

Urethabond 313 Clear Part A

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Urethabond 313 Clear Part A
Common Name: Polyester Polyol Mixture
SDS Number: I51
Revision Date: 6/25/2015
Version: 1
Chemical Family: Polyester Polyol
Supplier Details: Coatings for Industry, Inc.
319 Township Line Road
Souderton, PA 18964

Emergency: Infotrac
Contact: USA: 1-800-535-5053 / International :352-323-3500
Phone: 215-723-0919
Fax: 215-723-0911
Email: cs@cficoatings.com
Web: www.cficoatings.com

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

- Health, Serious Eye Damage/Eye Irritation, 1
- Environmental, Hazards to the aquatic environment - Chronic, 3
- Health, Carcinogenicity, 2
- Health, Skin corrosion/irritation, 2
- Physical, Flammable Liquids, 3
- Health, Specific target organ toxicity - Single exposure, 3
- Health, Acute toxicity, 5 Inhalation

GHS Label elements, including precautionary statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

- H318 - Causes serious eye damage
- H412 - Harmful to aquatic life with long lasting effects
- H351 - Suspected of causing cancer
- H315 - Causes skin irritation
- H226 - Flammable liquid and vapor
- H336 - May cause drowsiness or dizziness
- H333 - May be harmful if inhaled

GHS Precautionary Statements:

- P241 - Use explosion-proof electrical/ventilating/light/equipment.
- P243 - Take precautionary measures against static discharge.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Urehabond 313 Clear Part A

P308+313 - IF exposed or concerned: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with existing federal, state and local environmental control laws.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
0	45-55%	Polyester Polyol
763-69-9	37-40%	Propanoic acid, 3-ethoxy-, ethyl ester
123-86-4	11-13%	n-Butyl acetate

4 FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. Give oxygen or artificial respiration if needed. Get medical attention.

Skin Contact: Remove contaminated clothing and footwear immediately, and wash before reuse. Discard clothing and footwear which cannot be decontaminated.

Eye Contact: Wash with soap and water. Get medical attention if irritation develops and persists. Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get medical attention.

Ingestion: If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

5 FIRE FIGHTING MEASURES

Flash Point: 93 F.

Flash Point Method: Tag Closed Cup

LEL: NBA 1.3% ; EEP 1.05%

UEL: NBA 7.6% ; EEP Not Determined

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.

6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures:

Evacuate nonessential personnel. Remove all sources of ignition and ventilate the area. Equip clean up crew with appropriate protective equipment (see employee protection recommendations). Soak up in absorbent material such as sand, vermiculite, fuller's earth, and collect material in suitable containers.

Waste Disposal Method:

Waste may be incinerated or disposed of in accordance with federal, state, and local environmental control regulations. Empty containers must be handled with care due to product residue and combustible solvent vapor. Do not heat or cut empty container with electric or gas torch.

Urethabond 313 Clear Part A

7 HANDLING AND STORAGE

Handling Precautions: Handling precautions:
Material is combustible - keep away from heat, sparks and open flame. Take precautions against the buildup of electrostatic charges. Store in tightly closed containers to prevent moisture contamination. Practice caution and good personal cleanliness to avoid contact with skin and eyes. Avoid breathing vapors.
Note: Two component system- the cautions and hazards of both components apply to combined product when mixed.

Storage Requirements: Storage Temperature (min/max) : 32° F. (0 C)/122° F. (50 C)
Shelf Life: Two years, if unopened.
Special sensitivity:
Material is hygroscopic and may absorb small amount of atmospheric moisture. Containers should be tightly closed to prevent contamination with foreign materials and moisture.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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: Personal protective equipment

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).

Hand 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: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: > 480 min Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 79 min Material tested: Camatril (KCL 730 / Aldrich Z677442, 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.

