

# SAFETY DATA SHEET

PRODUCT CODE: PolyTopIVA

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** PolyTopIV PART A  
**PRODUCT CODES:** PolyTopIV A

**MANUFACTURER:** Legacy Industrial Products LLC  
**STREET ADDRESS:** 570 Lake Cook Rd. Ste 300  
**CITY, STATE, ZIP:** Deerfield, IL 60015

**INFORMATION PHONE:** 888-652-0333  
**EMERGENCY PHONE:** Info-Trac 800-535-5053

**PREPARED BY:** R Engle

**DATE REVISED:** 12/20/19

**Chemical Name or Class:** Aliphatic diamine mixture

## SECTION 2: HAZARDS IDENTIFICATION

### Hazard Overview

**GHS Classification:** Skin sensitizer category 1, Chronic aquatic toxicity category 1, Flammable Liquids category 4

**GHS Label Elements and Precautionary Statements:**

**Label Elements:** Exclamation Mark, Marine Pollutant



### Hazard Statements:

Warning: May cause an allergic skin reaction

Warning: Very toxic to aquatic life with long lasting effects

Warning: Combustible liquid

### Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves and clothing to prevent skin contact.

P273 Avoid release to the environment.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Response

P302 + P352 IF ON SKIN: wash with plenty of soap and water.

P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

P362 + P364 take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P370 + P378 In case of fire: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment for extinction.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool

Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws

### HMIS HAZARD CLASSIFICATION

**HEALTH:** 2      **FLAMMIBILITY:** 2      **REACTIVITY:** 0      **PERSONAL PROTECTIVE EQUIPMENT:** G

### POTENTIAL HEALTH EFFECTS

#### EYES:

HIGH VAPOR CONCENTRATIONS CAN CAUSE IRRITATION TO THE EYES, NOSE OR THROAT.

#### SKIN:

CANN CAUSE IRRITATION

#### INGESTION:

LIQUID CAN CAUSE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.

#### INHALATION:

HIGH CONCENTRATIONS OF VAPOR CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, NAUSEA AND DIZZINESS.

#### HEALTH HAZARDS (ACUTE AND CHRONIC):

PROLONGED OR REPEATED EXPOSURE MAY CAUSE ASTHMA AND SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.

#### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS

# SAFETY DATA SHEET

PRODUCT CODE: 444X

## CARCINOGENICITY

OSHA: NO      NTP: NO      IARC: NO

## ADDITIONAL CARCINOGENICITY INFORMATION:

Product may contain:

ethyl benzene as a component of xylene (IARC 2B)

cumene as a component of xylene (IARC 2B)

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT                                                                    | CAS NO.     | OSHA PEL | ACGIH TLV | OSHA STEL | WEIGHT % |
|-------------------------------------------------------------------------------|-------------|----------|-----------|-----------|----------|
| ASPARTIC ACID ESTER                                                           | 136210-30-5 | NE       | NE        | NE        | 25-45%   |
| ASPARTIC ACID ESTER                                                           | 136210-32-7 | NE       | NE        | NE        | 45-65%   |
| N-Butyl-2-(1-ethylpentyl)-1,3-oxazolidine                                     | 165101-57-5 | NE       | NE        | NE        | 5-10%    |
| Bis(1,2,2,6-pentamethyl-4-piperidyl) sebacate                                 | 41556-26-7  | NE       | NE        | NE        | 1-2%     |
| Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate                             | 82919-37-7  | NE       | NE        | NE        | <1%      |
| Siloxanes and silicones, di-me reactions products with silica (non-hazardous) | 67762-90-7  | NE       | NE        | NE        | <1%      |
| siloxanes and silicones, di-methyl (non-hazardous)                            | 63148-62-9  | NE       | NE        | NE        | <1%      |
| *Xylene                                                                       | 1330-20-7   | 100 ppm  | 100 ppm   | 150 ppm   | <0.2%    |
| 2-Phenoxyethanol                                                              | 122-99-6    | none     | none      | none      | <0.1%    |
| *Ethyl benzene (as a component of xylene)                                     | 100-41-4    | 100 ppm  | 100 ppm   | 125 ppm   | <0.1%    |
| Additive (NJ800963-5205)                                                      | -           | -        | -         | -         | <0.1%    |
| *Octamethylcyclotetrasiloxane                                                 | 556-67-2    | 10ppm    | 10ppm     | 10ppm     | <0.01%   |
| *Toluene                                                                      | 108-88-3    | 100ppm   | 100ppm    | 150ppm    | <0.01%   |

\*\*\*INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372 ARE PRESENT.

