Material Safety Data Sheet

Date Originated: 1/15/2015

NFPA

HCS CLASS: Toxic.
HCS CLASS: Irritating substance.
HCS CLASS: Sensitizing substance.
HCS CLASS: Combustible liquid IIIB having a flash point higher than 93.3°C (200°F).

Section 1. Chemical Product and Company Identification

Product Name

Polyflex 311A.0 ISO-Catalyst

Synonym

WP 311A.0

Chemical Family

Aromatic isocyanates.

Manufacturer

SUPPLIER:
Wasser Corporation
4118 B PL NW, Suite B
Auburn, WA 98001, US
Phone# 253-850-2967

In case of Emergency

EMERGENCY PHONE NUMBERS:
USA and Canada: 1-800 424-9300
International: 1-703 527-3887

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
<th>TLV/PEL</th>
<th>LC50/LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDI Prepolymer</td>
<td>Proprietary</td>
<td>60-100</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Diphenylmethane-4,4'-diisocyanate</td>
<td>101-68-8</td>
<td>5-10</td>
<td>TWA: 0.005 CEIL: 0.02 (ppm) from OSHA/NIOSH</td>
<td>ORAL (LD50) mg/kg: Acute: 15000 (Rat). VAPOR (LC50) ppm : Acute: 43 (Rat) (4 hour(s)).</td>
</tr>
<tr>
<td>Diphenylmethane-2,2- diisocyanate</td>
<td>26447-40-5</td>
<td>5-10</td>
<td>TWA: 0.005 CEIL: 0.02 (ppm) from ACGIH</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Section 3. Hazards Identification

Routes of Entry:
Inhalation. Skin contact (absorption). Eye contact. Ingestion.

Potential Acute Health Effects

**Eyes:** Liquid or spray mist may severely irritate eyes. Inflammation of the eye is characterized by redness, watering, and itching.

**Skin:** This product may irritate skin upon contact. Harmful if absorbed through the skin. May cause skin sensitization. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Ingestion:** Harmful if swallowed. Irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. Even small amounts of liquid aspirated into lungs during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death.

**Inhalation:** Harmful if inhaled (Irritant, sensitizer). Over-exposure by inhalation of the vapors/spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. May cause sensitization by inhalation. Massive overexposure can cause unconsciousness and death.

**Eyes:** Repeated or prolonged contact with spray mist may produce chronic eye irritation.

**Skin:** Repeated skin exposure can produce local skin destruction, or dermatitis, possibly sensitization.

**Ingestion:** May be fatal if swallowed.

**Inhalation:** Repeated or prolonged inhalation of vapors/spray mist may lead to chronic respiratory irritation. May cause sensitization by inhalation.

Other chronic effects on Humans
Sensitive individuals may develop eczema and/or asthma on inhalation of this material. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.

Section 4. First Aid Measures

**Eye Contact**
Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. DO NOT use an eye ointment. Seek medical attention.

**Skin Contact**
Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Rinse with plenty of running water (15-30 minutes). If irritation persists, seek medical attention.

**Hazardous Skin Contact**
If the chemical gets onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the person under shower. Wash gently and thoroughly the contaminated skin with running water and non abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Rinse with plenty of running water (15-30 minutes). Seek medical attention. Wash contaminated clothing before reusing.

**Inhalation**
Allow the person to rest in a well ventilated area. Loosen tight clothing around the person's neck and waist. If symptoms persist, seek medical advice immediately (show the label when possible).

**Hazardous Inhalation**
Evacuate the person to a safe area as soon as possible. Loosen tight clothing around the person's neck and waist. If the person is not breathing, administer mouth-to-mouth resuscitation. Warning: It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation if the material is toxic, infectious or corrosive. Oxygen may be administered if breathing is difficult. Seek medical attention.

**Ingestion**
DO NOT induce vomiting. Have conscious person drink several glasses of water. Seek immediate medical attention.

**Hazardous Ingestion**
DO NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. Have conscious person drink several glasses of water. Never give an unconscious person anything to ingest. Even small amounts of liquid aspirated into lungs during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. If the person is not breathing, administer mouth-to-mouth resuscitation. WARNING: It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Avoid mouth-to-mouth contact by using mouth guards or shields. If breathing is difficult, administer oxygen. Seek immediate medical attention.
Section 5. Fire and Explosion Data

Flammability of the Product: Combustible.
Auto-Ignition Temperature: Not available.
Flash Points: Not available.
Flammable Limits: Not available.
Products of Combustion: These products are carbon oxides (CO, CO2), and other toxic compounds (nitrogen oxides, isocyanate vapors, and traces of hydrogen cyanide).

