

# SAFETY DATA SHEET

## 1.0 IDENTIFICATION

- 1.1 GHS product identifier:** 865 Final Fair Hardener  
**1.2 Other means of identification:** Polyamide/Amine Solution  
**1.3 Recommended use of the chemical and restrictions on use:** N/A  
**1.4 Supplier's details:** CASS POLYMERS OF MICHIGAN, INC.  
815 WEST SHEPHERD STREET  
CHARLOTTE MI 48813 USA  
INFORMATION PHONE NUMBER: (248) 588-2270  
**1.5 Emergency phone number:** (703) 527-3887(Call Collect)

## 2.0 HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

Specific Target Organ Toxicity – Single Exposure 1, Acute Toxicity – Inhalation 3, Acute Toxicity – Dermal 3, Acute Toxicity – Oral 3, Skin Corrosion/Irritation 2, Eye Damage/Irritation 2B, Specific Target Organ Toxicity – Repeat Exposure 2, Toxic to Reproduction 2, Specific Target Organ Toxicity – Single Exposure 3

### 2.2 GHS label elements:

**Signal Word:** Danger

**Hazard Statement:** Causes damage to kidneys, lungs, liver, nerves and blood

**Prevention:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response:** If exposed: Call a poison center or doctor/physician. If inhaled: Move effected persons to fresh air; if effects occur, consult a physician. If on skin: Continued and thorough washing in flowing water for at least 15 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Wash clothing before reuse. Destroy contaminated leather items. If in eyes: Wash immediately and continuously with flowing water for at least 15 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. If swallowed: call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by a physician or medical personnel. Do not give anything by mouth to an unconscious person.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.

**Signal Word:** Danger

**Hazard Statement:** Toxic if inhaled

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

**Response:** If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.

**Signal Word:** Warning

**Hazard Statement:** Toxic in contact with skin

**Prevention:** Wear protective gloves/protective clothing.

**Response:** If on skin: wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell. Immediate, continued and thorough washing in flowing water for at least 30 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Remove/take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.





**Signal Word:** Danger

**Hazard Statement:** Toxic if swallowed

**Prevention:** Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response:** If swallowed: Call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by a physician or medical personnel. Do not give anything by mouth to an unconscious person. Rinse mouth.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.



**Signal Word:** Warning

**Hazard Statement:** Causes skin irritation

**Prevention:** Wash hands thoroughly after handling. Wear protective gloves.

**Response:** If on skin: wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before reuse.

**Signal Word:** Warning

**Hazard Statement:** Causes eye irritation

**Prevention:** Flush eyes thoroughly after eye contact.

**Response:** If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.



**Signal Word:** Warning

**Hazard Statement:** May cause damage to kidneys, lungs, liver, nerves and blood through prolonged or repeated exposure

**Prevention:** Do not breathe dust/fume/gas/mist/vapors/spray.

**Response:** Get medical advice/attention if you feel unwell.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.



**Signal Word:** Warning

**Hazard Statement:** Suspected of causing reproductive problems and birth defects.

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**Response:** If exposed or concerned: Get medical advice/attention.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.



**Signal Word:** Warning

**Hazard Statement:** May cause drowsiness or dizziness

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

**Response:** If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

**Store:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:** Dispose of contents/container by incineration under controlled conditions in accordance with all local and national laws and regulations.

**2.3 Other hazards which do not result in classification:** Flammable Liquid

**2.4 Hazards Material Information System (United States):**

<b>Health</b>	<b>2</b>
<b>Flammability</b>	<b>3</b>
<b>Physical Hazard</b>	<b>0</b>

Hazard Codes: \*=Chronic Hazard 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard

### 3.0 COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Mixtures

Chemical Identity	CAS No.	Concentration
Benzyl alcohol	100-51-6	15% - 20%
Benzene-1,3-dimethaneamine (MXDA)	1477-55-0	1%
Tetraethylenepentamine (TEPA)	112-57-2	3% - 5%
Barium Sulfate	7727-43-7	40% -50%
Magnesium Silicate	14807-96-6	1% - 10%
DibutylPhthalate	87-74-2	6.7%
Phenolic Resin	9003-35-4	1% -5%
Amorphous Silica	7631-86-9	1%
Siloxanes and Silicones, di-Me, reaction products with Silica	67762-90-7	<1%
Toluene	108-88-3	0.4%
n-Butyl Acetate	123-86-4	0.4%
n-Butanol	71-36-3	0.4%
Methyl Ethyl Ketone	78-93-3	0.3%

### 4.0 FIRST-AID MEASURES

#### 4.1 Description of necessary first-aid measures:

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

**Inhalation:** Move effected persons to fresh air; if effects occur, consult a physician.

**Skin Contact:** Continued and thorough washing in flowing water for at least 15 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Wash clothing before reuse. Destroy contaminated leather items.

**Eye Contact:** Wash immediately and continuously with flowing water for at least 15 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.

**Ingestion:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by a physician or medical personnel. Do not give anything by mouth to an unconscious person.