**Note:** Ingredients listed without percentages, the percentages are considered a trade secret.

## SECTION 4: FIRST AID MEASURES

### EYES:

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER LIDS, GET IMMEDIATE MEDICAL ASSISTANCE.

### SKIN:

FLUSH SKIN WITH WATER FOR AT LEAST 15 MINUTES AND REMOVE ALL CONTAMINATED CLOTHING IMMEDIATELY. GET MEDICAL ATTENTION IF REDDENING OR SWELLING OCCURS.

### INGESTION:

DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

### INHALATION:

REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY. GET MEDICAL ADVICE IF YOU FEEL UNWELL.

### NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

WEAR GLOVES AND OTHER SELF-PROTECTION WHEN PERFORMING TREATMENT

## SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,  
(% by volume)

UPPER: N/A  
LOWER: N/A

FLASH POINT: 180F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

SUITABLE: FOAM, ALCOHOL FOAM, CO2, WATER FOG, DRY CHEMICAL

UNSUITABLE: DO NOT USE WATER STREAM, AS THIS MAY SPREAD THE

FIRE **SPECIAL FIRE FIGHTING PROCEDURES:**

TOXIC FUMES WILL BE EVOLVED WHEN THIS MATERIAL IS INVOLVED IN A FIRE. A SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR FIRE FIGHTERS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

NONE KNOWN

## SECTION 6: RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

**PERSONAL PRECAUTIONS:** WEAR PERSONAL PROTECTIVE EQUIPMENT. ENSURE A PROPERLY VENTILATED AREA.

# SAFETY DATA SHEET

PRODUCT CODE: 444X

**ENVIRONMENTAL PRECAUTIONS:** AVOID RELEASE INTO THE ENVIRONMENT. PREVENT FROM REACHING DRAINS, SEWAR OR WATERWAYS.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:** WEAR SAFETY GLASSES OR GOGGLES, PROTECTIVE GLOVES AND PROTECTIVE CLOTHING. STOP THE SPILL AT THE SOURCE, DYKE AREA TO PREVENT SPREADING. PUMP LIQUID INTO SALVAGE TANK. USE ABSORBANT MATERIALS SUCH AS SAND OR CLAY TO TAKE UP THE REMAINDER, BUT WEAR PROPER RESPIRATORY PROTECTION. PLACE INTO DISPOSAL CONTAINER AND DISPOSE IN ACCORDANCE WITH LOCAL REGULATIONS.

---

## SECTION 7: HANDLING AND STORAGE

---

### PRECAUTIONS TO BE TAKEN IN HANDLING:

USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. USE ONLY WITH ADEQUATE VENTILATION. AVOID BREATHING MIST OR VAPOR. DO NOT EAT, DRINK, SMOKE OR USE PERSONAL PRODUCTS WHEN HANDLING. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.

### CONDITIONS FOR SAFE STORAGE:

STORE IN A COOL, WELL-VENTILATED AREA. PROTECT FROM FREEZING AND PHYSICAL DAMAGE. KEEP CONTAINERS TIGHTLY SEALED.

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

### RESPIRATORY PROTECTION:

NIOSH APPROVED RESPIRATOR PROTECTION REQUIRED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROLS. FOR EMERGENCIES A SELF-CONTAINED BREATHING APPARATUS OR A FULL FACE RESPIRATOR IS RECOMMENDED.

### VENTILATION:

AVOID BREATHING VAPORS. VENTILATION MUST BE SUFFICIENT TO CONTROL VAPORS.

### PROTECTIVE GLOVES:

IMPERVIOUS GLOVES, NEOPRENE OR RUBBER.

### EYE PROTECTION:

SPLASH PROOF GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

CLEAN BODY COVERING CLOTHING AS WELL AS APRON FOOTWEAR OR OTHER EQUIPMENT SHOULD BE USED AS DEEMED NECESSARY TO AVOID CONTACT WITH THE MATERIAL.

### WORK HYGIENIC PRACTICES:

OBSERVE GENERAL GOOD HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATONAL EXPOSURE LIMIT VALUES.

