SAFETY DATA SHEET

1.0 IDENTIFICATION

1.1 GHS product identifier: TCC-5095B

1.2 Other means of identification: Aromatic Amine Blend

1.3 Recommended use of the chemical and restrictions on use: N/A

1.4 Supplier's details: CASS POLYMERS OF MICHIGAN, INC.
31200 STEPHENSON HWY
MADISON HEIGHTS MI 48071 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 – Oral 3, Acute Toxicity – Dermal 3, Specific Target Organ Toxicity – Repeated Exposure 2, Skin Sensitizer 1, Carcinogenicity 2, Toxic to Reproduction 2

2.2 GHS label elements:

Signal Word: Danger
Hazard Statement: Causes damage to organs. Contact with eyes may cause irritation and discomfort. Contact with skin causes irritation, redness and discomfort which is transient. Inhalation of mists may cause irritation in the respiratory tract. Inhalation of vapors may cause irritation in the respiratory tract. Coughing and chest pain may result.
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 continue, 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 eye: 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: Preferred method of disposal includes 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.
Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal: Preferred method of disposal includes 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.
Storage: Store locked up.
Disposal: Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations.

Signal Word: Danger
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. Continued and thorough washing in flowing water for at least 15 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: Warning
Hazard Statement: May cause damage to organs through prolonged or repeated exposure. May cause allergic reaction/sensitization.
Prevention: Do not breathe dust/fume/gas/mist/vapors/spray.
Response: Get medical advice/attention if you feel unwell.
Disposal: Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations.

Signal Word: Warning
Hazard Statement: May cause an allergic skin reaction
Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.
Response: If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Continued and thorough washing in flowing water for at least 15 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Wash contaminated clothing before reuse.
Disposal: Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations.

Signal Word: Warning
Hazard Statement: Suspected of causing cancer. This material contains 4,4'-methylenedianiline (CAS# 101-77-9), a substance that is a known or suspected human carcinogen.
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: Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations.

Signal Word: Warning
Hazard Statement: Suspected of damaging fertility or the unborn child. This material contains DIBUTYL PHTHALATE (CAS# 84-74-2), a substance that has caused reproductive problems and birth defects in laboratory animals.
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: Preferred method of disposal includes 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):

Health	**2***
Flammability	**1**
Physical Hazard	**0**

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
4,4'methylenedianaline*	101-77-9	40% - 45%
N-Methyl Pyrrolidone	872-50-4	1% - 10%
DibutylPhthalate*	87-74-2	45% - 55%

***** This Material Presents a Chronic Health Hazard. See section 8-EXPOSURE CONTROLS/PERSONAL PROTECTION, and section 11-TOXICOLOGICAL INFORMATION for complete hazard/exposure limit information.

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 continue, 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:

Signs And Symptoms of Exposure (Acute effects): Contact with eyes may cause irritation and discomfort. Contact with skin causes irritation, redness and discomfort which is transient. Inhalation of mists may cause irritation in the respiratory tract. Inhalation of vapors may cause irritation in the respiratory tract. Coughing and chest pain may result.

Chronic Exposure Hazards (Possible Longer Term Effects): Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposures may result in: Impaired fertility, birth defects, developmental abnormalities in the unborn child. This material contains substances known or anticipated to be human carcinogens.

Medical Conditions Generally Aggravated By Exposure: Skin disorders, Respiratory Disorders and Allergies

Carcinogens under OSHA, ACGIH, NTP, IARC, Other: This product contains 4,4'-methylenedianiline. IARC: group 2B; OSHA: May Cause Cancer; NTP: Anticipated to be a carcinogen. Other chronic health risks exist with components of this product. See section 8 and section 11 for further information.

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 340ºF (171ºC). 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 fire fighting clothing (includes fire fighting 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: Ventilate area and remove or turn off all sources of ignition. 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 prolonged exposure. Do not get on skin, in eyes or on clothing. Do not breathe vapors. Handle in well-ventilated workspace. When handling, do not eat, drink, or smoke. After handling, wash exposed skin thoroughly before eating, drinking, smoking or using the toilet. 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
4,4'methylenedianaline	101-77-9	40% - 45%	0.1 ppm TWA	ACGIH
DibutylPhthalate	87-74-2	45% - 55%	5 mg/m^3 TWA 5 mg/m^3 8 hr PEL	ACGIH OSHA

8.2 Appropriate engineering controls: No specific controls needed.

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 this material.