**Note to Physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

#### 4.2 Most Important symptoms/effects, acute and delayed:

**Inhalation:** Harmful if inhaled and may cause delayed lung injury. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Toxic by inhalation. May cause damage to kidneys, lungs, liver, nerves and blood.

**Eye contact:** Product vapor in low concentrations can cause lacrimation, conjunctivitis and Corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Causes eye irritation.

**Skin contact:** If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Causes skin irritation. May cause damage to kidneys, lungs, liver, nerves and blood.

**Ingestion:** Harmful if swallowed. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

**Medical Conditions Generally Aggravated By Exposure:** Skin disorders, Allergies, kidney, blood and liver disorders.

**Carcinogens Under OSHA, ACGIH, NTP, IARC, Other:** This product contains no OSHA, ACGIH, NTP or IARC listed carcinogens in concentrations of 0.1 percent or greater.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary: N/A

### 5.0 FIRE-FIGHTING MEASURES

#### 5.1 Suitable extinguishing media:

Water fog or fine spray. Carbon dioxide. Alcohol resistant foam. Dry chemical fire extinguishers.

**5.2 Specific hazards arising from the chemical:**

Flash point is -2°C(28°F). May generate toxic or irritating combustion products. Sudden reaction and fire may occur if product is mixed with an oxidizing agent.

**5.3 Special protective actions for fire-fighters:**

Wear positive-pressure self-contained breathing apparatus and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves.)

**6.0 ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:**

Wear adequate personal protective equipment; see Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION.

**6.2 Methods and materials for containment and clean up:**

Large spills: Contain with dike. Pump into suitable and properly labeled containers.

Small spills: Dilute with water and recover or use non-combustible absorbent material/sand and shovel into appropriate containers.

**7.0 HANDLING AND STORAGE****7.1 Precautions for safe handling:**

Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well-ventilated workspace. When handling, do not eat, drink, or smoke.

Other Precautions: Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA).

**7.2 Conditions for safe storage, including any incompatibilities:**

Keep away from: oxidizers. Keep in cool, dry, ventilated storage areas and in closed containers.

**8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Component	CAS No.	Percent	Exposure Limits	Source
Amorphous Silica	7631-86-9	<1%	2.4 mg/m <sup>3</sup> TWA respirable dust, 10 mg/m <sup>3</sup> TWA total inhalable dust	OES/EH40 ACGIH
Benzyl alcohol	100-51-6	15% - 20%	10 ppm (44.2 mg/m <sup>3</sup> ) TWA	ACGIH
Toluene	108-88-3	0.4%	200ppm TWA 50ppm TLV	OSHA ACGIH
n-Butanol	71-36-3	0.4%	100ppm TWA 50ppm TLV	OSHA ACGIH
Methyl Ethyl Ketone	78-93-3	0.3%	200ppm TWA 200ppm TLV	OSHA ACGIH
DibutylPhthalate	87-74-2	6.7%	5 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup> 8 hr PEL	ACGIH OSHA

**8.2 Appropriate engineering controls:**

No specific controls needed. Heated material

**8.3 Individual protection measures, such as personal protective equipment:**

**Eye Protection:** Chemical safety glasses. A full-face shield and vapor respirator is recommended for operations involving spraying or other operations placing this material under pressurized conditions.

**Hand Protection:** Neoprene rubber gloves. Impermeable gloves. Nitrile rubber gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

**Respiratory Protection:** A cartridge mask National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors may be appropriate. Always ensure proper ventilation when using this product.

**Protective Clothing:** Long sleeved clothing.

**Work And Hygienic Practices:** Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet.

**Notice:** The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all requisite workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), as well as the instructions/specifications provided by the glove supplier.

**9.0 PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Appearance (physical state, color, etc.):** Thin Paste, Purple to Lavender.

**9.2 Odor:** Solvent Odor

**9.3 Odor threshold:** N/A

- 9.4 pH:** Not Determined
- 9.5 Melting point/freezing point:** Not Determined
- 9.6 Initial boiling point and boiling range:** Not Determined
- 9.7 Flash Point:** -2°C(28°F)
- 9.8 Evaporation rate:** N/A
- 9.9 Flammability (solid, gas):** N/A
- 9.10 Upper/lower flammability or explosive limits:** LFL-Not Determined; UFL-Not Determined
- 9.11 Vapor pressure:** Not Determined
- 9.12 Vapor Density:** N/A
- 9.13 Relative density(Specific Gravity):** 1.26 – 1.38
- 9.14 Solubility(ies):** Liquid components are soluble in water
- 9.15 Partition coefficient; n-octanol/water:** N/A
- 9.16 Auto-ignition temperature:** >300°C
- 9.17 Decomposition temperature:** N/A
- 9.18 Viscosity:** N/A
- 9.19 Volatile content:** 8% (105.6g/L)
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## 10.0 STABILITY AND REACTIVITY