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

**APPEARANCE AND ODOR:** AMBER CLEAR LIQUID WITH SLIGHT ODOR

**BOILING POINT OR RANGE:** N/A

**VAPOR DENSITY (AIR = 1):** Not available

**SPECIFIC GRAVITY (H2O = 1):** 1.06

**EVAPORATION RATE:** N/A

**SOLUBILITY IN WATER:** NEGLIGIBLE

**Odor Threshold:** N/A

**pH:** N/A

**Melting point/freezing point:** N/A

**Vapor Pressure:** N/A

**Auto Ignition Temperature:** N/A

**Partition Coefficient: n-octanol/water:** N/A

**Decomposition Temperature:** N/A

---

## SECTION 10: STABILITY AND REACTIVITY

---

### STABILITY:

STABLE

### CONDITIONS TO AVOID (STABILITY):

AVOID CONTACT WITH EXCESSIVE HEAT, OPEN FLAMES OR IGNITION SOURCES OF ANY KIND

### INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS OR MATERIALS

### HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO, CO2, NOX, AMINES AND OTHER ALIPHATIC FRAGMENTS WHICH HAVE NOT BEEN DETERMINED.

### HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

---

## SECTION 11: TOXICOLOGICAL INFORMATION

---

*\*No data for the product itself. The following is based on available Component Data\**

# SAFETY DATA SHEET

PRODUCT CODE: 444X

**Acute Oral Toxicity** – [ASPARTIC ACID ESTER CAS# 136210-30-5: >2000 mg/kg (rat)]  
[Bis(1,2,2,6-pentamethyl-4-piperidyl) sebacate CAS# 41556-26-7: LD50 > 2000 mg/kg (rat)]  
[Xylene CAS# 1330-20-7: LD50 rat, Dose: 3,523 mg/kg]  
[2-Phenoxyethanol CAS# 122-99-6: LD50 rat, Dose: 1,260 mg/kg]  
[Ethyl benzene (as a component of xylene) CAS# 100-41-4: LD50 rat, Dose: 3,500 mg/kg]  
[Toluene CAS# 108-88-3: LD50 rat, Dose: 2,600 mg/kg]

**Acute Inhalation Toxicity** – [ASPARTIC ACID ESTER CAS# 136210-30-5: LC50 > 4.224 mg/L air, 4 hr, (rat)]  
[N-Butyl-2-(1-ethylpentyl)-1,3-oxazolidine CAS# 165101-57-5: exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure]  
[Xylene CAS# 1330-20: LC50 rat, Dose: 5000 ppm, Exposure time: 4 h]

**Acute dermal Toxicity** – [ASPARTIC ACID ESTER CAS# 136210-30-5: LD50 >2000 mg/kg (rat)]  
[Xylene CAS# 1330-20-7: LD50 rabbit, Dose: 1,700 mg/kg]  
[2-Phenoxyethanol CAS# 122-99-6: LD50 rabbit, Dose: 3,818 mg/kg]  
[Ethyl benzene (as a component of xylene) CAS# 100-41-4: LD50 rabbit, Dose: 5,510 mg/kg]

**Skin corrosion/irritation** – [ASPARTIC ACID ESTER CAS# 136210-30-5: slight irritant]  
\*Contains impurity of diethyl fumarate, which caused non-immunologic contact urticarial in both human and guinea pig skin resulting in redness, swelling, and dermatitis (eczema). Response was significantly higher on skin with pre-existing condition than in normal skin.  
[Xylene CAS# 1330-20: Moderate skin irritation(rabbit)]  
[2-Phenoxyethanol CAS# 122-99-6: Moderate skin irritation(rabbit)]  
[Ethyl benzene (as a component of xylene) CAS# 100-41-4: Moderate skin irritation(rabbit)]  
[Octamethylcyclotetrasiloxane CAS# 556-67-2: rabbit, Result: slight irritation]  
[Toluene CAS# 108-88-3: rabbit, Result: Moderate skin irritation]

