

Wearcoat 2035 Part A

1	PRODUCT AND COMPANY IDENTIFICATION
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Supplier Details:	Coatings for Industry, Inc. 319 township Line Rd. Souderton, PA 18964
Emergency:	Infotrac
Contact:	USA: 1-800-535-5053 / International :352-323-3500
Phone:	215-723-0919
Fax:	215-723-0911
Email:	info@cficoatings.com
Web:	www.cficoatings.com

2	HAZARDS IDENTIFICATION
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Classification of the substance or mixture

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

Health, Skin sensitization, 1
 Environmental, Hazards to the aquatic environment - Chronic, 3
 Health, Serious Eye Damage/Eye Irritation, 2 A

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H317 - May cause an allergic skin reaction
 H412 - Harmful to aquatic life with long lasting effects
 H319 - Causes serious eye irritation

GHS Precautionary Statements:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P333+313 - If skin irritation or a rash occurs: Get medical advice/attention.
 P302+352 - IF ON SKIN: Wash with soap and water.
 P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Wearcoat 2035 Part A

3 COMPOSITION/INFORMATION ON INGREDIENTS
Ingredients:

Cas#	%	Chemical Name
136210-30-5	20-30%	Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester
136210-32-7	40-50%	Aspartic acid, N,N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, tetraethyl ester
6846-50-0	20-30%	Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester
623-91-6	<5%	2-Butenedioic acid (2E)-, diethyl ester
1318-02-1	<5%	Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites)

4 FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact:	Remove contaminated clothing and footwear immediately, and wash before reuse. Discard clothing and footwear which cannot be decontaminated. Wash skin with soap and water. Get medical attention if irritation develops and persists.
Eye Contact:	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Then remove contact lenses, if easily removeable, and continue irrigation for not less than 15 minutes. Get medical Attention if irritation develops.
Ingestion:	Rinse mouth with water. Drink large quantities of water. Do not induce vomiting. Seek immediate medical attention

5 FIRE FIGHTING MEASURES

Flash Point:	> 136 C
Flash Point Method:	SETA Flash Tester CC

Special Fire Fighting Procedures:

Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn by fire fighters. During a fire, irritating and/or toxic gases and smoke (see reactivity data) may be present from decomposition/combustion. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Use cold water to cool fire exposed containers to minimize risk of rupture. Solvent vapors may be heavier than air. Stagnant air may cause vapors to accumulate and travel along the ground to an ignition source which may result in a flash back to the source of the vapors.

Extinguishing Media: Dry chemical; carbon dioxide; foam; water spray for large fires.

Wearcoat 2035 Part A

6	ACCIDENTAL RELEASE MEASURES
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Evacuate nonessential personnel.
 Keep away from drains and ground water.
 Pick up excess with inert absorbant material and place into separate waste container.
 Watch out for slippery conditions when spillage.
 Dispose of in accordance with local, state and federal regulations.

7	HANDLING AND STORAGE
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Handling Precautions:	Store in a cool dry place. Use approved containers only. Keep container tightly sealed.
Storage Requirements:	Keep away from heat, sparks, and flames. Keep container tightly sealed. Store in area where it will not come into contact with strong acids or oxidizing agents.

8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Engineering Controls:	Exhaust ventilation sufficient to keep the airborne concentrations of the solvents in the workplace below their respective TLVs. Respirator that is recommended or approved for use in organic vapor containing environments (air purifying or fresh air supplied) may be necessary. In spray applications an organic vapor/particulate respirator or air supplied air unit is necessary. The use of a positive pressure supplied air respirator is mandatory when; airborne concentrations are not known; when levels are 10 times the appropriate TLV; or if spraying is performed in a confined space or area with limited ventilation. Take into account other materials being used concurrently, the type of application and environmental concentrations when selecting a respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).
Personal Protective Equipment:	<p>The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.</p> <p>Respiratory Protection If vapors form, respiratory protection is recommended., The use of a positive pressure supplied air respirator is recommended if the airborne concentration is unknown or if spraying is performed in a confined space or area with limited ventilation., In spray applications, an organic vapor/particulate respirator or air supplied unit is necessary.</p> <p>Hand Protection Ensure gloves remain in good condition during use and replace if any deterioration is observed. Permeation resistant gloves., Viton gloves., 4H laminate gloves., Butyl rubber gloves., Nitrile rubber gloves.</p> <p>Eye Protection Chemical safety goggles or safety glasses with side-shields., Chemical safety goggles in combination with a full face shield if a splash hazard exists.</p> <p>Skin Protection Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact., Where spray mist/vapor is anticipated, permeation resistant clothing is recommended.</p> <p>Additional Protective Measures Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.</p>