Fire Hazards in Presence of Various Substances: Combustible in presence of open flames and sparks.
Explosion Hazards in Presence of Various Substances: Not available.

Fire Fighting Media and Instructions: Use DRY chemical, CO2, or foam. If water is used, it should be used in flooding quantities. The reaction between water and hot isocyanate may be vigorous. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. During a fire, isocyanate vapours and other irritating, highly toxic gases may be generated by thermal decomposition or combustion.

Special Remarks on Fire Hazards: When heated to decomposition it emits highly toxic fumes.
Special Remarks on Explosion Hazards: Container explosion may occur under fire conditions or when heated (due to pressure build-up).

Section 6. Accidental Release Measures

Small Spill: Absorb with an inert material and place in an appropriate waste disposal container. Treat with a neutralizing solution (5% ammonia water, or 5-10% sodium carbonate in water). Add about 10 parts of neutralizer per 1 part of isocyanate with mixing. Wear suitable protective clothing.

Large Spill: Poisonous combustible liquid, insoluble or very slightly soluble in water. Ventilate. Eliminate all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. A self contained breathing apparatus should be used to avoid inhalation of the product. Warn personnel to move away. Stop leak if without risk. DO NOT touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Cover with WET earth, sand or other non-combustible material, or with DRY absorbent wetted with a neutralizing solution (5% ammonia water, or 5-10% sodium carbonate in water). After 15 minutes transfer it to waste container, or put in open drums - fill the drums half way. Do not seal - evolution of CO2 can cause pressure build-up. Keep drums (not sealed) outside, or in safe ventilated area for a few days. After clean-up monitor the vapors concentration. Use the neutralizing solution to decontaminate the surface and the tools. The spilled material, clean-up residues, and spent decontamination solution are hazardous wastes. Call for assistance on disposal.
Section 7. Handling and Storage

Precautions
Manipulate in a well ventilated area. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes. Contact lenses should not be worn. Keep away from foodstuffs, drinks and tobacco. Eating, drinking and smoking should be prohibited in any area where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Ensure that eyewash station and safety shower is proximal to the work-station location. In case of accident or if you feel unwell, seek medical advice immediately (show the label if possible). Individuals with respiratory problems (asthma, chronic bronchitis), or allergic to isocyanates should avoid any contact with this product. ATTENTION: Isocyanate vapors cannot be smelled until concentrations are well above the safe exposure limit! Do not use jet-type drum heaters, do not heat over 80°C (176°F).

Storage
Keep away from heat. Keep away from sources of ignition. Keep container tightly closed and in a well-ventilated place. Contains moisture sensitive material; store in a dry place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room. Provide an inert gas pad if stored in bulk. Keep away from incompatibles.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash station and safety shower is proximal to the work-station location. Do air monitoring if possible.

Personal Protection
During mixing, handling and application: Splash goggles. Full protective clothing. Gloves (impervious). Suitable respiratory equipment. When air concentrations are not known or above the TLV, an air-supplied respirator or SCBA (self-contained breathing apparatus) is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134).
ATTN: Air-purifying (cartridge type) respirators are not approved for protection against isocyanates due to their low warning properties.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Boots. Gloves (impervious). Self-contained breathing apparatus (for above TLV, or unknown vapor concentrations), must be used to avoid inhalation of the product.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Odor</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Odorless</td>
<td>ATTENTION: ISOCYANATE VAPORS CANNOT BE SMELLED UNTIL CONCENTRATIONS ARE WELL ABOVE THE SAFE EXPOSURE LIMIT!</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Taste</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Water/Oil Dist. Coeff.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Ionicity (in Water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Dispersion Properties</td>
<td>Is not dispersed in water.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity Data

Stability
The product is stable.

Instability Temperature
Not available.

Conditions of Instability
No additional remarks.

Incompatibility with various substances
Incompatible with water, strong oxidizing agents, amines, strong bases, strong acids, alcohols. Absorbs moisture from the air. Reacts slowly with water to liberate CO2 gas.

Corrosivity
No specific information is available in our database regarding the corrosivity of this product in presence of various materials.

Special Remarks on Reactivity
No additional remarks.
Section 11. Toxicological Information

Routes of Entry
Inhalation. Skin contact (absorption). Eye contact. Ingestion.

