

Material Safety Data Sheet

SECTION I – COMPANY AND PRODUCT IDENTIFICATION

Issue Date: 8/24/07

Company: Wear –Concepts Inc.
106 NW Business Park Lane
Riverside, Missouri 64150**Telephone Number:** 816-587-1923
Emergency Telephone Number: 800-424-9300
Internet: www.wearcon.com**Product Name:** Wear-Con Triple-Bead 90 Hi-Temp Wear Compound
Common Name: Epoxy Hardener**P/N:** 12590

SECTION II – INGREDIENTS/HAZARD INFORMATION

Component	CAS Number	%	OSHA PEL	ACGIH TLV	Other
Aluminum Oxide	1344-28-1	40-45	NA ppm 15 mg/M3 TWA	NA ppm 10 mg/M3 TWA	None
Crystalline Silica	14808-60-7	25-30	NA ppm .098 mg/M3 TWA	NA ppm .05 mg/M3 TWA	None
Diethylenetriamine	111-40-0	1-5	NE	NE	None
Amorphous Silica	112926-00-8	1-5	NA ppm 6 mg/M3TWA	NA ppm 10 mg/M3TWA	None
Bisphenol A	80-05-7	1-5	NE	NE	None

SECTION III – HAZARDS IDENTIFICATION

Health: 2 Flammability: 0 Reactivity: 1

Primary Routes of Entry: Eye and skin contact, dermal absorption, inhalation and ingestion.**Carcinogen:** The International Agency for Research on Cancer (IARC) has determined that respirable crystalline silica from occupational exposure is in Group 1, “sufficient evidence in humans for carcinogenicity”. The National Toxicology Program (NTP) Annual Report on Carcinogens lists crystalline silica (respirable) as a substance that may reasonably be anticipated to be a carcinogen. Respirable crystalline silica (quartz) is classified as substance known to the State of California to be a carcinogen.**Effects of Overexposure – Acute:****Eyes:** Contact with paste may cause severe damage including blindness. Vapors may be irritating.**Skin:** Prolonged Contact causes burns and may cause skin sensitization. Absorption through skin can occur in toxic amounts. Contact with curing product may cause thermal burns.**Inhalation:** Vapors are irritating to respiratory tract and may cause respiratory sensitization. Although unlikely in the normal use of this product, repeated or prolonged inhalation of dust may cause delayed lung injury, including pneumoconiosis silicosis, or lung cancer.**Ingestion:** May cause burns to the mouth, throat and stomach.**Signs and Symptoms:** Systemic toxicity may result in reproductive, liver, kidney and CNS effects. Symptoms include burning sensations, irritation, nausea, vomiting, rashes, shortness of breath, bronchitis, wheezing, or cough.**Medical Conditions Aggravated By Overexposure:** Existing dermal and pulmonary conditions.**Toxicological Studies:** No information available.

SECTION IV – FIRST AID MEASURES

In Case of Contact, immediately flush eyes and skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Destroy contaminated leather items such as belts and shoes.

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

If swallowed, DO NOT INDUCE VOMITING. If fully conscious, give 1 or 2 glasses of water to dilute. Get medical attention immediately.

SECTION V – FIRE-FIGHTING MEASURES

Flash Point (method used): None

Extinguishing Media: Carbon Dioxide, dry chemical, “alcohol” foam or water fog

Special Fire Fighting Procedures: Use full protective equipment including self-contained breathing apparatus. Water spray may be ineffective. If water is used, fog nozzles are preferable. If exposed to fire or extreme heat, water should be used to cool containers and prevent pressure build-up or possible auto-ignition.

Unusual Fire & Explosion Hazards: Due to pressure build-up, closed containers exposed to extreme heat may explode. When mixed with a second reactive component and kept in a mass (larger than ½ gallon or larger of mixed material) for longer than pot life the material can exotherm to a very high temperature and decompose from the heat of the reaction. Do not breathe any of the fumes. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Before attempting clean-up, refer to hazard caution information in other sections of this material safety data form. Contain spilled material and remove with inert absorbent. Store in closed container until properly disposed of.

SECTION VII – HANDLING AND STORAGE

Do not store for long periods of time above 100 Degrees F or near fire or open flame. Keep container closed when not in use. Do not reuse empty containers.

SECTION VIII – PERSONAL PROTECTION

Respiratory Protection: All workers and bystanders must be protected from over exposure. Avoid breathing vapors, spray mist or sanding dust. During sanding and grinding operations, use NIOSH/MSHA approved mechanical filter respirator to remove solid airborne particles of sanding dust. When used in restricted areas, wear NIOSH/MSHA approved chemical/mechanical filters designed to remove a combination of particulates and vapor. Use NIOSH/MSHA approved respirators when flame cutting, welding, and brazing material coated with this product. The fumes from these operations can be hazardous. Always use adequate ventilation. NIOSH has recommended that the permissible exposure limit for crystalline silica be changed to 50 micrograms respirable free silica per cubic meter of air (Time Weight Average).