**Serious eye damage/irritation** – [ASPARTIC ACID ESTER CAS# 136210-30-5: slight irritant]  
[Xylene CAS# 1330-20: : Eye irritation(rabbit)]  
[2-Phenoxyethanol CAS# 122-99-6: Eye irritation(rabbit)]  
[Ethyl benzene (as a component of xylene) CAS# 100-41-4: Eye irritation(rabbit)]  
[Octamethylcyclotetrasiloxane CAS# 556-67-2: rabbit, Result: mild eye irritation]  
[Toluene CAS# 108-88-3: rabbit, Result: Moderate eye irritation]

**Respiratory or skin sensitization** - [ASPARTIC ACID ESTER CAS# 136210-30-5: skin sensitizer (guinea pig, (maximization test)]  
[ASPARTIC ACID ESTER CAS# 136210-32-7 : skin sensitizer]  
[Bis(1,2,2,6-pentamethyl-4-piperidyl) sebacate CAS# 41556-26-7: Strong sensitizer (20/20 positive @ maximization test – guinea pig)]  
[2-Phenoxyethanol CAS# 122-99-6: Guinea pig, Result: does not cause skin sensitization]  
[Octamethylcyclotetrasiloxane CAS# 556-67-2: guinea pig, Result: does not cause skin sensitization]

**Carcinogenicity** – [Ethyl benzene (as a component of xylene) CAS# 100-41-4: : IARC Group 2B, possibly carcinogenic to humans]

**Germ cell mutagenicity** – [ASPARTIC ACID ESTER CAS# 136210-30-5: not suspected (in vitro and in vivo)]

**Reproductive toxicity** – [ASPARTIC ACID ESTER CAS# 136210-30-5: not suspected (rat)]  
[2-Phenoxyethanol CAS# 122-99-6: (rat, oral, 14 days, no observed effects in general toxicity maternal @ 300mg/kg body weight or teratogenicity @ 1000 mg/kg body weight), (rabbit, dermal, 14 days, no observed effects in general toxicity maternal @ 300mg/kg body weight or teratogenicity @ 600 mg/kg body weight)]

**Specific target organ toxicity (single exposure)** – [ASPARTIC ACID ESTER CAS# 136210-30-5: not suspected]

**Specific target organ toxicity (repeated exposure)** – [ASPARTIC ACID ESTER CAS# 136210-30-5: not suspected]

**Aspiration toxicity** – no data

---

## SECTION 12: ECOLOGICAL INFORMATION

*\*No data for the product itself. The following is based on available Component Data\**

**Acute (short term) toxicity** – [ASPARTIC ACID ESTER CAS# 136210-30-5: LC50 (96h): 66 mg/l (Danio rerio), no adverse effects for fresh water fish, aquatic invertebrates and algae @  $\geq 5$  mg/l]

[Bis(1,2,2,6-pentamethyl-4-piperidyl) sebacate CAS# 41556-26-7: (To fish: Bluegill/96hr/LC50 – 0.97mg/L), (To aquatic invertebrates: Daphnia magna/24hr/EC50 – 20mg/L), (To microorganisms: Sewage bacteria/IC20,IC50,IC80 - >100mg/L)]

**Chronic (long term) toxicity** –

**Persistence and degradability** – [ASPARTIC ACID ESTER CAS# 136210-30-5: not readily biodegradable]

[N-Butyl-2-(1-ethylpentyl)-1,3-oxazolidine CAS# 165101-57-5: Significant Biodegradation; approximately 66% over 28 days. Fish LC50, 96 hr = 20 mg/l. Daphnia EC50, 48 hrs = 3.26mg/l. Algae growth inhibition EOC50 – 5.6 mg/l]

[Bis(1,2,2,6-pentamethyl-4-piperidyl) sebacate CAS# 41556-26-7: not biodegradable]

**Bioaccumulative potential** – [ASPARTIC ACID ESTER CAS# 136210-30-5: not expected to bio-accumulate]  
**Mobility in soil** – no data

---

## SECTION 13: WASTE DISPOSAL

### WASTE DISPOSAL METHOD:

DISPOSE OF MATERIAL AS A HAZARDOUS WASTE ACCORDING TO FEDERAL, STATE, AND LOCAL REGULATIONS.

---

## SECTION 14: Transport Information

# SAFETY DATA SHEET

PRODUCT CODE: 444X

**DOT:** Not Regulated

**IMO/IMDG:** UN3082, Environmentally hazardous substance, liquid, n.o.s., (N-Butyl-2-(1-ethylpentyl)-1,3-oxazolidine), 9, PGIII, marine pollutant

---

## SECTION 15: REGULATORY INFORMATION

---

No data for the product itself.

