

Safety Data Sheet ECO288 Filler Paste

1. Product and Company Identification

Product Identifier: ECO288 Filler Paste

SDS Number: ECO288

Product Description: A UV Curable Filler Paste

Supplier Details:

Clean Armor Technology, LLC
7222 Commerce Center Drive, Suite 220
Colorado Springs, CO 80919

Phone: (800) 255 3924

Emergency: CHEMTEL

2. Hazard Identification

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

- Health, Acute toxicity, 4 Oral
- Health, Skin corrosion/irritation, 2
- Health, Respiratory or skin sensitization, 1 Skin
- Environmental, Hazards to the aquatic environment - Chronic, 2
- Health, Serious Eye Damage/Eye Irritation, 2 B

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: WARNING

GHS Hazard Pictograms:

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GHS Hazard Statements:

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H320 - Causes eye irritation
- H372 - Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
- H402 - Harmful to aquatic life
- H411 - Toxic to aquatic life with long lasting effects
- H412 - Harmful to aquatic life with long lasting effects

GHS Precautionary Statements:

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P264 - Wash skin thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves.
- P280 - Wear protective gloves/ eye protection/ face protection.
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

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- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 - Call a POISON CENTER or doctor/ physician if you feel unwell.
- P314 - Get medical advice/ attention if you feel unwell.
- P321 - Specific treatment (see supplemental first aid instructions on this label).
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention.
- P337 + P313 - If eye irritation persists: Get medical advice/ attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
- P501 - Dispose of contents/ container to an approved waste disposal plant.

3. Composition/Information of Ingredients

Chemical Ingredients:

CAS #	%	Chemical Name
0	55-80%	Monomer Blend
0	1-10%	Photoinitiator Blend
0	5-25%	Surfactant Blend
0	.1-3%	Inhibitor Blend
0	5-15%	Silica

4. First Aid Measures

Inhalation: If product vapor or fume causes respiratory irritation or distress, move the person to fresh air immediately. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention.

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Skin Contact: Remove contaminated clothing and wash before reuse. Promptly flush skin with water until all chemical is removed. Wash with soap and water. If irritation persists, seek medical advice.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Remove contact lenses if able. Obtain medical attention if irritation persists.

Ingestion: Do not induce vomiting. If vomiting occurs, have person lean forward to reduce risk of aspiration of material into the lungs. Rinse mouth with water if the victim is conscious. Remove dentures if present. Do not leave victim unattended. Get medical attention if necessary.

5. Fire Fighting Measures

Extinguishable media

Suitable extinguishing agents: Foam, extinguishing powder or water spray or alcohol resistant foam.

Unsuitable extinguishing agents: Water jets and high pressure streams.

Special Hazards

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. Polymerization is exothermic and can degenerate into an uncontrolled reaction. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediate. Obtain medical attention if necessary.

Explosion hazards: Material does not present an explosion hazard

Firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible polymerization. If possible, firefighters should control runoff water to prevent environmental contamination.

6. Accidental Release Measures

Personal precautions, protective equipment and emergence procedures

Evacuate non-essential personnel. Remove all sources of ignition. Ventilate the area. Wear appropriate protective clothing.

Environmental precautions

Prevent contact with soil and entry into drains, sewers or waterways

Methods and materials for containment and cleanup

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Cover drains. Cover spill area with inert absorbent. Collect material and place in an approved container for disposal. Dispose of material in accordance with state and local regulations. Wash area with soap and water.

Personal precautions, protective equipment and emergence procedures

Evacuate non-essential personnel. Remove all sources of ignition. Ventilate the area. Wear appropriate protective clothing.

Environmental precautions

Prevent contact with soil and entry into drains, sewers or waterways

Methods and materials for containment and cleanup

Cover drains. Cover spill area with inert absorbent. Collect material and place in an approved container for disposal. Dispose of material in accordance with state and local regulations. Wash area with soap and water.

7. Handling and Storage

Handling Precautions:

Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Consider normal working hygiene. If normal use of material presents a breathing hazard, use adequate ventilation or wear appropriate respiratory protection. No smoking.

Protection against fire and explosion

Polymerization is exothermic and can be an uncontrolled reaction

Storage Requirements:

Store in cool/dry area. Protect container and its fittings from physical damage.