Toxicity to Animals
See: Section 2

Chronic Effects on Humans
Sensitive individuals may develop eczema and/or asthma on inhalation of this material. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.

Other Toxic Effects on Humans
See: Section 3

Special Remarks on Toxicity to Animals
Carcinogenic effects: No substantial evidence. Mutagenic effects: No substantial evidence. The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

Special Remarks on Chronic Effects on Humans
Isocyanates are not known to cause cancer in humans. Sensitive individuals may develop eczema and/or asthma on inhalation of this material. Exposure may cause asthma, dermatitis and pulmonary oedema; effects may be delayed.

Special Remarks on Other Toxic Effects on Humans
Over-exposure can cause lung irritation, chest pain and oedema which may be fatal. Sensitizer - skin and inhalation.

Section 12. Ecological Information

Ecotoxicity
Not available.

BOD5 and COD
Not available.

Products of Biodegradation
Not available

Toxicity of the Products of Biodegradation
Not available.

Special Remarks on the Products of Biodegradation
No additional remarks.

Section 13. Disposal Considerations

Waste Disposal
In accordance with municipal, state, and federal regulations. Consult your local or regional authorities. Empty decontaminated containers should be crushed to prevent re-use. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch.

Section 14. Transport Information

DOT Classification
Not a DOT controlled material (United States).

DOT Identification number
Not applicable (PIN and PG).

Special Provisions for Transport
Not applicable.

DOT (Pictograms)
Section 15. Other Regulatory Information and Pictograms

Other Regulations
TSCA (Toxic Substance Control Act): All components of this product are either reported in EPA TSCA Inventory, or exempt. OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications
WHMIS (Canada)

DSCL (EEC)

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

National Fire Protection Association (U.S.A.)

Protective Clothing

Section 16. Other Information

References
- Manufacturer's Material Safety Data Sheets.

Other Special Considerations
Medical supervision of all employees who come in contact with this product is recommended (pre-employment and periodic medical examination). Individuals with respiratory problems (asthma, chronic bronchitis), or allergic to sensitizers, should avoid any contact with this product.

Validated by HS Reg.Depart.REg.SS on 1/15/2015.
Verified by HS Reg.Depart.REg.SS.

Printed 1/15/2015.

EMERGENCY PHONE NUMBERS:
USA and Canada: 1-800 424-9300
International: 1-703 527-3887

Notice to Reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. 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 that exist.
Material Safety Data Sheet

Date Originated: 1/14/2015

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HCS Risk Phrases</th>
<th>Protective Clothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HCS CLASS: Toxic.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HCS CLASS: Irritating substance.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>HCS CLASS: Sensitizing substance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HCS CLASS: Combustible liquid IIIB having a flash point higher than 93.3°C (200°F).</td>
<td></td>
</tr>
</tbody>
</table>

Section 1. Chemical Product and Company Identification

Product Name

Polyflex 311B. All colors

Synonym

WP311B.XX

Manufacturer

SUPPLIER:
Wasser Corporation
4118 B PL NW, Suite B
Auburn, WA 98001, US
Phone# 253-850-2967

In case of Emergency

EMERGENCY PHONE NUMBERS:
USA and Canada: 1-800 424-9300
International: 1-703 527-3887.

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
<th>TLV/PEL</th>
<th>LC₅₀/LD₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N’-dialkylaminodiphenylmethane</td>
<td>5285-60-9</td>
<td>7-13</td>
<td>Not available.</td>
<td>ORAL (LD₅₀): Acute: 1410 mg/kg [Rat]. DERMAL (LD₅₀): Acute: &gt;3160 mg/kg [Rabbit].</td>
</tr>
<tr>
<td>2,4-Diethyltoluenediamine</td>
<td>2095-02-5</td>
<td>7-13</td>
<td>Not available.</td>
<td>ORAL (LD₅₀): Acute: 504 mg/kg [Rat]. DERMAL (LD₅₀): Acute: 1000 mg/kg [Rabbit].</td>
</tr>
<tr>
<td>Poly(oxy(methyl-1,2-ethanediyl)), alpha-(2-aminomethyl)omega-(2-aminomethyl)ethoxy)</td>
<td>9046-10-0</td>
<td>5-10</td>
<td>Not available.</td>
<td>ORAL (LD₅₀): Acute: 480 mg/kg [Rat]. DERMAL (LD₅₀): Acute: 2090 mg/kg [Rabbit].</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>3-7</td>
<td>TWA: 3 (mg/m³) from ACGIH</td>
<td>ORAL (LD₅₀): Acute: 1625 mg/kg [Rat]. DERMAL (LD₅₀): Acute: 1220 mg/kg [Rabbit].</td>
</tr>
<tr>
<td>2,6-Diethyltoluenediamine</td>
<td>2095-01-4</td>
<td>1-5</td>
<td>TWA: 0.02 (ppm)</td>
<td>ORAL (LD₅₀): Acute: 504 mg/kg [Rat]. DERMAL (LD₅₀): Acute: 1000 mg/kg [Rabbit].</td>
</tr>
</tbody>
</table>
Section 3. Hazards Identification

