The information contained herein is based upon data considered true and accurate. However, OMEGA makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user’s consideration, investigation and verification. Since the use and conditions of use of this information and the material described herein are not within the control of OMEGA, OMEGA assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to OMEGA’s Terms and Conditions of Sale, including those limiting warranties and remedies contained herein, it is the responsibility of the user to determine whether any use of this data and information is in accordance with applicable federal, state or local laws and regulations.
SECTION 5. FIREFIGHTING MEASURES

AUTOIGNITION: Not Available
FLASH POINT: >200°F
EXTINGUISHING MEDIA: Water spray or fog, CO2, dry chemical.
SPECIAL FIREFIGHTING PROCEDURES: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Cool exposed equipment with water spray.

FIRE & EXPLOSION HAZARDS: Combustible at high temperature.
HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, unknown hydrocarbons.
LOWER EXPLOSION LIMIT (%): Not Determined
UPPER EXPLOSION LIMIT (%): Not Determined

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES: Evacuate immediate area and dike area to contain spill. Extinguish open flames and ignition sources in the immediate area. Wear proper protective clothing, gloves, and splash goggles. Absorb as much of spilled material as possible with rags, sand, vermiculite or other absorbent material. Scrape absorbed material into designated waste containers. Wash area thoroughly with detergent and rinse, taking care to prevent runoff into drains or other waterways. All spilled material, absorbed waste and wash water must be disposed of in accordance with all Federal, state and local regulations.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

SECTION 7. HANDLING AND STORAGE

STORAGE TEMPERATURE: 25°C
SHELF LIFE (Days): 365
HANDLING/STORAGE: Keep containers properly sealed and store indoors in a well ventilated area. Keep away from heat and sources of ignition.
SENSITIVITY TO STATIC ELECTRICITY: No
SPECIAL SENSITIVITY: No
SENSITIVITY TO MECHANICAL IMPACT: No

HMIS® HAZARD RATINGS
HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risk, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs by OSHA’s 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material “as supplied”, and the second represents the material “in use”
* = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMITS

Mfg. Working

ACGIH OSHA Standard

Manufacturer:

Aluminum Oxide 10 mg/m³ PEL (total dust); 5 mg/m³ PEL (respirable fraction, listed under Particulates not otherwise regulated)

5 mg/m³ TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m³ TWA (total dust)

Silicon Dioxide 10 mg/m³ PEL (total dust); 5 mg/m³ PEL (respirable fraction, listed under Particulates not otherwise regulated)

15 mg/m³ TWA (total dust)

Butyl Glycidyl Ether Skin - potential significant contribution to overall exposure by 270 mg/m³ TWA

3 ppm TWA

VENTILATION REQUIREMENTS:

Local mechanical ventilation. Sufficient to keep vapors below TLV exposure limits.

EYE PROTECTION REQUIREMENTS:

Wear close fitting goggles or full face shield.

GLOVE REQUIREMENTS:

Neoprene or natural rubber is recommended.

CLOTHING REQUIREMENTS:

Wear protective equipment to comply with good occupational hygiene practice.

CHANGE/REMOVAL OF CLOTHING:

Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS:

Showers and eye washing equipment must be provided at handling points.

RESPIRATOR REQUIREMENTS:

Respiratory protection required if the exposure level is unknown or has been measured and found to exceed the published exposure limits.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PREVIOUS PAGE

Page 6 of 8

MATERIAL SAFETY DATASHEET

One Omega Drive

Stamford, CT 06907-0047

omega.com

e-mail: info@omega.com

COMPONENT EXPOSURE LIMITS

OSHA

Mfg. Working

Standard

Aluminum Oxide 10 mg/m³ PEL (total dust); 5 mg/m³ PEL (respirable fraction, listed under Particulates not otherwise regulated)

5 mg/m³ TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m³ TWA (total dust)

Silicon Dioxide 10 mg/m³ PEL (total dust); 5 mg/m³ PEL (respirable fraction, listed under Particulates not otherwise regulated)

15 mg/m³ TWA (total dust)

Butyl Glycidyl Ether Skin - potential significant contribution to overall exposure by 270 mg/m³ TWA

3 ppm TWA

3.5 mg/m³ TWA

VENTILATION REQUIREMENTS:

Local mechanical ventilation. Sufficient to keep vapors below TLV exposure limits.

