum)	N.D.	ND.	N.D.	N.D.
	N.D.	N.D.	N.D.	N.D.
Xylene	100 ppm	150 ppm	100 ppm	N.D.
1,6-Hexamethylene Diisocyanate	0.005 ppm	N.D.	N.D.	N.D.

Personal Protection



RESPIRATORY PROTECTION: Wear a MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.



SKIN PROTECTION: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield. Wear impervious gloves to prevent contact with the skin. Wear protective gear as needed - apron, suit, boots. Wear long sleeves when contact is likely to occur.



EYE PROTECTION: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).



OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



HYGENIC PRACTICES: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Avoid breathing vapors. Do not eat, drink, or smoke in areas where this material is used.

SECTION 9. Physical and Chemical Properties

Physical State: Appearance: Liquid Liquid Odor: **Odor Threshold:** N.D. Typical Density, g/cm3: pH: 1.149 N.D. Freeze Point. °F: Viscosity: N.D. N.D. Solubility in Water: N.D. **Explosive Limits, vol%:** 0.9 - 6.2322 - 397 Boiling Range, °F: Flash Point, °F: 80 **Evaporation Rate:** Auto-ignition Temp., °F: Not determined N.D. Vapor Pressure: Vapor Density: N.D. N.D.

(See "Other information" Section for abbreviation legend)

SECTION 10. Stability and Reactivity

STABILITY: No Information

CONDITIONS TO AVOID: Avoid impact, friction, heat, sparks, flame and source of ignition.

INCOMPATIBILITY: Keep away from acids. Prevent contact with strong oxidizing agents. Keep away from strong bases. Avoid contact with amines. Avoid contact with moisture and/or water. Avoid contact with concentrated sulfuric or nitric acid. Avoid contact with alcohols. Avoid the use of copper alloys in contact with this material.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases/fumes are given off during burning or thermal decomposition. During combustion carbon monoxide may be formed. During combustion carbon dioxide may be formed. Decomposition releases nitrogen oxides. Isocyanate-containing vapors are a hazardous decomposition product.

HAZARDOUS POLYMERIZATION: No Information

SECTION 11. Toxicological Information



Information on Toxicological Effects

Primary Route(s) of Entry: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Causes delayed lung injury. May cause allergic respiratory reaction. Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, lightheadedness, and stupor (CNS depression). Prolonged exposure to high concentrations can cause central neurological depression and EEG abnormalities. Certain individuals will develop sensitization (chemical asthma) which will result in reactions at levels below the TLV. Conditions aggravated by exposure include asthma and other respiratory disorders (bronchitis, emphysema, hyperreactivity)Breathing in the material may irritate the mucous membranes of the nose, throat bronchi and lungs. Danger of serious damage to health by prolonged exposure through inhalation. Vapor/aerosol concentrations above recommended exposure levels are irritating to eyes and respiratory tract, may cause headache, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Overexposure may cause upper respiratory tract irritation, headaches, cyanosis, blood serum changes, central nervous system damage and narcosis. Symptoms may include runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial sparm and pulmonary edema (fluid in lungs). Chemical or hypersensitivty pneumonitis, with flu-like symptoms (eg. fever, chills) have also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material. Personnel with pre-existing skin disorders should avoid contact with this product. Symptoms include redness, itching and swelling. May cause necrosis and possible scarring.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Symptoms may include stinging, tearing, redness and swelling. EFFECTS OF OVEREXPOSURE - INGESTION: Irritating to mouth, throat, and stomach. Ingestion may result in nausea, vomiting, diarrhea and pain. May cause dizziness and drowsiness and/or stupor. Ingestion may cause gastrointestinal tract irritation. May cause nausea and vomiting.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause delayed lung damage. Overexposure may cause nervous system damage. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes. Overexposure to vapors or mist may trigger asthma attacks in suspected individuals. Very high exposure (confined spaces/abuse) to light hydrocarbons may result in abnormal heart rhythm.

Carcinogenicity

CAS-No.	<u>Name</u>	IARC	<u>NTP</u>
28182-81-2	Hexane, 1,6-Diisocyanato-,Homopolymer	3- Not classifiable as to its carcinogenicity to humans.	Not Listed
64742-95-6	Light aromatic solvent naphtha (petroleum)	3- Not classifiable as to its carcinogenicity to humans.	Not Listed
Mixture	Modified polysiloxane	3- Not classifiable as to its carcinogenicity to humans.	Not Listed
Mixture	Acrylic resin mixture	3- Not classifiable as to its carcinogenicity to humans.	Not Listed
95-63-6	1,2,4 trimethylbenzene	3- Not classifiable as to its carcinogenicity to humans.	Not Listed
1330-20-7	Xylene	3- Not classifiable as to its carcinogenicity to humans.	Not Listed
822-06-0	1,6-Hexamethylene Diisocyanate	3- Not classifiable as to its carcinogenicity to humans.	Not Listed