Suitable packing materials. Keep away from heat, sparks, and flames. Avoid contact to direct sunlight.

Ventilate closed areas.

8. Exposure Controls/Personal Protection

Engineering Controls:

Use mechanical (general) ventilation for storage areas.

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Use local exhaust at filling zones and where leakage is probable.

Personal Protective Equipment:

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

Silica cas#:(7631-86-9) [5-15%]

Personal Protective Equipment:

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min
Material tested:Dermatril (KCL 740 / Aldrich Z677272, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min
Material tested:Dermatril (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product

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enter drains. Discharge into the environment must be avoided.

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Components with workplace control parameters

TWA 6 mg/m³ USA. NIOSH Recommended Exposure Limits
TWA 20Million USA. Occupational Exposure Limits
particles per (OSHA) - Table Z-3 Mineral Dusts
particles per (OSHA) - Table Z-3 Mineral Dusts
Millions of particles per cubic foot of air, based on impinger samples
counted by light-field techniques.
mppcf X 35.3 = million particles per cubic meter = particles per c.c

TWA 80mg/m³ / USA. Occupational Exposure Limits
%SiO₂ (OSHA) - Table Z-3 Mineral Dusts

9. Physical and Chemical Properties

Appearance: Clear, colorless to pale yellow liquid

Physical State: Liquid

Odor Threshold: No data available

Particle Size: No data available

Spec Grav./Density: 1.0495-1.0505

Saturated Vapor Concentration: No data available

Odor: Mild

Molecular Formula: No data available

Solubility: Not soluble in water

Softening Point: No data available

Percent Volatile: No Volatiles

10. Stability and Reactivity

Chemical Stability:

Product can undergo hazardous, exothermic polymerization

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Conditions to Avoid:

Product is stable under normal conditions.

Materials to Avoid:

This material polymerizes exothermically in the presence of heat, contamination, oxygen-free atmosphere, free radicals, peroxides and inhibitor depletion. DO NOT expose to sunlight or ultraviolet radiation.

Hazardous Decomposition:

Strong oxidizing agents, strong reducing agents, free radical generators, inert gas, oxygen scavengers, peroxides, sunlight, UV radiation.

Hazardous Polymerization:

Thermal decomposition products may include carbon oxides, nitrogen oxides, acrylates, amines, hazardous organic compounds, acrid smoke and fumes.

Reactivity:

Can occur with extreme heat or flame

11. Toxicological Information

Skin corrosion/irritation: Skin - rabbit Result: Irritating to skin. - 24 h

Serious eye damage/eye irritation: Eyes - rabbit Result: Irritating to eyes.

Respiratory or skin sensitization: Maximization Test - guinea pig Result: May cause sensitization by skin contact.

Germ cell mutagenicity: Ames test S. typhimurium

Mutagenicity (micronucleus test) mouse - male and female Result: negative

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

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Information on toxicological effects

Acute toxicity: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Silicon dioxide)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by

ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by

NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by

OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

12. Ecological Information

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Toxicity-This product is toxic to aquatic life with long lasting effects

Persistence and degradability: Biodegradability aerobic - Exposure time 28 d Result: 82 - 90 % - Readily biodegradable. (OECD TestGuideline 301B)

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

Silica cas#:(7631-86-9) [5-15%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

13. Disposal Considerations

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

Silica cas#:(7631-86-9) [5-15%]

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

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Contaminated packaging: Dispose of as unused product.

14. Transport Information

DOT

Transport hazard class(es)(DOT): Not applicable

IMDG

Transport hazard class(es) (IMDG): Not applicable

IATA

Transport hazard classes(es)(IATA): Not applicable

Not hazardous product according to these transport classifications.

Not regulated for transport

15. Regulatory Information

TSCA Status - All components of this product are listed on the Toxic Substance Control Act (TSCA) inventory.

SARA 313 information - None of the chemicals in this product are subject to the reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

SARA 313, 302/304 - None of the components of this product are subject to reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains no reportable substances.

Clean Air Act (CAA) - This product contains no reportable chemicals

Clean Water Act (CWA) - This product contains no reportable chemicals

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

TSCA = Toxic Substances Control Act

16. Other Information

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Author - Clean Armor

This information is given in good faith and based on our current knowledge of the product.

Disclaimer:

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