

SAFETY DATA SHEET



Date Prepared : 06/02/2015
SDS No : RB-805A

ResoBond 805 Tie-Coat, White, Part A, Hardener

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ResoBond 805 Tie-Coat, White, Part A, Hardener
PRODUCT CODE: 501GA
CHEMICAL FAMILY: Modified Cycloaliphatic Amine

MANUFACTURER

Resodyn Engineered Polymeric Systems
130 North Main Street
Suite 650
Butte, MT 59701
Emergency Phone: (800)424-9300
Customer Service: 406-497-5288
E-Mail: www.resodyn.com

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical) : (877) 800-5553
CANUTEC (Canadian Transportation) : (613) 996-6666
CHEMTREC (US Transportation) : (800) 424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1C
Acute Toxicity (Inhalation), Category 4
Serious Eye Damage, Category 1
Respiratory Tract Irritation, Category 3
Respiratory Sensitization, Category 1B
Acute Toxicity (Oral), Category 3
Acute Toxicity (Dermal), Category 5

Environmental:

Acute Hazards to the Aquatic Environment, Category 3

GHS LABEL



Corrosion



Skull and
crossbones



Exclamation
mark



Health
hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H315: Causes skin irritation.
H318: Causes serious eye damage.
H314: Causes severe skin burns and eye damage.
H402: Harmful to aquatic life.
H301: Toxic if swallowed.

H332: Harmful if inhaled.

H313: May be harmful in contact with skin.

PRECAUTIONARY STATEMENTS

Prevention:

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P273: Avoid release to the environment.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P321: Specific treatment (see first aid section on this label).

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTER/doctor/...

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363: Wash contaminated clothing before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P405: Store locked up.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501: Dispose of contents/container in accordance with local/national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
formaldehyde, polymer with benzenamine, hydrogenated	> 40	135108-88-2
Benzyl Alcohol	< 40	100-51-6
cyclohexanamine, 4,4'-methylenebis-	< 5	1761-71-3
2-piperazin-1-ylethylamine	< 15	140-31-8
2,4,6-tris(dimethylaminomethyl)phenol	< 5	90-72-2

4. FIRST AID MEASURES

EYES: Remove contact lenses if present. Hold eyelids apart, initiate and maintain gentle and continuous irrigation until patient receives medical care. If prompt medical care is not available, continue irrigation for one hour. Rinse under eyelids with plenty of water for at least 20 minutes.

SKIN: Immediately remove contaminated clothing and flush skin with water for at least 20 minutes. Cover any wound with a sterile dressing. Seek immediate medical attention.

INGESTION:

Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Seek medical attention.

INHALATION: If difficulty breathing, move to fresh air once. For acute overexposure, give oxygen if breathing is difficult. Apply artificial respiration if breathing has stopped. Keep patient warm and at rest. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Product vapor in low concentration can cause lacrimation, conjunctivitis and corneal Edema when absorbed into the eye

tissue. Corneal edema may give rise to a perception of a blue haze or fog around lights. The effect is transient.

SKIN: Severe skin irritant, and sensitizer. Contact causes severe irritation and pain, may cause burns and permanent injury.

INGESTION: Ingestion may cause bleeding of the gastrointestinal tract and the vomiting of blood.

INHALATION: Inhalation of vapors may severely damage tissue and produce scarring.

ACUTE TOXICITY: May cause burns to skin and eyes. May cause permanent eye injury. High concentration of vapors can cause severe irritation of eyes and respiratory tract.

CHRONIC EFFECTS: Prolonged or repeated exposure may cause asthma and skin sensitization or other allergic response.

NOTES TO PHYSICIAN: Further treatment may be necessary. Contact local poison control center. Rinse mouth. Application of corticosteroid cream has been effective in treating skin irritation.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Flammable in presence of open flame, sparks, excessive heat and static discharge.

EXTINGUISHING MEDIA: Do not use water, which may spread fire. Extinguish with foam, dry chemical, carbon dioxide, earth or sand.

HAZARDOUS COMBUSTION PRODUCTS: May generate ammonia and toxic nitrogen oxide gasses. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated.

EXPLOSION HAZARDS: Dusts and aerosols at sufficient concentrations may exhibit explosive characteristics if ignited by static discharge or spark. Exercise care during dusting or misting operations such as grinding or drilling.

FIRE FIGHTING PROCEDURES: Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

FIRE FIGHTING EQUIPMENT: Toxic fumes will be evolved when this material is involved in a fire. Self-contained breathing apparatus should be available for fire fighters.