**Component data:**

**ASPARTIC ACID ESTER CAS# 136210-30-5:** TSCA & DSL - listed

**ASPARTIC ACID ESTER CAS# 136210-32-7:** TSCA & DSL - listed

**2-(3-heptyl)-N-butyl-1,3-oxazolidine CAS# 165101-57-5:**

TSCA – all substances either listed or exempted

CERCLA – no

SARA 304 RQ – no

SARA 311/312 hazards – flammable liquids

SARA 302 – no

SARA 313 – no

Ozone Depletion Potential – no

US Clean Air Act Section 112 (40 CFR 61) – no HAP

US Clean Air Act Section 112(r) (40 CFR 68.130, Subpart F) – no Accidental release prevention

California Prop 65 – no

**Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate CAS# 41556-26-7:** TSCA & DSL – listed or exempted

**Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS# 82919-37-7:** TSCA & DSL – listed or exempted

**Siloxanes and silicones, di-me reactions products with silica CAS# 67762-90-7 :** Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

**siloxanes and silicones, di-methyl CAS#63148-62-9 :** Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

**Xylene CAS# 1330-20-7:** Xylene contains EPCRA section 313 chemicals subject to the reporting requirements of the emergency planning and community right to know act of 1968. (Maximum wt % for components of xylene are: M-Xylene CAS# 108-38-3 is 46%, P-Xylene CAS# 106-42-3 is 20%, Ethyl Benzene CAS# 100-41-4 is 19%, O-Xylene CAS# 95-47-6 is 16%.. Xylene and its components are on the California Proposition 65 list for developmental toxicity, Reproductive toxicity and carcinogen list. Ingredients are on the TSCA list, DSL Canada, AICS, China, EINECS, ENCS, Korea, New Zealand, Phillipines inventory lists and on the Massachusetts, New Jersey, Pennsylvania right to know lists Ethyl Benzene a component of xylene has been designated by IARC as a possible carcinogen to humans based on increased tumor incidence in laboratory animals. risk phrases R10 Flammable R20/21 Harmful by inhalation and in contact with skin, R38 irritating to skin, S25 Avoid contact with eyes. SARA 313 Components: Xylene @ <0.1%, Component is on the Massachusetts, Pennsylvania, New Jersey Right To Know list

**2-Phenoxyethanol CAS# 122-99-6:** SARA 302 Components: none. (SARA 313 Components: 2-Phenoxyethanol @ <0.1%) Component is on the TSCA list and Canadian DSL list. Component is on the Massachusetts, Pennsylvania, New Jersey Right To Know list

**Ethyl benzene (as a component of xylene) CAS# 100-41-4:** SARA 302 Components : none. (SARA 313 Components: Ethylbenzene @ <0.1%) Component is on the TSCA list and Canadian DSL list. Component is on the Massachusetts, Pennsylvania, New Jersey Right To Know list.

**NJ TSNR 800963-5205:** TSCA & DSL – listed or exempted, Component is on the Pennsylvania & New Jersey right to know list.

**Cumene CAS# 98-82-8 :** TSCA & DSL – listed or exempted, Component is on the Pennsylvania right to know list.

**Octamethylcyclotetrasiloxane CAS# 556-67-2:** TSCA & DSL – listed or exempted

**Toluene CAS# 108-88-3:** TSCA & DSL – listed or exempted, Component is on the Pennsylvania & New Jersey right to know list.

---

## SECTION 16: OTHER INFORMATION

---

**DISCLAIMER:** THE INFORMATION HERE IN IS BASED ON THE DATA AVAILABLE AND IS BELIEVED TO BE ACCURATE, HOWEVER, THE MANUFACTURER MAKES NO WARRANTY EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS OBTAINED FROM THE USE THEREOF. ACCORDINGLY, WE ASSUME NO RESPONSIBILITY FOR INJURY FROM THE USE OF THIS PRODUCT.