Eye 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 and body protection: impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Propanoic acid, 3-ethoxy-, ethyl ester (763-69-9) [37-40%] : no data available

Urethabond 313 Clear Part A

n-Butyl acetate (123-86-4) [11-13%]

TWA 150 ppm USA. ACGIH Threshold Limit Values (TLV)
Eye & Upper Respiratory Tract irritation

STEL 200 ppm USA. ACGIH Threshold Limit Values (TLV)
Eye & Upper Respiratory Tract irritation

TWA 150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
710 mg/m3 1910.1000

STEL 200 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
950 mg/m3 1910.1000

TWA 150 ppm USA. Occupational Exposure Limits (OSHA) - Table Z- 1
710 mg/m3 Limits for Air Contaminants

The value in mg/m3 is approximate.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Odor:	solvent odor
Physical State:	Liquid	Solubility:	Negligible in water
Spec Grav./Density:	1-1.1	Percent Volatile:	By Volume: Approx 55%
Vapor Pressure:	PMA : 3.7 mm Hg. @ 20° C; EEP : 1.1 mm	Flash Point:	108 F. (42.2 C) TCC.
		VOC:	Part A: 481g/l ; When mixed with PartB:

10 STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Heat, flames and sparks
Materials to Avoid:	Oxidizing agents, Reducing agents, Peroxides, Phosphorus compounds
Hazardous Decomposition:	By Fire and Thermal Decomposition: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke., Other undetermined compounds
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Propanoic acid, 3-ethoxy-, ethyl ester (763-69-9) [14.3%]

Information on toxicological effects

Acute toxicity:
Oral LD50: (Rat male) > 5,000 mg/kg
Oral LD50: (Rat female) 4,309 mg/kg
Inhalation LC50: (Rat male 6h) > 998 ppm (highest concentration tested)
Dermal LD50: (Rabbit male) 4,080 mg/kg
LD50 Dermal: (Rabbit female) 4,680 mg/kg

Other information on acute toxicity:
Skin corrosion/irritation: (Rabbit) No skin irritation - 4 h - OECD Test Guideline 404
Serious eye damage/eye irritation: (Rabbit) No eye irritation - 24 h - OECD Test Guideline 405

Urethabond 313 Clear Part A

Respiratory or skin sensitisation: guinea pig - Does not cause skin sensitisation. - OECD Test Guideline 406
Germ cell mutagenicity: Genotoxicity in vitro - S. typhimurium - with and without metabolic activation - 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

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 May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: Nausea, Headache, Vomiting, Central nervous system depression, Dizziness

Synergistic effects: no data available

Additional Information:

Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 1,000 mg/kg RTECS: UF3325000

n-Butyl acetate (123-86-4) [11-13%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 10,700 - 14,130 mg/kg

Inhalation LC50 LC50 Inhalation - rat - 4 h - > 21.0 mg/l

Dermal LD50 LD50 Dermal - rabbit - 17,600 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit - Moderate eye irritation

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

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: 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: Developmental Toxicity - rat - Inhalation:

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.
no data available

Urethabond 313 Clear Part A

Specific target organ toxicity - single exposure (Globally Harmonized System):
May cause drowsiness or dizziness.

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. Vapours may cause drowsiness and dizziness. 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: Drowsiness, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

12

ECOLOGICAL INFORMATION

Propanoic acid, 3-ethoxy-, ethyl ester (763-69-9) [14.3%]

Information on ecological effects

Toxicity:

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 55.3 mg/l - 96 h. Method: OECD Test Guideline 203

static test LC50 - Pimephales promelas (fathead minnow) - 45.3 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates immobilization EC50 - Daphnia magna (Water flea) - > 479.7 mg/l - 48 h. Method: OECD Test Guideline 202 invertebrates

Toxicity to algae Growth inhibition EC50 - Selenastrum capricornutum (green algae) - > 114.86 mg/l - 72 h. Method: OECD Test Guideline 201

Toxicity to bacteria Growth inhibition IC50 - other microorganisms - > 5,000 mg/l - 16 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.

Harmful to aquatic life.

n-Butyl acetate (123-86-4) [11-13%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 100 mg/l - 96 h.

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 72.8 - 205.0 mg/l - 24 h. and other aquatic invertebrates

Urethabond 313 Clear Part A

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.

Harmful to aquatic life with long lasting effects.
no data available

13 DISPOSAL CONSIDERATIONS

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

UN1263, Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base, 3, PGIII

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Polyester Polyol (0) [45-55%] TSCA

Propanoic acid, 3-ethoxy-, ethyl ester (763-69-9) [37-40%] TSCA

RQ(5000LBS), n-Butyl acetate (123-86-4) [11-13%] CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

RQ = Reportable Quantity
TSCA = Toxic Substances Control Act
CERCLA = Superfund clean up substance
CSWHS = Clean water Act Hazardous substances
MASS = MA Massachusetts Hazardous Substances List
OSHA = OSHA workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TXAIR = TX Air Contaminants with Health Effects Screening Level

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.

Urethabond 313 Clear Part A

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.