FIRE EXPLOSION: Containers may explode in heat of fire; cool containers with water. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point.

SENSITIVE TO STATIC DISCHARGE: None

SENSITIVITY TO IMPACT: None

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide, nitrogen oxides, and/or ammonia.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Avoid contact with material. Persons not wearing appropriate protective equipment should be excluded from the area of spill until clean-up is complete. Stop spill at source. Dike area to prevent spreading. Remaining product may be taken up by clay, diatomaceous earth or other absorbent and shoveled into disposal containers such as a dumpster or other common garbage receptacle. Residual material may be removed using steam or hot soapy water. Keep spark-producing equipment away from area. Observe environmental regulations and report spills as required to appropriate authorities.

LARGE SPILL: For large spills, dike and collect with absorbent material. Flushed cleaned areas with water being careful not to allow run-off to enter drains, sewers or streams. Observe Environmental regulations. Wear PPE - gloves, rubber boots, and safety glasses.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:

Avoid contact with eyes, skin, and clothing.

For industrial use only!

Harmful if inhaled.

Do not take internally.

May cause irritation.

Do not eat, drink or smoke when using this product.
 Wear chemical splash goggles, gloves and protective clothing.
 Avoid high ambient temperatures and humidity.
 Wash thoroughly after handling.

STORAGE: Store in a cool, dry place.
 Keep container closed when not in use.
 Store away from direct heat and flame.
 Keep away from food and drinking water.
 Store out of direct sunlight.
 DO NOT SMOKE where product is used or stored.
 Store in a well-ventilated place.
 Do not store in reactive metal containers.
 Do not store near acids.
 Always mix well before using.

SPECIAL SENSITIVITY: DO NOT USE sodium nitrate or other nitrosating agents in formulations containing this product.
 Suspected carcinogen nitrosamines could be formed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
			EXPOSURE LIMITS	
			ACGIH TLV	
Chemical Name			ppm	mg/m ³
Benzyl Alcohol	TWA	10		

ENGINEERING CONTROLS: Breathing vapors must be avoided. Ventilation must be sufficient to control vapors. This material should be confined as far as possible within sealed or covered equipment in which case normal ventilation should be adequate. Special (local) ventilation will be needed in areas where vapors are expected to be vented.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Splashproof, chemical resistant safety goggles or face shield. Eye bath nearby. Contact lenses should not be worn.

SKIN: Impervious gloves, neoprene, or other suitable long sleeved and legged clothing. Launder clothing before reuse.

RESPIRATORY: Use organic vapor cartridges in respirators. If TLV of any component is exceeded use appropriate respiratory protection or ventilate in accordance with OSHA Regulation 29 CFR Part 1910.V.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Safety shower and eyewash station should be within direct access. Keep containers closed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point (°C)
Benzyl Alcohol	200

ODOR: Ammonia

APPEARANCE: Liquid

COLOR: Straw Yellow

pH: Alkaline.

PERCENT VOLATILE: 0

FLASH POINT AND METHOD: (212°F)

FLAMMABLE LIMITS: NE to NE

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

BOILING POINT: (392°F)

SPECIFIC GRAVITY: 1 to 1.1

(VOC): 150.000

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under normal conditions of use and storage.

CONDITIONS TO AVOID: Do not store in iron, zinc, galvanized or other reactive metal containers.

POSSIBILITY OF HAZARDOUS REACTIONS: CAUTION! N-Nitrosamines, many of which are known potent carcinogens, may be formed if exposed to nitrous acid, nitrites, or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminum, zinc, iron, and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxides, possibly creating an explosion. Reactive with hydroxyl compounds, nitrites, nitrosating agents. Vigorous reaction accompanied by large heat release when mixed with acids. Generated heat may cause vigorous boiling.

HAZARDOUS DECOMPOSITION PRODUCTS: Nitric Acid. Ammonia. Nitrogen oxides. Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide. Aldehydes. Flammable hydrocarbon fragments (i.e. acetylene.) Nitrosamine.

INCOMPATIBLE MATERIALS: (Materials to avoid) mineral acids, organic acids, oxidizing agents, and reactive metals.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀	DERMAL LD ₅₀	INHALATION LC ₅₀
Benzyl Alcohol	1230	2000	1000

DERMAL LD₅₀: No data is available on the product itself.