EYE PROTECTION REQUIREMENTS:

Wear close fitting goggles or full face shield.

GLOVE REQUIREMENTS:

Neoprene or natural rubber is recommended.

CLOTHING REQUIREMENTS:

Wear protective equipment to comply with good occupational hygiene practice.

CHANGE/REMOVAL OF CLOTHING:

Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS:

Showers and eye washing equipment must be provided at handling points.

RESPIRATOR REQUIREMENTS:

Respiratory protection required if the exposure level is unknown or has been measured and found to exceed the published exposure limits.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE:

Mixture

PHYSICAL FORM:

Paste

COLOR:

Black

ODOR:

Slight

ODOR THRESHOLD:

None Established

OXIDIZING PROPERTIES:

Not Applicable

BOILING POINT:

Not Determined

SOLUBILITY IN WATER:

Not Determined

PARTITION COEFFICIENT (n-octanol/water):

Not Determined

SPECIFIC GRAVITY (Water=1):

2.4

EVAPORATION RATE:

Not Determined

VAPOR PRESSURE (mmHg):

<0.1 @ 25°C

VAPOR DENSITY (air=1):

>1.0

VOLATILES:

<18.8 g/liter

VOLATILE ORGANIC COMPOUNDS:

Not Available

AUTOIGNITION:

Flash Point:

>200°F

SECTION 15. REGULATORY INFORMATION

TSCA:

All components are on the TSCA inventory.

Canadian Domestic Substance List (DSL):

Is on DSL

China (IECSC):

On the IECSC Inventory.

Australia (AICS):

On the AICS Inventory.

Korea (KECI):

On the KECI Inventory.

Philippines (PICCS):

On the PICCS Inventory.

SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372)

Aluminum Oxide 1344-28-1

CALIFORNIA PROPOSITION 65

WARNING: This product contains following chemicals that are known to the state of California to cause cancer, birth defects or other reproductive harm.

Unless a concentration is specified in Section 2 of the MSDS, the below chemical/s are present in trace amounts.

COMPONENT

CAS NUMBER

Carbon Black 1333-86-4

Phenyl Glycidyl Ether 122-60-1

Epichlorohydrin 106-89-8

3.5 mg/m³ TWA

3.5 mg/m³ TWA
SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable
STABILITY DETAIL: Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID: Amines, Acids, Strong oxidizers, Mercaptans, Imidazoles
CONDITIONS TO AVOID: Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, unknown hydrocarbons
HAZARDOUS POLYMERIZATION CONDITIONS: Hazardous polymerization has not been reported to occur under normal temperature and pressures.

SECTION 11. TOXICOLOGICAL INFORMATION

Route of Entry:
- Eye Contact
- Skin Contact
- Inhalation
- Ingestion

Carcinogen IARC NTP OSHA SUBSTANCE SPECIFIC REGULATION

COMPONENT
- Carbon Black

CHRONIC (Long Term) EFFECTS OF EXPOSURE:
A component(s) of this product was found to be positive in one or more mutagenetic assays.

TARGET ORGANS:
- Eyes; Skin; Respiratory system

SKIN SENSITIZATION:
Sensitizer. May cause allergic reaction.

PRODUCT TOXICOLOGY:
This data sheet is based on a consideration of the properties of the constituents.

COMPONENT ORAL TOXICITY NOTES ON ORAL TOXICITY
- Aluminum Oxide
- Epoxy Resin
- Butyl Glycidyl Ether
- Carbon Black

COMPONENT DERMAL TOXICITY NOTES ON DERMAL TOXICITY
- Aluminum Oxide
- Epoxy Resin
- Butyl Glycidyl Ether
- Carbon Black

COMPONENT INHALATION TOXICITY NOTES ON INHALATION TOXICITY
- Aluminum Oxide
- Epoxy Resin
- Butyl Glycidyl Ether
- Carbon Black

SECTION 12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT: Unknown
POTENTIAL TO BIOACCUMULATE: Unknown
ECOTOXICITY: Unknown
AQUATIC TOXICITY: None Established

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Disposal should be in accordance with local, state, or national legislation.
EMPTY CONTAINER WARNINGS: Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.
SECTION 10. STABILITY AND REACTIVITY

STABILITY:
Stable

STABILITY DETAIL:
Material is stable under normal temperatures and pressures.