N/A = Not Available

See Section 1 for date of preparation

# SAFETY DATA SHEET

PRODUCT CODE: PolyTopIV B

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

P

**PRODUCT NAME:** PolyTopIV PART B  
**PRODUCT CODES:** PolyTopIV B

**MANUFACTURER:** Legacy Industrial Products LLC  
**STREET ADDRESS:** 570 Lake Cook Rd. Ste 300  
**CITY, STATE, ZIP:** Deerfield, IL 60015

**INFORMATION PHONE:** 888-652-0333  
**EMERGENCY PHONE:** Info-Trac 800-535-5053

**PREPARED BY:** R Engle

**DATE REVISED:** 12/20/19

**Chemical Name or Class:** Aliphatic diamine mixture

**Chemical Name or Class:** HDI isocyanate

## SECTION 2: HAZARDS IDENTIFICATION

### Hazard Overview

**GHS Classification:** Acute toxicity inhalation category 4, Skin Sensitization category 1, Specific target organ toxicity – single exposure category 3, Flammable Liquids category 3, Acute toxicity dermal category 4, Skin irritation category 2, eye irritation category 2A, specific target organ toxicity – repeated exposure category 2 (central nervous system, kidney, liver), aspiration hazard category 1, Carcinogenicity category 2

**GHS Label Elements and Precautionary Statements:**

Label Elements: Exclamation Mark, Flame, Health Hazard



### Hazard Statements:

Danger: May be fatal if swallowed and enters airways

Warning: Harmful if inhaled

Warning: May cause an allergic skin reaction

Warning: May cause respiratory irritation.

Warning: Flammable liquid and vapour

Warning: Harmful in contact with skin

Warning: Causes skin irritation

Warning: Causes serious eye irritation

Warning: May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure

Warning: Suspected of causing cancer

### Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use

P271 Use only outdoors or in a well-ventilated area

P284 Wear respiratory protection

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/eye protection/ face protection

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash hands thoroughly after handling.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood

### Response

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

P331 Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352 IF ON SKIN: wash with plenty of soap and water.

P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

P361 + P364 take off immediately all contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish

# SAFETY DATA SHEET

PRODUCT CODE: 444X

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 IF eye irritation persists: Get medical advice/attention.  
P314 Get medical advice/attention if you feel unwell.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.

## Storage:

P405 Store locked up.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed

## Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws

## HMIS HAZARD CLASSIFICATION

HEALTH: 2      FLAMMIBILITY: 2      REACTIVITY: 1      PERSONAL PROTECTIVE EQUIPMENT: G

## POTENTIAL HEALTH EFFECTS

### EYES:

CAN CAUSE SEVERE IRRITATION ,REDNESS, TEARING, OR BLURRED VISION AS WELL AS CORNEAL OPACITY AND CONJUNTIVITIS.

### SKIN:

MAY CAUSE IRRITATION, DEFATTING AND DERMATTITIS.

### INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITTING, DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS  
CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL. CAN CAUSE CORROSIVE ACTION TO THE MUCOUS MEMBRANES  
AND DIGESTIVE TRACTS.

### INHALATION:

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, HEADACHE, AND POSSIBLE  
UNCONSCIOUSNESS. BURNING SENSATION TO MUCOUS MEMBRANES, SHORTNESS OF BREATH AND FLU LIKE SYMPTOMS MAY  
OCCUR.

### HEALTH HAZARDS (ACUTE AND CHRONIC):

CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. OVER-EXPOSURE TO THIS  
MATERIAL CAN CAUSE CARDIAC ABNORMALITIES. OVEREXPOSURE CAN POSSIBLY CAUSE ANEMIA, LIVER ABNORMALITIES, KIDNEY  
DAMAGE, OR EYE DAMAGE. MAY CAUSE ASTHMA OR OTHER RESPIRATORY DISORDERS, BRONCHITIS, EMPHYSEMA, HYPERACTIVITY,  
AND ECZEMA.

### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS

### CARCINOGENICITY

OSHA: NO      NTP: YES      IARC: YES

### ADDITIONAL CARCINOGENICITY INFORMATION:

Product may contain:

ethyl benzene as a component of xylene (IARC 2B)

cumene as a component of xylene (IARC 2B)