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	<u>Name</u>	Oral LD50, mg/kg	Dermal LD50, mg/kg	Vapor LC50, mg/L
28182-81-2	Hexane, 1,6-Diisocyanato-,Homopolymer	>2500	>2000	>10
64742-95-6	Light aromatic solvent naphtha (petroleum)	3492	>3160	>20
1330-20-7	Xylene	>3500	>4200	>20
822-06-0	1,6-Hexamethylene Diisocyanate	746	>7000	0.124

SECTION 12. Ecological Information

ECOLOGICAL INFORMATION: No Information

SECTION 13. Disposal Considerations



For more guidance and information contact our Waste Services Division at (262) 658-4000.

Always dispose of any waste in accordance with all local, state, and federal regulations.

DISPOSAL METHOD: Dispose of waste in accordance with all local, state and federal regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only noncombustible material for clean-up. Recover by pumping (use an explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Collect spilled materials for disposal. Clean up spill area with a decontamination solution made up of 50% isopropyl alcohol, 45% water and 5% concentrated ammonia solution. The solution should cover the area for at least one hour then be collected for disposal. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) Wait at least 15 minutes after first application of neutralization solution. Cover the area with absorbent material and shovel this into approved metal container.. Check for residual surface contamination. Repeat applications of decontamination solution, with scrubbing, followed by absorbent until surface is decontaminated. Decontaminate the spill area using a neutralization solution. Neutralization solution: mix equal amounts of the following to total two times the estimated spill volume: 1) mineral spirits 80%, VM&P naphtha 15% and houshold detergent 5% and 2) a 50/50 mixture of monoethanolamine and water. Absorb or pump off as much of the spilled material as possible. Allow the absorbent material to absorb the spill liquid. Shovel the absorbent material into an approved metal container. Do not fill the container more that n 2/3 full to allow for expansion and do not tighten the lid on the container. Repeat application of absorbent material until all liquid has been removed from the surface. Apply lid loosely to metal waste container (do not tighten the lid because carbon dioxide and heat can be generated from the neutralization process). With lid still loosely in place, move container to an isolated, well ventialled area to allow the release of carbon dioxide. After 72 hours, seal the container and properly dispose of the waste and any contaminated equipment.

SECTION 14. Transport Information

DOT Proper Shipping

Name:

Paint related material

Packing Group: III

DOT Hazard Class: 3 Hazard SubClass: No Information

DOT UN/NA Number: UN1263 Resp. Guide Page: 128

SECTION 15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	<u>CAS-No.</u>
1,2,4 trimethylbenzene	95-63-6
Xylene	1330-20-7
1,6-Hexamethylene Diisocyanate	822-06-0
Ethylbenzene	100-41-4
Cumene	98-82-8
Toluene	108-88-3
Benzene	71-43-2

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical NameCAS-No.Modified polysiloxaneMixtureAcrylic resin mixtureMixture

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer.

 Chemical Name
 CAS-No.

 Ethylbenzene
 100-41-4

 Cumene
 98-82-8

 Benzene
 71-43-2

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

Chemical Name CAS-No.

Toluene 108-88-3 Benzene 71-43-2

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: No Information

SECTION 16. Other Information

Revision Date: 10/13/2017 Supersedes Date: 10/13/2017

Datasheet produced by: EH&S - Regulatory Department

HMIS Ratings:

Health:	1	Flammability:	3	Reactivity:	0	Personal Protection:	X

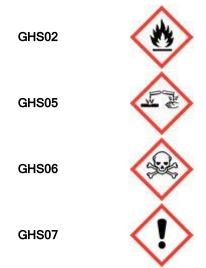
Volatile Organic Compounds, gr/ltr: 38

DISCLAIMER: THE VOLATILE ORGANIC COMPOUND (VOC) CONTENT REPORTED HEREIN, IF ANY, IS BASED ON A MATERIAL VOC CALCULATION. NOTE THAT SEVERAL METHODS ARE USED FOR CALCULATING VOC CONTENT AND THAT STANDARDS/REQUIREMENTS REGARDING VOC CONTENT VARY BY LOCATION/JURISDICTION. ACCORDINGLY, EMCO MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS MATERIAL'S COMPLIANCE WITH VOC STANDARDS/REQUIREMENTS APPLICABLE IN LOCATIONS/JURISDICTIONS WHERE THIS MATERIAL MAY BE SOLD OR USED.

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS may not be applicable. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.