Wearcoat 2035 Part A

Exposure Limits

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Odor:	Mild
Physical State:	Liquid	Percent Volatile:	4.5%
Spec Grav./Density:	1.0-1.1	Flash Point:	>136 C SETA Flash CC
Viscosity:	300-800 cps		

10

STABILITY AND REACTIVITY

Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Contact with incompatible materials Heat, flames and sparks
Materials to Avoid:	Strong Acids; Strong Oxidizing Agents.Isocyanates
Hazardous Decomposition:	By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (NOx), Amines, other aliphatic fragments which have not been determined, Ammonia gas may be liberated at high temperatures.
Hazardous Polymerization:	Will not occur.

11

TOXICOLOGICAL INFORMATION**Likely Routes of Exposure:**

Skin Contact
Eye Contact
Inhalation
Ingestion

Health Effects and Symptoms

Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash., May cause skin irritation with symptoms of reddening, itching, and swelling., May cause eye irritation with symptoms of reddening, tearing, stinging, and swelling., May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Chronic: Not expected to cause adverse chronic health effects.

Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester (136210-30-5)

Acute Oral Toxicity
Acute toxicity estimate: > 5,000 mg/kg (Calculation method)

Aspartic acid, N,N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, tetraethyl ester (136210-32-7)

Acute Oral Toxicity
Acute toxicity estimate: > 5,000 mg/kg (Calculation method)

Toxicity Data for: Aspartic Ester

Toxicity Note: Toxicity data is based on a similar product.

Acute Oral Toxicity

LD50: > 2,000 mg/kg (rat) (Directive 67/548/EEC, Annex V, B.1.) Studies of a comparable product.

Acute Inhalation Toxicity

LC50: > 4.224 mg/l, 4 h, dust/mist (rat, male/female) (OECD Test Guideline 403) Toxicological studies of a comparable product.

Acute Dermal Toxicity

LD50: > 2,000 mg/kg (rat) (Directive 67/548/EEC, Annex V, B.3.) Studies of a comparable product.

Skin Irritation

Wearcoat 2035 Part A

OECD Test Guideline 404, slight irritant

Eye Irritation

rabbit, OECD Test Guideline 405, Slightly irritating. Toxicological studies of a comparable product.

Rat, Effect on the respiratory tract: slight irritant

Sensitization

Skin sensitisation according to Magnusson/Kligmann (maximizing test):: positive (Guinea pig, OECD Test Guideline 406)

Toxicological studies of a comparable product.

Repeated Dose Toxicity

Subacute oral toxicity: NOAEL: > 1,000 mg/kg, (rat, Male/Female) Toxicological studies of a comparable product.

Mutagenicity

Genetic Toxicity in Vitro:

Chromosome aberration test in vitro: negative. Toxicological studies of a comparable product.

Salmonella/microsome test (Ames test): No indication of mutagenic effects. Toxicological studies of a comparable product.

Genetic Toxicity in Vivo:

Micronucleus test: negative (Mouse). Toxicological studies of a comparable product.

negative

Toxicity to Reproduction/Fertility

Two-generation study, Oral, (rat, male/female) Toxicological studies of a comparable product.

Developmental Toxicity/Teratogenicity

rat, female, Oral, NOAEL (teratogenicity): 1,000 mg/kg, NOAEL (maternal): 1,000 mg/kg, Studies of a comparable product.

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester (6846-50-0)

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - female - > 2,000 mg/kg

Inhalation: no data available

LD50 Dermal - rabbit - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation: Skin - rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

Serious eye damage/eye irritation: Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: Hamster ovary 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.

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

Additional Information:

Repeated dose toxicity - rat - male - No observed adverse effect level - 150 mg/kg RTECS: SA1420000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

2-Butenedioic acid (2E)-, diethyl ester (623-91-6)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 1,780 mg/kg

Inhalation LC50 no data available

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

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.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: EM5950000

Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - > 10,000 mg/kg

Inhalation LC50 Dermal LD50 LD50 Dermal - rabbit - > 2,000 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - Human - No skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - No eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: Genotoxicity in vitro - Human - lymphocyte Cytogenetic analysis

Wearcoat 2035 Part A

Genotoxicity in vivo - mouse - Intraperitoneal

Carcinogenicity:

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Zeolites crystalline aluminosilicates, composed of silica (SiO₂) and alumina (Al₂O₃), in various proportions plus metallic oxides. Pr)

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

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.