MATERIALS TO AVOID:
Amines, Acids, Strong oxidizers, Mercaptans, Imidazoles

CONDITIONS TO AVOID:
Elevated temperatures

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon monoxide, carbon dioxide, unknown hydrocarbons

HAZARDOUS POLYMERIZATION CONDITIONS:
Hazardous polymerization has not been reported to occur under normal temperature and pressures.

SECTION 11. TOXICOLOGICAL INFORMATION

Route of Entry:
Eye Contact; Skin Contact; Inhalation; Ingestion

CARCINOGEN IARC NTP OSHA SUBSTANCE SPECIFIC REGULATION
COMPONENT (group) Yes (2B) No Not listed

CHRONIC (Long Term) EFFECTS OF EXPOSURE:
A component(s) of this product was found to be positive in one or more mutagenetic assays.

TARGET ORGANS:
Eyes; Skin; Respiratory system

SKIN SENSITIZATION:
Sensitizer. May cause allergic reaction.

PRODUCT TOXICOLOGY:
This data sheet is based on a consideration of the properties of the constituents.

COMPONENT ORAL TOXICITY NOTES ON ORAL TOXICITY
Aluminum Oxide
Epoxy Resin Oral LD50: Rat > 5000 mg/kg Unlikely to be hazardous if swallowed.
Butyl Glycidyl Ether Oral LD50: Rat 1000 mg/kg May cause nausea, vomiting and diarrhea
Carbon Black Oral LD50: Rat > 8000 mg/kg Unlikely to be hazardous if swallowed.

COMPONENT DERMAL TOXICITY NOTES ON DERMAL TOXICITY
Aluminum Oxide Slight/mild irritant
Epoxy Resin
Butyl Glycidyl Ether Severe/very severe irritant.
Carbon Black Particulates may scratch eye surfaces and cause mechanical irritation.

COMPONENT INHALATION TOXICITY NOTES ON INHALATION TOXICITY
Aluminum Oxide Dust may cause irritation.
Epoxy Resin Unlikely to be hazardous by inhalation because of the low vapor pressure of the material at ambient temperature.
Butyl Glycidyl Ether Inhalation LC50 Vapor or aerosol, if generated, can cause irritation of the eyes, nose, and respiratory tract.
Carbon Black Inhalation LC50 (1 hr): Rat 6750 mg/m³ Inhalation of high concentrations of dust may cause irritation and discomfort. Repeated exposure to dusts may aggravate pre-existing respiratory conditions. Prolonged or frequent breathing of excess dust may cause an adverse respiratory effect.

COMPONENT NOTES ON EYE IRRITATION
Aluminum Oxide Slight/mild irritant. Particulates may scratch eye surfaces and cause mechanical irritation.
Epoxy Resin
Butyl Glycidyl Ether Severe/very severe irritant.
Carbon Black Particulates may scratch eye surfaces and cause mechanical irritation.

SECTION 12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT: Unknown
POTENTIAL TO BIOACCUMULATE: Unknown
ECOTOXICITY: Unknown
AQUATIC TOXICITY: None Established

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:
Disposal should be in accordance with local, state, or national legislation.

EMPTY CONTAINER WARNINGS:
Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMITS

Mfg. Working

ACGIH OSHA Standard Manufacturer:

Aluminum Oxide 10 mg/m³ PEL (total dust); 5 mg/m³ PEL (respirable fraction, listed under Particulates not otherwise regulated)

OSHA 15 mppcf TWA (respirable fraction); 5 mg/m³ TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m³ TWA (total dust)

Butyl Glycidyl Ether Skin - potential significant contribution to overall exposure by the cutaneous route, 3 ppm TWA

Carbon Black 3.5 mg/m³ TWA

VENTILATION REQUIREMENTS: Local mechanical ventilation. Sufficient to keep vapors below TLV exposure limits.