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. 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.

Respiratory Protection: A cartridge mask National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors is appropriate for use with this material. Maintain adequate workplace ventilation at levels below designated occupational guidelines.

Protective Clothing: Long sleeved clothing. Impermeable (non-absorbent) work 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.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance (physical state, color, etc.): Mobile Liquid, Amber

9.2 Odor: Slight Aromatic 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: 340ºF (171ºC)

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): 1.00 – 1.10

9.14 Solubility(ies): Liquid Components Readily 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

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: Not applicable

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.

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 be considered toxic by ingestion.
Skin Contact: Widespread skin contact is not likely to cause immediate toxic effects. Prolonged skin contact may cause impaired fertility or reproductive harm.
Acute Irritation:
Skin: Skin contact has caused allergic skin reactions in certain sensitized individuals.
Eyes: Irritation with local redness. Mechanical irritation possible due to solid filler materials.
Inhalation: May cause respiratory irritation upon exposure to vapors.

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:

Carcinogen: This material contains 4,4'-methylenedianiline (CAS# 101-77-9), a substance that is a known or suspected human carcinogen.
Mutagen: This material contains DIBUTYL PHTHALATE (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 DIBUTYL PHTHALATE (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	45% - 55%	LD50 LC50 LD50 LD50	8,000 mg/kg 4,250 mg/m^3 3,050 µL/kg >20 mL/kg	Oral Inhalation Interaperitoneal Dermal	Rat Rat Rat Rabbit
4,4'-methylenedianaline	101-77-9	40% - 45%	LD50 LC50	517 mg/kg 220 mg/kg	Oral Dermal	Rat Rabbit

12.0 ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

Chemical Name	CAS No.	%	Test	Concentration	Result	Species
4,4'-Methylenedianiline	101-77-9	40% - 45%	LC50	39 mg/L	96 hr	Rainbow Trout
DIBUTYL PHTHALATE	84-74-2	45% - 55%	LC50 EC50	0.92 mg/L 3.4 mg.L	96 hr 48 hr	Fathead Minnow Daphnid

Individual components of this mixture have been independently tested by the raw material suppliers and any known results have been presented above. The results for the individual components may not be representative of the ecological toxicity of this finished product. This finished product has not been tested to determine individual toxicological/ecological limits Caution should be taken to prevent release to the environment. See Section 13 for further information.

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 disposal 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: The generation of waste should be avoided or minimized wherever possible. Preferred method of disposal includes incineration under controlled conditions in accordance with all local and national laws and regulations. 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. 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-2651

14.2 UN proper shipping name: 4,4' Diaminodiphenylmethane

14.3 Transport hazard class(es): 6.1

14.4 Packing group, if applicable: III, Marine Pollutant

14.5 Environmental hazards: Marine Pollutant

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),50 %
4,4'-METHYLENEDIANILINE (CAS# 101-77-9), 40%
OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)
Irritant. Sensitizer. Possible Risk of Impaired Fertility. May Cause Cancer
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), 50%
4,4'-METHYLENEDIANILINE (CAS# 101-77-9), 40%
CALIFORNIA PROPOSITION 65: SUBSTANCES (component (s) know to the State of California to cause cancer and/or reproductive and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986") DIBUTYL PHTHALATE (CAS#84-74-8), 50% - Reproductive Hazard
4,4'-METHYLENEDIANILINE (CAS# 101-77-9), 40% - Carcinogen

CANADA REGULATIONS

DSL: Components of this product have been reported to Environment Canada in accordance with subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substances List.
WHMIS HAZARD CLASSIFICATION D2B- Very Toxic Material Causing Other Toxic Effects
WHMIS INGREDIENT DISCLOSURE LIST DIBUTYL PHTHALATE CAS#84-74-2, 50%
4,4'-METHYLENEDIANILINE CAS# 101-77-9, 40%
WHMIS TRADE SECRET REGISTRY NUMBER(S). This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR. **NONE**
WHMIS SYMBOL(S):

16.0 OTHER INFORMATION

16.1 Date of Preparation: 10/07/2011

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.