Signs and Symptoms of Exposure: prolonged or repeated exposure can cause:, Damage to the lungs. Cough, Difficulty in breathing, Gastrointestinal disturbance, prolonged or repeated exposure can cause:, Damage to the lungs., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: ZG6800000

12

ECOLOGICAL INFORMATION

Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester (136210-30-5)

Data on the product is not available. Please find the data available for the components.

Aspartic acid, N,N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, tetraethyl ester (136210-32-7)

Data on the product is not available. Please find the data available for the components.

Ecological Data for Aspartic Ester

Biodegradation

13 %, Exposure time: 28 d, i.e. not readily degradable. Ecotoxicological reports on a comparable product

0 %, Exposure time: 28 d, i.e. not inherently degradable. Ecotoxicological studies of the product

Bioaccumulation

value calculated, 1,872 BCF

The substance hydrolyzes rapidly in water. An accumulation in aquatic organisms is not to be expected.

Acute and Prolonged Toxicity to Fish

LC50: 66 mg/l (Danio rerio (zebra fish), 96 h). Ecotoxicological reports on a comparable product

Acute Toxicity to Aquatic Invertebrates

EC50: 88.6 mg/l (Daphnia magna (Water flea), 48 h). Studies of a comparable product.

Toxicity to Aquatic Plants

IC50: 113 mg/l, (scenedesmus subspicatus, 72 h). Ecotoxicological reports on a comparable product

Toxicity to Terrestrial Plants

NOEC: >= 100 mg/kg, End Point: seedling emergence (Avena sativa (oats)). Studies of a comparable product.

NOEC: >= 100 mg/kg, End Point: seedling emergence (Allium cepa (onion)). Studies of a comparable product.

NOEC: >= 100 mg/kg, End Point: seedling emergence (Brassica napus (rape)). Studies of a comparable product.

Wearcoat 2035 Part A

Toxicity to Microorganisms

EC50: 3,110 mg/l, (activated sludge, 3 h). Ecotoxicological reports on a comparable product

Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester (6846-50-0)

Information on ecological effects

Toxicity:

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - > 1.55 mg/l - 96 h. (OECD Test Guideline 203)

Toxicity to algae Growth inhibition EC50 - Selenastrum capricornutum (green algae) - > 7.49: mg/l - 72 h (OECD Test Guideline 201)

Persistence and degradability: Biodegradability aerobic - Exposure time 28 d Result: 70.73 % - Readily biodegradable. (OECD Test Guideline 301B) Remarks: The 10 day time window criterion is not fulfilled.

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

2-Butenedioic acid (2E)-, diethyl ester (623-91-6)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 4.5 mg/l - 96 h.

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

no data available

Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1)

Information on ecological effects

Toxicity:

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

Wearcoat 2035 Part A

13	DISPOSAL CONSIDERATIONS
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Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws

Empty Container Precautions

Do not heat or cut container with electric or gas torch. Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

14	TRANSPORT INFORMATION
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Land transport (DOT)

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO/IATA)

Non-Regulated

15	REGULATORY INFORMATION
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Component (CAS#) [%] - CODES

 Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester (136210-30-5) [20-30%] MASS, NJHS, PA, TSCA

Aspartic acid, N,N'-[methylenebis(2-methyl-4,1-cyclohexanediyl)]bis-, tetraethyl ester (136210-32-7) [40-50%] MASS, NJHS, PA, TSCA

Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester (6846-50-0) [20-30%] TSCA

2-Butenedioic acid (2E)-, diethyl ester (623-91-6) [<5%] NJHS, PA, TSCA

Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1) [<5%] NJHS, PA

Regulatory CODE Descriptions

 MASS = MA Massachusetts Hazardous Substances List
 NJHS = NJ Right-to-Know Hazardous Substances
 PA = PA Right-To-Know List of Hazardous Substances
 TSCA = Toxic Substances Control Act

16

OTHER INFORMATION

NOTICE: This information is presented in good faith and believed to be accurate as of the effective date below. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Coatings For Industry, Inc. assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material. Regulatory requirements are subject to change and may differ from one location to another: it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The preceding specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.