EYE PROTECTION REQUIREMENTS: Wear close fitting goggles or full face shield.

GLOVE REQUIREMENTS: Neoprene or natural rubber is recommended.

CLOTHING REQUIREMENTS: Wear protective equipment to comply with good occupational hygiene practice.

CHANGE/REMOVAL OF CLOTHING: Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS: Showers and eye washing equipment must be provided at handling points.

RESPIRATOR REQUIREMENTS: Respiratory protection required if the exposure level is unknown or has been measured and found to exceed the published exposure limits.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

SECTION 5. FIREFIGHTING MEASURES

AUTOIGNITION: Not Available
FLASH POINT: >200°F
EXTINGUISHING MEDIA: Water spray or fog, CO2, dry chemical.
SPECIAL FIREFIGHTING PROCEDURES: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Cool exposed equipment with water spray.

FIRE & EXPLOSION HAZARDS: Combustible at high temperature.
HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, unknown hydrocarbons.
LOWER EXPLOSION LIMIT (%): Not Determined
UPPER EXPLOSION LIMIT (%): Not Determined

SECTION 6 ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES: Evacuate immediate area and dike area to contain spill. Extinguish open flames and ignition sources in the immediate area. Wear proper protective clothing, gloves, and splash goggles. Absorb as much of spilled material as possible with rags, sand, vermiculite or other absorbent material. Scrape absorbed material into designated waste containers. Wash area thoroughly with detergent and rinse, taking care to prevent runoff into drains or other waterways. All spilled material, absorbed waste and wash water must be disposed of in accordance with all Federal, state and local regulations.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

SECTION 7. HANDLING AND STORAGE

STORAGE TEMPERATURE: 25°C
SHELF LIFE (Days): 365
HANDLING/STORAGE: Keep containers properly sealed and store indoors in a well ventilated area. Keep away from heat and sources of ignition.
SENSITIVITY TO STATIC ELECTRICITY: No
SPECIAL SENSITIVITY: No
SENSITIVITY TO MECHANICAL IMPACT: No

SECTION 16. OTHER INFORMATION

HMIS® HAZARD RATINGS
HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risk, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs by OSHA’s 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material “as supplied”, and the second represents the material “in use”

* chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

HEALTH FLAMMABILITY PHYSICAL HAZARD
*2 1 0
MSDS Date December 14, 2010
For Information Contact: OMEGA Engineering, Inc.
(203) 359-1660
The information contained herein is based upon data considered true and accurate. However, OMEGA makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user’s consideration, investigation and verification. Since the use and conditions of use of this information and the material described herein are not within the control of OMEGA, OMEGA assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to OMEGA’s Terms and Conditions of Sale, including those limiting warranties and remedies contained herein, it is the responsibility of the user to determine whether any use of this data and information is in accordance with applicable federal, state or local laws and regulations.

© Copyright 2012 OMEGA ENGINEERING, INC., ALL RIGHTS RESERVED. PRINTED IN U.S.A.
SECTION 1. IDENTIFICATION

PRODUCT (TRADE) NAME: OMEGBOND® 200 Cement (Part B, Catalyst)
GENERIC NAME OR FAMILY: Catalyst for Epoxy Resin
SUPPLIER: OMEGA Engineering, Inc.
P. O. Box 4047
Stamford, CT 06907
TELEPHONE: (203) 359-1660

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
DANGER! CAUSES SEVERE OR PERMANENT DAMAGE TO EYES. SEVERE EYE IRRITANT. HARMFUL IF SWALLOWED. SEVERE SKIN IRRITANT. RESPIRATORY SENSITIZER. SKIN SENSITIZER. Tan Liquid Pungent Odor
EYE: Severe/very severe irritant. May cause permanent damage if eye is not immediately irrigated.
SKIN CONTACT: Repeated and/or prolonged contact may result in severe irritation. Repeated and/or prolonged contact may cause skin sensitization.
INHALATION: Respiratory irritant. Possible respiratory sensitizer.
INGESTION: Will cause irritation to mouth, throat, and stomach.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY: Anhydrides
COMPONENT: CAS NUMBER CONCENTRATION (% by weight)
Methylhexahydrophthalic anhydride 25550-51-0 35 - 50
Benzenetetracarboxylic-1, 2, 4, 5-Dianhydride 89-32-7 35 - 50