- 10.1 Reactivity:** N/A
- 10.2 Chemical stability:** Stable
- 10.3 Possibility of hazardous reactions:** Will not occur
- 10.4 Conditions to avoid:** N/A
- 10.5 Incompatible materials:** Oxidizing Agents (i.e. perchlorates, nitrates etc.). Sodium or Calcium Hypochlorite. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
- 10.6 Hazardous decomposition products:** Carbon Monoxide in a fire. Carbon Dioxide in a fire. Irritating and toxic fumes at elevated temperatures.
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## 11.0 TOXICOLOGICAL INFORMATION

- 11.1 Likely routes of exposure:** Eye Contact, Skin Contact, Ingestion, Inhalation.
- 11.2 Symptoms related to the physical, chemical and toxicological characteristics:**
- Ingestion:** This material should not be considered toxic due to ingestion.
- Skin Contact:** Prolonged or widespread skin contact is not likely to cause immediate toxic effects. Possible risk of chronic effects with long-term exposure.
- Irritation:**
- Skin:** Skin contact has caused allergic skin reactions in certain sensitized individuals.
- Eyes:** Product vapor in low concentrations can cause lacrimation, conjunctivitis and Corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Causes eye irritation.
- Inhalation:** Harmful if inhaled and may cause delayed lung injury. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Toxic by inhalation. May cause damage to kidneys, lungs, liver, nerves and blood.
- 11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:**
- Carcinogen:** This material does not contain any materials listed by OSHA, ACGIH, NTP or IARC as a carcinogen.
- Mutagen:** This material contains DibutylPhthalate (CAS# 84-74-2), a substance that has caused DNA and other cell damage to human tissues in laboratory tests.
- Reproductive Hazard:** This material contains DibutylPhthalate (CAS# 84-74-2), a substance that has caused reproductive problems and birth defects in laboratory animals.
- 11.4 Numerical measures of toxicity:**
- This finished product has not been tested to determine individual toxicological/ecological limits. Individual components of this mixture have been independently tested by the raw material manufacturers and any known results have been presented below. The results for the individual components may not be representative of the toxicity of this finished product.

Ingredient Name	CAS No.	%	Test	Result	Route	Species
DibutylPhthalate	87-74-2	6.7%	LD50	8000mg/kg	Oral	Rat
			LC50	4250 mg/m3	Inhalation	Rat
			LD50	3050 µL/kg	Interaperitoneal	Rat
			LD50	>20mL/kg	Dermal	Rabbit

## 12.0 ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity:

Chemical Name	CAS No.	%	Test	Concentration	Result	Species
Dibutly Phthalate	84-74-2	6.7%	LC50EC50	0.92 mg/L	96 hr	Fathead Minnow
				3.4 mg/L	48 hr	Daphnid

### 12.2 Persistence and degradability:

This material contains components that show little or no evidence of biodegradability. Caution should be taken to prevent release to the environment. See Section 13 for further information.

### 12.3 Bioaccumulative potential: N/A

### 12.4 Mobility in soil: N/A

### 12.5 Other adverse effects: N/A

## 13.0 DISPOSAL CONSIDERATIONS

### 13.1 Disposal methods:

Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations. The generation of waste should be avoided or minimized wherever possible. Untreated material is not suitable for disposal. Waste, even small quantities, should never be poured down drains, sewers or watercourses. Waste must be disposed of in accordance with federal, state and local environmental control regulations. This material, when properly mixed and cured with its resin component at the proper mix ratio, may be safely landfilled.

Contaminated packaging: Empty containers can only be disposed of when the remaining product adhering to the container walls has been removed. Hazard warning labels should be removed from the container only after it has been properly emptied

## 14.0 TRANSPORT INFORMATION

### 14.1 UN number: UN-1866

### 14.2 UN proper shipping name: Resin Solution

### 14.3 Transport hazard class(es): 3

### 14.4 Packing group, if applicable: II

### 14.5 Environmental hazards: N/A

### 14.6 Transport in bulk: N/A

### 14.7 Special precautions for user: N/A

## 15.0 REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations:

**Toxic Substances Control Act (TSCA):** All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**Toxic Substance Control Act (TSCA) 12(b) COMPONENT(S):** Dibutyl Phthalate (CAS# 84-74-8) 6.7%

**OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es):** Irritant. Sensitizer. Corrosive.

**EPA SARA Title III Section 312 (40CFR370) hazard class:** Immediate Health Hazard. Delayed Health Hazard.

**EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimis" level are:** Dibutyl Phthalate (CAS# 84-74-8) 6.7%

**CALIFORNIA PROPOSITION 65 Substances (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")** None

**New Jersey Trade Secret Registry Number(s):** None

### CANADA REGULATIONS

**DSL:** Included on Inventory.

### WHMIS Hazard Classification:

D2B- Very Toxic Material Causing Other Toxic Effects

B2- Flammable Liquid

**WHMIS Ingredient Disclosure List:**

Dibutyl Phthalate (6.7% by mass)

**WHMIS Trade Secret Registry Number(s):**

**This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. None**

**WHMIS SYMBOLS**



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**16.0 OTHER INFORMATION**

**16.1 Date of Preparation:** 08/29/2011

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To the best of our knowledge, the information contained herein is accurate. Final determination of the suitability of any material is the sole responsibility of the users. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.