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT                               | CAS NO.    | OSHA PEL | ACGIH TLV | OSHA STEL | WEIGHT % |
|------------------------------------------|------------|----------|-----------|-----------|----------|
| HOMOPOLYMER OF HDI                       | 28182-81-2 | 1mg/m3   | NONE      | NONE      | 55-75    |
| HEXAMETHYLENE DIISOCYANATE (HDI)         | 822-06-0   | NONE     | 0.005 PPM | NONE      | <0.5     |
| *XYLENE                                  | 1330-20-7  | 100ppm   | 100ppm    | 150ppm    | 10-20    |
| *Ethylbenzene (as a component of xylene) | 100-41-4   | 100ppm   | 100ppm    | 125ppm    | 1-5      |
| *cumene (as a component of xylene)       | 98-82-8    | 50ppm    | 50ppm     | 50ppm     | <0.1     |
| 4-chlorobenzotrifluoride                 | 98-56-6    | none     | none      | none      | 10-20    |

\*\*\*Indicates toxic chemicals subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.

Note: Ingredients listed without percentages, the percentages are considered a trade secret.

## SECTION 4: FIRST AID MEASURES

### EYES:

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. KEEP EYE WIDE OPEN WHILE RINSING. REMOVE  
CONTACT LENSES. PROTECT UNHARMED EYE. GET IMMEDIATE MEDICAL ASSISTANCE.

### SKIN:

WASH AFFECTED AREA WITH SOAP AND WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING PROMPTLY,  
PLACE THEM INTO A SEALED BAG. IN CASE OF PERSISTANT INFLAMMATION, OBTAIN MEDICAL ATTENTION. EXISTING SKIN  
DISORDERS MAY BE AGGRAVATED BY EXPOSURE.

### INGESTION:

DO NOT INDUCE VOMITING! RINSE OUT MOUTH WITH WATER. DO NOT GIVE ANYTHING TO DRINK. KEEP PERSON WARM AND CONSULT  
A PHYSICIAN IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

### INHALATION:

REMOVE TO FRESH AIR. IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY. OBTAIN MEDICAL ASSISTANCE. ASTHMATIC  
TYPE SYMPTOMS MAY OCCUR IMMEDIATELY OR BE DELAYED FOR SEVERAL HOURS. EXISTING RESPIRATORY DISORDERS MY BE  
AGGRAVATED BY EXPOSURE.

# SAFETY DATA SHEET

PRODUCT CODE: 444X

## NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

USE APPROPRIATE PROTECTIVE EQUIPMENT AND CLOTHING WHEN TREATING A CONTAMINATED PERSON. MOVE OUT OF DANGEROUS AREA. DO NOT LEAVE THE VICTIM UNATTENDED.

---

## SECTION 5: FIRE-FIGHTING MEASURES

---

**FLAMMABLE LIMITS IN**  
**AIR, (% by volume)**

**UPPER:** N/A  
**LOWER:** N/A

**FLASH POINT:** 100-140F

**METHOD USED:**

SETA FLASH

**EXTINGUISHING MEDIA:**

FOAM, ALCOHOL FOAM, CO<sub>2</sub>, DRY CHEMICAL

**UNSUITABLE EXTINGUISHING MEDIA:**

WATER

**SPECIAL FIRE FIGHTING PROCEDURES:**

ENTER CONFINED AREA WITH FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS. DURING A FIRE, HDI VAPORS AND OTHER HIGHLY TOXIC VAPORS MAY BE GENERATED. WATER OR EXTREME HEAT MAY CAUSE CONTAINERS TO EXPLODE. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATERWAYS.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

WATER CONTAMINATION MAY CAUSE THE GENERATION OF CO<sub>2</sub> AND CAUSE CONTAINER TO BURST OR EXPLODE. EXTREME HEAT MAY CAUSE CONTAINER TO EXPLODE. HAZARDOUS DECOMPOSITION PRODUCTS EVOLVED IN A FIRE MAY BE IRRITATING OR TOXIC.

**ADDITIONAL INFORMATION:**

STAY UPWIND. EVACUATE THE PERSONNEL AWAY FROM THE FUMES. DO NOT ATTEMPT TO FIGHT FIRE WITHOUT SUITABLE PROTECTIVE EQUIPMENT. COOL HEAT EXPOSED EQUIPMENT/CONTAINERS WITH A WATER SPRAY ENSURING THAT THERE IS NO DIRECT CONTACT BETWEEN WATER AND THE PRODUCT.