SECTION 4. FIRST AID MEASURES

EYE: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.
SKIN CONTACT: Flush exposed areas thoroughly with soap and water until all chemical is removed. Remove contaminated clothing and launder before reuse. Obtain immediate medical attention.
INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.
INGESTION: DO NOT attempt to give anything by mouth to an unconscious person. If individual is conscious, give water to dilute stomach contents. Get prompt medical attention.
SECTION 5. FIREFIGHTING MEASURES

AUTOIGNITION: Not Available
FLASH POINT: 310°F (Pensky-Martens Closed Tester)
EXTINGUISHING MEDIA: CO2; Dry Chemical; Water Fog
SPECIAL FIREFIGHTING PROCEDURES: A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Cool exposed equipment with water spray.
FIRE & EXPLOSION HAZARDS: Combustible at high temperatures.
HAZARDOUS COMBUSTION PRODUCTS: Combustion will evolve toxic and irritant vapors. Carbon monoxide, carbon dioxide, unknown hydrocarbons.
LOWER EXPLOSION LIMIT (%): Not Applicable
UPPER EXPLOSION LIMIT (%): Not Applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES: Ventilate area. May cause allergic skin reaction. Use suitable protective clothing. Absorb spillages onto sand, earth or any suitable absorbent material. Do not allow to enter drains, sewers or watercourses. Scrape absorbed material into proper waste containers. Wash area with soap and water; prevent entry of wash water into drains or other waterways. Dispose of wastes and water in accordance with all applicable federal, state, and local regulations.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

SECTION 7. HANDLING AND STORAGE

STORAGE TEMPERATURE: 25°C
SHELF LIFE (Days): 365
HANDLING/STORAGE: Keep containers properly sealed and store indoors in a well ventilated area. Store in cool, dry place. Good industrial hygiene should be practiced.
SENSITIVITY TO STRATIC ELECTRICITY: No
SPECIAL SENSITIVITY: Avoid moisture contamination.
SENSITIVITY TO MECHANICAL IMPACT: No

HMIS HAZARD RATINGS

HMIS ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risk, and 4 representing significant hazards or risks. Although HMIS ratings are not required on MSDSs by OSHA’s 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS. These ratings are to be used only with a fully implemented HMIS program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS Implementation Manual.

When two ratings are provided for Health, the first represents the material “as supplied”, and the second represents the material “in use”

* = chronic health hazard

HMIS is a registered trademark of the National Paint and Coatings Association (NPCA).
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION REQUIREMENTS: Use in a well-ventilated area. Local mechanical ventilation.

EYE PROTECTION REQUIREMENTS: Wear eye/face protection. Safety spectacles/goggles/full face shield.

GLOVE REQUIREMENTS: Employees must wear appropriate protective gloves to prevent contact with this substance.

CLOTHING REQUIREMENTS: Employees must wear appropriate clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn. Rubber boots and apron if exposure is severe.

CHANGE/REMOVAL OF CLOTHING: Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS: Wash exposed areas with soap and water. Showers and eye washing equipment must be provided at handling points.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

MIXTURE

PHYSICAL FORM: Liquid

COLOR: Tan

ODOR: Pungent

ODOR THRESHOLD: Not Available

OXIDIZING PROPERTIES: Not Applicable

SOLUBILITY IN WATER: Slightly Soluble

PARTITION COEFFICIENT (n-octanol/water): Not Determined

SPECIFIC GRAVITY (Water=1): 1.35

EVAPORATION RATE: Negligible

VAPOR PRESSURE (mmHg): Negligible @ 25°C

VAPOR DENSITY (air=1): >1.0

VOLATILES: <0.5%/wt

VOLATILE ORGANIC COMPOUNDS: Negligible

AUTOIGNITION: Not Available

FLASH POINT: 310°F (Pensky-Martens Closed Tester)
SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable
STABILITY DETAIL: Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID: Strong oxidizers, Bases
CONDITIONS TO AVOID: Avoid moisture contamination. Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, unknown hydrocarbons. Combustion will evolve toxic and irritant vapors. Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY: Skin Contact; Inhalation; Ingestion