Routes of Entry:
Inhalation. Skin contact (absorption). Eye contact. Ingestion.

Potential Acute Health Effects

**Eyes:** Liquid or spray mist may irritate eyes. Over-exposure may cause severe irritation. Inflammation of the eye is characterized by redness, watering, and itching.

**Skin:** This product may irritate skin upon contact. Harmful if absorbed through the skin. May cause skin sensitization. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Ingestion:** Harmful if swallowed. Irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion of this product. Even small amounts of liquid aspirated into the lungs during ingestion or vomiting may cause pulmonary injury and possibly death.

**Inhalation:** Harmful if inhaled (Irritant, sensitizer). Over-exposure by inhalation of the vapors/spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. May cause sensitization by inhalation. Massive exposure can cause death.

Potential Chronic Health Effects

**Eyes:** Repeated or prolonged contact with spray mist may produce chronic eye irritation.

**Skin:** Repeated skin exposure can produce local skin destruction, or dermatitis, possibly sensitization.

**Ingestion:** May be fatal if swallowed.

**Inhalation:** Repeated or prolonged inhalation of vapors/spray mist may lead to chronic respiratory irritation. May cause sensitization by inhalation.

Other chronic effects on Humans

The substance is toxic to mucous membranes, upper respiratory tract, lungs, blood, kidney, liver. Toxicity of the product to the reproductive system: Not available. Exposure may cause asthma, dermatitis and pulmonary oedema; effects may be delayed.

Section 4. First Aid Measures

**Eye Contact**
Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 20 minutes, keeping eyelids open. DO NOT use an eye ointment. Seek medical attention.

**Skin Contact**
Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Rinse with plenty of running water (15-30 minutes). If irritation persists, seek medical attention.

**Hazardous Skin Contact**
If the chemical gets onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the person under shower. Wash gently and thoroughly the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Rinse with plenty of running water (15-30 minutes). Seek medical attention. Wash contaminated clothing before reusing.

**Inhalation**
Allow the person to rest in a well ventilated area. Loosen tight clothing around the person’s neck and waist. If symptoms persist, seek medical advice immediately (show the label when possible).

**Hazardous Inhalation**
Evacuate the person to a safe area as soon as possible. Loosen tight clothing around the person’s neck and waist. If the person is not breathing, administer mouth-to-mouth resuscitation. Warning: It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation if the material is toxic, infectious or corrosive. Oxygen may be administered if breathing is difficult. Seek medical attention.

**Ingestion**
DO NOT induce vomiting. Have conscious person drink several glasses of water. Seek immediate medical attention.

**Hazardous Ingestion**
DO NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. Have conscious person drink several glasses of water or milk. Never give an unconscious person anything to ingest. Even small amounts of liquid aspirated into lungs during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. If the person is not breathing, administer mouth-to-mouth resuscitation. WARNING: It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Avoid mouth-to-mouth contact by using mouth guards or shields. If breathing is difficult, administer oxygen. Seek immediate medical attention.
Flammability of the Product

Combustible.

Auto-Ignition Temperature

Not available.

Flash Points

The lowest known value is CLOSED CUP: Higher than 93.3°C (200°F). (Pensky-Martens). (Polypropylene glycol)

Flammable Limits

Not available.

Products of Combustion

Carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...) and other identified, possible toxic compounds.

Fire Hazards in Presence of Various Substances

Slightly flammable to flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions

SMALL FIRE: Use DRY chemicals, CO₂, alcohol foam or water spray.

LARGE FIRE: Use alcohol foam, water spray or fog. Never direct a water jet in the container in order to prevent any splashing of the product which could cause spreading of the fire. Cool containing vessels with water spray or fog in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards

Container explosion may occur under fire conditions or when heated.

Special Remarks on Explosion Hazards

Container explosion may occur under fire conditions or when heated (due to pressure build-up).