Notes: Components:

Benzyl Alcohol: LD50 (rabbit) 2000 mg/kg

1-(2-Aminoethyl)piperazine LD50 (rabbit) 880 mg/kg

4,4'-Methylenebiscyclohexanamine LD50 (rabbit) 2110 mg/kg

Formaldehyde, polymer with benzenamine, hydrogenated LD50 (rabbit) >1000 mg/kg

ORAL LD₅₀: > 500 mg/kg (rat)

INHALATION LC₅₀: No data is available on the product itself.

Notes: Components:

Benzyl Alcohol: LD50, rat (4 hours): >4.178 mg/L

EYE EFFECTS: Irritant.

SKIN EFFECTS: Irritant.

REPRODUCTIVE EFFECTS: No Data Available

TERATOGENIC EFFECTS: No Data Available

MUTAGENICITY: No Data Available

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: No Data available on the product itself.

Components: some components are classified as persistent, bioaccumulative, or toxic.

Consult www.pbtprofiler.net

AQUATIC TOXICITY (ACUTE): No data is available on the product itself.

Notes: Components:

Benzyl Alcohol, bluegill sunfish (96 hour): LC50: 10 mg/L
 Benzyl Alcohol, fathead minnow (96 hour): LC50: 460 mg/L
 Benzyl Alcohol, silverside minnow (96 hour): LC50: 10 - 32 mg/L
 Benzyl Alcohol, water flea (48 hour): LC50: 360 mg/L

4,4'-Methylenebiscyclohexanamine, golden orfe (96 hour): LC50: 46-100 mg/L
 4,4'-Methylenebiscyclohexanamine, daphnia magna (48 hour): EC50: 6.84 mg/L
 4,4'-Methylenebiscyclohexanamine, algae (72 hour): EC50: 140-200 mg/L

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Material should be disposed of as hazardous waste in accordance with Federal, state and local environmental regulations. Dispose of containers with any amount of liquid material as hazardous waste. Part B mixed containers can be considered as non-hazardous provided all residual material is cured solid. Part A and part D containers can be washed out with a small amount of laquer thinner. The residual material should be collected in one large container and disposed of as hazardous waste. The waste material can also be mixed with an epoxy resin and cured to a solid state for disposal as non-hazardous waste. Consult Sauereisen for the appropriate amount of epoxy resin to add to a known amount of part A (epoxy resin hardener).

EMPTY CONTAINER: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Animes, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN2735

PACKING GROUP: III

LABEL: Corrosive

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Animes, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN NUMBER: UN2735

HAZARD CLASS: 8

PACKING GROUP: III

LABEL: Corrosive.

AIR (ICAO/IATA)

SHIPPING NAME: Animes, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN/NA NUMBER: UN2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: Animes, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN/NA NUMBER: UN2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

LABEL: Corrosive

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Animes, Liquid, Corrosive, N.O.S., (Cycloaliphatic amine)

UN/NA NUMBER: UN2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

LABEL: Corrosive

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive



Toxic

R36/37/38: Irritating to eyes, respiratory system and skin.

S24/25: Avoid contact with skin and eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

R20/21: Harmful by inhalation and in contact with skin.

R25: Toxic if swallowed.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute. Chronic. Irritant. Toxic.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: There are no listed chemicals above detection limits in this compound.

TITLE III NOTES: None above detection limits.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2
Benzyl Alcohol	100-51-6
cyclohexanamine, 4,4'-methylenebis-	1761-71-3
2-piperazin-1-ylethylamine	140-31-8
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2

TSCA STATUS: Components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CALIFORNIA PROPOSITION 65: Known to the State of California to cause cancer and reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Act of 1986".

It has not been determined and cannot be ascertained that this product would not expose users to the listed chemicals at the very low level prescribed in the regulations. Therefore, it is the user's responsibility to determine if the percent of the hazardous / carcinogenic ingredients listed elsewhere in the SDS comply with State of California regulations.

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Toxic



Corrosive

R36/37/38: Irritating to eyes, respiratory system and skin.

S24/25: Avoid contact with skin and eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

R20/21: Harmful by inhalation and in contact with skin.

R25: Toxic if swallowed.

WHMIS CLASS: Class D, Division 2, Subdivision B: Materials cause other toxic effects, toxic material.
Class E, Corrosive.

DOMESTIC SUBSTANCE LIST (INVENTORY): Data not available.

16. OTHER INFORMATION

PREPARED BY: John A Kozak **Date Prepared:** 06/02/2015

HMIS RATING

HEALTH	<input type="text" value=""/>	3
FLAMMABILITY	<input type="text" value=""/>	1
PHYSICAL HAZARD	<input type="text" value=""/>	0
PERSONAL PROTECTION	<input type="text" value=""/>	H