COMPONENT INHALATION TOXICITY NOTES ON INHALATION TOXICITY
Methylhexhydrophthalic Respiratory irritant. Respiratory sensitizer.
Anhydride
Benzenetetracarbonxylic Inhalation LC50 (4 hr); May cause irritation to eyes and respiratory
1, 2, 4, 5-Dianhydride Rat >150 mg/m3 system. Exposure to high concentrations may produce lung damage. Possible respiratory sensitizer.

COMPONENT NOTES ON EYE IRRITATION
Methylhexhydrophthalic Severe/very severe irritant.
Anhydride.
Benzenetetracarbonxylic Severe/very severe irritant.
1, 2, 4, 5-Dianhydride

SECTION 12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT: Do not allow to enter drains, sewers, or watercourses.
MOBILITY: Slightly Soluble
POTENTIAL TO BIOACCUMULATE: Unknown
AQUATIC TOXICITY: None Established

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Disposal should be in accordance with local, state, or national legislation.
EMPTY CONTAINER WARNINGS: Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.
SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable
STABILITY DETAIL: Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID: Strong oxidizers, Bases
CONDITIONS TO AVOID: Avoid moisture contamination. Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, unknown hydrocarbons. Combustion will evolve toxic and irritant vapors. Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY: Skin Contact; Inhalation; Ingestion
CARCINOGEN IARC NTP OSHA SUBSTANCE SPECIFIC REGULATION
COMPONENT There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.
CHRONIC (Long Term) EFFECTS OF EXPOSURE
TARGET ORGANS: Eyes; Skin; Respiratory system
RESPIRATORY SENSITIZATION: Sensitizer. May cause allergic reaction.
SKIN SENSITIZATION: Sensitizer. May cause allergic reaction.
PRODUCT TOXICOLOGY PRODUCT INFORMATION: A moderate irritant to skin, eyes, respiratory system and gastrointestinal tract.
COMPONENT ORAL TOXICITY
Methylhexahydrophthallic Anhydride
Benzenetetracarbonxylic 1, 2, 4, 5-Dianhydride
NOTES ON ORAL TOXICITY Irritant and may cause nausea and vomiting. Ingestion may cause irritation of the gastrointestinal tract.
COMPONENT DERMAL TOXICITY
Methylhexahydrophthallic Anhydride
Benzenetetracarbonxylic 1, 2, 4, 5-Dianhydride
NOTES ON DERMAL TOXICITY Irritating to the skin. Repeated and/or prolonged contact may cause skin sensitization. Can cause severe irritation on moist skin. Repeated and/or prolonged contact may cause skin sensitization.

SECTION 12. ECOLOGICAL INFORMATION

POTENTIAL EFFECT ON ENVIRONMENT: Do not allow to enter drains, sewers, or watercourses.
MOBILITY: Slightly Soluble
POTENTIAL TO BIOACCUMULATE: Unknown
AQUATIC TOXICITY: None Established

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Disposal should be in accordance with local, state, or national legislation.
EMPTY CONTAINER WARNINGS: Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION REQUIREMENTS: Use in a well-ventilated area. Local mechanical ventilation.

EYE PROTECTION REQUIREMENTS: Wear eye/face protection. Safety spectacles/goggles/full face shield.

GLOVE REQUIREMENTS: Employees must wear appropriate protective gloves to prevent contact with this substance.

CLOTHING REQUIREMENTS: Employees must wear appropriate clothing and equipment to prevent any possibility of skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn. Rubber boots and apron if exposure is severe.