Small Spill

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Wear suitable protective clothing and proper respirator.

Large Spill

Combustible liquid, insoluble or very slightly soluble in water. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.
Material Safety Data Sheet

Product Name: Polyflex 311B. All colors

Section 7. Handling and Storage
Precautions
Keep away from heat. Keep away from sources of ignition. Avoid contact with skin and eyes. Do not breathe gas, fumes, vapor or spray. Do not ingest. Wear suitable protective clothing.

Storage
Keep container dry. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8. Exposure Controls/Personal Protection
Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash station and safety shower is proximal to the work-station location. Do air monitoring if possible.

Personal Protection
Chemical safety goggles. Contact lenses not be worn when working with this chemical. Wear appropriate respirator when ventilation is inadequate. None required under normal use. NIOH approved air-purifying particulate respirator with N-95 filter. When contamination level exceed the recommended exposure limits. Wear impervious protective clothing, splash goggles.

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Boots. Gloves. Wear appropriate respirator when ventilation is inadequate. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Odor</th>
<th>Slight.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>Taste</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Color</td>
<td>Varied.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Water/Oil Dist. Coeff.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>IONicity (in Water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Dispersion Properties</td>
<td>Is not dispersed in water.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity Data
Stability
The product is stable.

Instability Temperature
Not available.

Conditions of Instability
No additional remarks.

Incompatibility with various substances
Incompatible with water, strong oxidizing agents, amines, strong bases, strong acids, alcohols. Absorbs moisture from the air. Reacts slowly with water to liberate CO2 gas.

Corrosivity
No specific information is available in our database regarding the corrosivity of this product in presence of various materials.

Special Remarks on Reactivity
No additional remarks.

Special Remarks on Corrosivity
No additional remarks.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Inhalation. Skin contact (absorption). Eye contact. Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>See: Section 2</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>The substance is toxic to mucous membranes, upper respiratory tract, lungs, blood, kidney, liver. Toxicity of the product to the reproductive system: Not available. Exposure may cause asthma, dermatitis and pulmonary oedema; effects may be delayed.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>See: Section 3</td>
</tr>
<tr>
<td>Special Remarks on Toxicity to Animals</td>
<td>No additional remark.</td>
</tr>
<tr>
<td>Special Remarks on Chronic Effects on Humans</td>
<td>The IARC and NTP have concluded that certain polycyclic aromatic hydrocarbons are probably carcinogenic to humans (Group 2A and B) (Extracts (petroleum), heavy paraffinic distillate solvent)</td>
</tr>
<tr>
<td>Special Remarks on other Toxic Effects on Humans</td>
<td>Moderately toxic if swallowed. An allergen. An eye irritant. (Castor oil)</td>
</tr>
</tbody>
</table>

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5 and COD</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Biodegradation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on the Products of Biodegradation</td>
<td>No additional remarks.</td>
</tr>
</tbody>
</table>

### Section 13. Disposal Considerations

| Waste Disposal | In accordance with municipal, state, and federal regulations. Consult your local or regional authorities. Empty decontaminated containers should be crushed to prevent re-use. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch. |

### Section 14. Transport Information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>Not a DOT controlled material (United States).</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Identification number</td>
<td>Not applicable (PIN and PG).</td>
</tr>
<tr>
<td>Special Provisions for Transport</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>DOT (Pictograms)</td>
<td><img src="image" alt="NoDOTPictogram" /></td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Product Name: Polyflex 311B. All colors

Section 15. Other Regulatory Information and Pictograms

Other Regulations
- TSCA (Toxic Substance Control Act): All components of this product are either reported in EPA TSCA Inventory, or exempt. OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
- CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All components of this product are either on the Domestic Substances List (DSL), or exempt, and acceptable for use under the provisions of CEPA.

Other Classifications
- WHMIS (Canada)
  - WHMIS CLASS D-1: Material causing immediate and serious toxic effects.
  - WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
  - WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (Europe)

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Clothing (Pictograms)

Section 16. Other Information

References
- Manufacturer's Material Safety Data Sheets.

Other Special Considerations
- Medical supervision of all employees who come in contact with this product is recommended (pre-employment and periodic medical examination). Individuals with respiratory problems (asthma, chronic bronchitis), or allergic to sensitizers, should avoid any contact with this product.

Printed 1/14/2015.

EMERGENCY PHONE NUMBERS:
USA and Canada: 1-800 424-9300
International: 1-703 527-3887.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. 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 that exist.