Ventilation: Good general ventilation must be provided during applications.

Personal Protective Equipment: Impermeable gloves, such as supported butyl rubber, are recommended. Consult with the glove manufacturer in all cases of glove selection. Safety glasses with side shields are recommended.

Other Protective Equipment or Measures: Face shields, full-body protection, boots as required by user conditions and equipment. Eyewash and safety shower facilities should be available for emergency use.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density: Heavier than Air
Solubility in Water: Negligible
Appearance & Odor: Grey/Black Paste/Amine odor

Specific Gravity: N/F
Volatiles By Volume (%): 0.00
Evaporation Rate (butyl acetate=1): <1
Melting Point (°F): N/A

SECTION X – STABILITY AND REACTIVITY

Stability: Stable
Incompatibility: Avoid contact with mineral acids, amines, and strong bases
Hazardous Decomposition Products: May cause hazardous fumes when heated to decomposition or from mixed material that is kept in ½ gallon or larger mass longer than the pot life. The following represents a partial list: (From burning, heating, or reaction with other materials). Nitrogen Oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm). Carbon Monoxide in fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric Acid in a fire. Nitrosamines. Aldehydes. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic. Treat all fumes as hazardous and DO NOT BREATHE.
Hazardous Polymerization: Will not occur
Mixed product should not be kept in quantities greater than 3 lbs weight (approx. 1 quart volume longer than 25 to 35 minutes). This product reacts quickly when in large mixed masses and develops heat quickly. It is possible for the mass to reach decomposition temperatures and give off dangerous gasses. Always pour the material out in thin thickness (1/4 inch or less) to avoid the mass reaction.

SECTION XI – TOXICOLOGICAL INFORMATION

No information available

SECTION XII – ECOLOGICAL INFORMATION

No information available

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations. Incinerate only in approved facility. Do not incinerate closed containers.

SECTION XIV – TRANSPORTATION INFORMATION

Proper Shipping Name: Corrosive solids, n.o.s.
Technical Name: Diethylenetriamine
Hazard Class: 8
UN Number: 1759
Packing Group: III



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SECTION XV – REGULATORY INFORMATION

This product contains 0.00 pounds per gallon (0 grams/liter) volatile organic compounds. The VOC less water and exempt solvents is 0.00 lbs/gal (0 gm/L).

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. This information contained herein is based on data believed by WEAR CONCEPTS to be accurate, but we do not assume any liability for the accuracy of this information. We neither suggest nor guarantee that any hazards mentioned are the only ones that exist. Anyone intending to rely on any recommendation or to use any equipment, technique or material mentioned should be also satisfy himself that he can meet all applicable safety and health standards.

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Riverside, Missouri 64150**Telephone Number:** 816-587-1923
Emergency Telephone Number: 800-424-9300
Internet: www.wearcon.com**Product Name:** Wear-Con Triple-Bead 90 Hi-Temp Wear Compound
Common Name: Epoxy Resin**P/N:** 12590

SECTION II – INGREDIENTS/HAZARD INFORMATION

Component	CAS Number	%	OSHA PEL	ACGIH TLV	Other
Aluminum Oxide	1344-28-1	45-50	NA ppm 15 mg/M3 TWA	NA ppm 10 mg/M3 TWA	None
Epoxy Novolac	28064-14-4	15-20	NE	NE	None
TMP Triglycidyl Ether	30499-70-8	15-20	NE	NE	None
Crystalline Silica	14808-60-7	10-15	NA ppm .098 mg/M3 TWA	NA ppm .05 mg/M3 TWA	None
Amorphous Silica	112926-00-8	5-10	NA ppm 6 mg/M3 TWA	NA ppm 10 mg/M3 TWA	None

Note: To the best of our knowledge, this product does not contain any SARA 313 chemicals.

SECTION III – HAZARDS IDENTIFICATION

Health: 1 Flammability: 0 Reactivity: 1

Primary Routes of Entry: Eye and skin contact, dermal absorption, inhalation and ingestion.**Carcinogen:** The International Agency for Research on Cancer (IARC) has determined that respirable crystalline silica from occupational exposure is in Group 1, “sufficient evidence in humans for carcinogenicity”. The National Toxicology Program (NTP) Annual Report on Carcinogens lists crystalline silica (respirable) as a substance that may reasonably be anticipated to be a carcinogen. Respirable crystalline silica (quartz) is classified as substance known to the State of California to be a carcinogen.**Effects of Overexposure:****Acute:**Eyes: Contact with paste may cause irritation.Skin: Prolonged Contact causes burns and may cause skin irritation.Inhalation: Vapors are irritating to respiratory tract and may cause headache, nausea, dizziness.Ingestion: No effects anticipated from ingestion incidental to normal use. Larger quantities may cause distress of the digestive tract and nausea.