CHANGE/REMOVAL OF CLOTHING: Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS: Wash exposed areas with soap and water. Showers and eye washing equipment must be provided at handling points.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE: Mixture

PHYSICAL FORM: Liquid

COLOR: Tan

ODOR: Pungent

ODOR THRESHOLD: Not Available

OXIDIZING PROPERTIES: Not Applicable

SOLUBILITY IN WATER: Slightly Soluble

PARTITION COEFFICIENT (n-octanol/water): Not Determined

SPECIFIC GRAVITY (Water=1): 1.35

EVAPORATION RATE: Negligible

VAPOR PRESSURE (mmHg): Negligible @ 25°C

VAPOR DENSITY (air=1): >1.0

VOLATILES: <0.5%/wt

VOLATILE ORGANIC COMPOUNDS: Negligible

AUTOIGNITION: Not Available

FLASH POINT: 310°F (Pensky-Martens Closed Tester)
SECTION 5. FIREFIGHTING MEASURES

AUTOIGNITION: Not Available
FLASH POINT: 310°F (Pensky-Martens Closed Tester)
EXTINGUISHING MEDIA: CO2; Dry Chemical; Water Fog
SPECIAL FIREFIGHTING PROCEDURES: A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Cool exposed equipment with water spray.
FIRE & EXPLOSION HAZARDS: Combustible at high temperatures.
HAZARDOUS COMBUSTION PRODUCTS: Combustion will evolve toxic and irritant vapors. Carbon monoxide, carbon dioxide, unknown hydrocarbons.
LOWER EXPLOSION LIMIT (%): Not Applicable
UPPER EXPLOSION LIMIT (%): Not Applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES: Ventilate area. May cause allergic skin reaction. Use suitable protective clothing. Absorb spillages onto sand, earth or any suitable absorbent material. Do not allow to enter drains, sewers or watercourses. Scrape absorbed material into proper waste containers. Wash area with soap and water; prevent entry of wash water into drains or other waterways. Dispose of wastes and water in accordance with all applicable federal, state, and local regulations.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

SECTION 7. HANDLING AND STORAGE

STORAGE TEMPERATURE: 25°C
SHELF LIFE (Days): 365
HANDLING/STORAGE: Keep containers properly sealed and store indoors in a well ventilated area. Store in cool, dry place. Good industrial hygiene should be practiced.
SENSITIVITY TO STRATIC ELECTRICITY: No
SPECIAL SENSIVITY: Avoid moisture contamination.
SENSITIVITY TO MECHANICAL IMPACT: No

SECTION 16. OTHER INFORMATION

HMIS® HAZARD RATINGS
HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risk, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs by OSHA’s 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS® These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

When two ratings are provided for Health, the first represents the material “as supplied”, and the second represents the material “in use” * = chronic health hazard

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).
SECTION 1. IDENTIFICATION

PRODUCT (TRADE) NAME: OMEGABOND® 200 Cement (Part B, Catalyst)

GENERIC NAME OR FAMILY: Catalyst for Epoxy Resin

SUPPLIER: OMEGA Engineering, Inc.
P. O. Box 4047
Stamford, CT 06907

TELEPHONE: (203) 359-1660

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER! CAUSES SEVERE OR PERMANENT DAMAGE TO EYES. SEVERE EYE IRRITANT. HARMFUL IF SWALLOWED. SEVERE SKIN IRRITANT. RESPIRATORY SENSITIZER. SKIN SENSITIZER. Tan Liquid Pungent Odor

EYE: Severe/very severe irritant. May cause permanent damage if eye is not immediately irrigated.

SKIN CONTACT: Repeated and/or prolonged contact may result in severe irritation. Repeated and/or prolonged contact may cause skin sensitization.

INHALATION: Respiratory irritant. Possible respiratory sensitizer.

INGESTION: Will cause irritation to mouth, throat, and stomach.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY: Anhydrides

COMPONENT | CAS NUMBER | CONCENTRATION (% by weight)
--- | --- | ---
Methylhexahydrophthalic anhydride | 25550-51-0 | 35 - 50
Benzenetetracarboxylic-1, 2, 4, 5-Dianhydride | 89-32-7 | 35 - 50

SECTION 4. FIRST AID MEASURES

EYE: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

SKIN CONTACT: Flush exposed areas thoroughly with soap and water until all chemical is removed. Remove contaminated clothing and launder before reuse. Obtain immediate medical attention.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

INGESTION: DO NOT attempt to give anything by mouth to an unconscious person. If individual is conscious, give water to dilute stomach contents. Get prompt medical attention.