Chronic: Crystalline silica has been classified as a carcinogenic for humans (2A) by IARC. The excessive inhalation of crystalline silica is also a known cause of silicosis. (Risk depends on duration and level of exposure.) Other possible chronic effects are silicosis, cancer, scleroderma and tuberculosis. The main route of entry is inhalation of crystalline silica. Dry silica powder should be handled with great care. When the silica is mixed and wetted by the other components the risk of inhalation is greatly reduced.

Medical Conditions Aggravated by Exposure: If you are allergic or have been sensitized to: epoxies, amines, isocyanates, detergents, or other chemicals see a physician prior to use. If none of these conditions exist and you use the product in accordance with the Safe Handling and Use Information (Sections VII and VIII) you should expect no mild medical conditions to be aggravated.

SECTION IV – FIRST AID MEASURES

In Case of Contact, immediately flush eyes and skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Destroy contaminated leather items such as belts and shoes.

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

If swallowed, DO NOT INDUCE VOMITING. If fully conscious, give 1 or 2 glasses of water. Get medical attention immediately.

SECTION V – FIRE-FIGHTING MEASURES

Flash Point (method used): None

Extinguishing Media: Carbon Dioxide, dry chemical, “alcohol” foam or water fog

Special Fire Fighting Procedures: Use full protective equipment including self-contained breathing apparatus. Water spray may be ineffective. If water is used, fog nozzles are preferable. If exposed to fire or extreme heat, water should be used to cool containers and prevent pressure build-up or possible auto-ignition.

Unusual Fire & Explosion Hazards: Due to pressure build-up, closed containers exposed to extreme heat may explode. When mixed with a second reactive component and kept in a mass (larger than ½ gallon or larger of mixed material) for longer than potlife the material can exotherm to a very high temperature and decompose from the heat of the reaction. Do not breathe any of the fumes. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SECTION VI – ACCIDENTAL RELEASE MEASURES

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SECTION VII – HANDLING AND STORAGE

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Respiratory Protection: All workers and bystanders must be protected from over exposure. Avoid breathing vapors, spray mist or sanding dust. During sanding and grinding operations, use NIOSH/MSHA approved mechanical filter respirator to remove solid airborne particles of sanding dust. When used in restricted areas, wear NIOSH/MSHA approved chemical/mechanical filters designed to remove a combination of particulates and vapor. Use NIOSH/MSHA approved respirators when flame cutting, welding, brazing and sanding material coated with this product. The fumes from these operations can be hazardous. Do not breath them. Always use adequate ventilation. NIOSH has recommended that the permissible exposure limit for crystalline silica be changed to 50 micrograms respirable free silica per cubic meter of air (Time Weight Average).

Ventilation: Good general ventilation must be provided during application. Local exhaust ventilation may be necessary due to high curing temperatures, which cause significant levels of vapors to be released.

Personal Protective Equipment: Impermeable gloves, such as supported butyl rubber, are recommended. Consult with the glove manufacturer in all cases of glove selection. Chemical goggles recommended.

Other Protective Equipment or Measures: Face shields full-body protection, boots as required by user conditions and equipment. Eyewash and safety shower facilities should be available for emergency use.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A

Vapor Pressure: N/A

Vapor Density: Heavier than Air

Solubility in Water: Negligible

Appearance & Odor: White Paste/Amine odor

Specific Gravity: N/F

Volatiles By Volume (%): 0

Evaporation Rate (butyl acetate=1): <1

Melting Point (°F): N/A

SECTION X – STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Avoid contact with mineral acids, amines, and strong bases

Hazardous Decomposition Products: May cause hazardous fumes when heated to decomposition or from mixed material that is kept in ½ gallon or larger mass longer than the potlife. The following represents a partial list: (From burning, heating, or reaction with other materials). Nitrogen Oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm). Carbon Monoxide in fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric Acid in a fire. Nitrosamines. Aldehydes. The oxides of nitrogen gases (except nitrous oxide) emitted on decomposition are highly toxic. Treat all fumes as hazardous and DO NOT BREATHE.

Hazardous Polymerization: Will not occur

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SECTION XI – TOXICOLOGICAL INFORMATION

No information available



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SECTION XII – ECOLOGICAL INFORMATION

No information available

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations. Incinerate only in approved facility. Do not incinerate closed containers.

SECTION XIV – TRANSPORTATION INFORMATION

Proper Shipping Name: Not Regulated
Hazard Class: None
UN Number: None
Packing Group: None

SECTION XV – REGULATORY INFORMATION

This product contains 0 pounds per gallon (0 grams/liter) volatile organic compounds. The VOC less water and exempt solvents is 0 lbs/gal (0 gm/L).

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

This information contained herein is based on data believed by WEAR CONCEPTS to be accurate, but we do not assume any liability for the accuracy of this information. We neither suggest nor guarantee that any hazards mentioned are the only ones that exist. Anyone intending to rely on any recommendation or to use any equipment, technique or material mentioned should be also satisfy himself that he can meet all applicable safety and health standards.