---

## SECTION 6: RELEASE MEASURES

---

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

EVACUATE PERSONNEL TO A SAFE AREA. WEAR RESPIRATOR AND PROTECTIVE CLOTHING. REMOVE ALL SOURCES OF IGNITIONS. DO NOT ALLOW MATERIAL TO ENTER SEWERS OR SURFACE/GROUND WATER. REMOVE EXCESS WITH SPARK PROOF EQUIPMENT, AND THE REMAINDER WITH AN ABSORBENT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. CONTAINED AIR RESPIRATOR MAY BE NECESSARY. ENSURE ADEQUATE VENTILATION. IF THE PRODUCT CONTAMINATES RIVERS, LAKES OR DRAINS INFORM RESPECTIVE AUTHORITIES. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN ACCUMULATE IN LOW AREAS.

---

## SECTION 7: HANDLING AND STORAGE

---

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

STORE IN COOL DRY PLACE, SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING THE TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE SDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS. KEEP MATERIAL AWAY FROM ALL SOURCES OF IGNITION. TAKE NECESSARY ACTION TO AVOID STATIC ELECTRICITY DISCHARGE. USE ONLY EXPLOSION PROOF EQUIPMENT. OPEN DRUM CAREFULLY AS CONTENT MAY BE UNDER PRESSURE. KEEP CONTAINER TIGHTLY CLOSED IN A DRY WELL VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE.

**OTHER PRECAUTIONS:**

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. CONTAMINATED LEATHER ARTICLES CANNOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEROF. WEAR APPROPRIATE SAFETY EQUIPMENT AND RESPIRATOR AT ALL TIMES WHEN VENTILATION IS NOT SUFFICIENT TO CONTROL VAPORS. OBSERVE OSHA REGULATIONS FOR RESPIRATOR USE (29 CFR 1910.134). WHEN SPRAYING MATERIAL AVOID EXPOSURE TO ALL MISTS GENERATED BY USING AIR SUPPLIED RESPIRATOR.

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

**RESPIRATORY PROTECTION:**

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER-EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. ENGINEERING OR ADMINISTRATIVE MEASURES SHOULD BE TAKEN TO REDUCE THE RISK & EXPOSURE. USE A POSITIVE PRESSURE SUPPLIED AIR RESPIRATOR WHEN EXCEEDING TLV'S OR IF HDI MONOMER CONCENTRATIONS EXCEED ACCEPTABLE LIMITS OR WHEN SPRAYING MATERIAL.

**VENTILATION:**

EXHAUST VENTILATION SUFFICIENT TO KEEP AIRBORN CONCENTRATIONS OF HDI BELOW THEIR TLV AND MGL MAXIMUM. REFERS TO PATTY'S INDUSTRIAL HYGIENE & TOXICOLOGY- VOLUME 1 (3<sup>RD</sup> EDITION) CHAPTER 17 AND VOLUME III (1<sup>ST</sup> EDITION) CHAPTER 3 FOR DETAILS.

**PROTECTIVE GLOVES:**

# SAFETY DATA SHEET

PRODUCT CODE: 444X

IMPERVIOUS GLOVES, NEOPRENE OF RUBBER.

## EYE PROTECTION:

SPLASH PROOF GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS. DO NOT WEAR CONTACT LENSES WHEN USING THIS PRODUCT.

## OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

CLEAN BODY COVERING CLOTHING AS WELL AS APRON FOOTWEAR OR OTHER EQUIPMENT SHOULD BE USED AS DEEMED NECESSARY TO AVOID CONTACT WITH THE MATERIAL.

## WORK HYGIENIC PRACTICES:

OBSERVE GENERAL GOOD HYGIENIC PRACTICES. WHEN USING, DO NOT EAT, DRINK OR SMOKE. WASH HANDS BEFORE BREAKS AND AT THE END OF EVERY DAY.

SEE SECTION THREE FOR OCCPATONAL EXPOSURE LIMIT VALUES.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOR:** COLORLESS TO PALE AMBER LIQUID WITH MILD SOLVENT ODOR

**BOILING POINT OR RANGE:** N/A

**VAPOR DENSITY (AIR = 1):** Not available

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.1

**EVAPORATION RATE:** N/A

**SOLUBILITY IN WATER:** REACTS

**Odor Threshold:** N/A

**pH:** N/A

**Melting point/freezing point:** N/A

**Vapor Pressure:** N/A

**Auto Ignition Temperature:** N/A

**Partition Coefficient: n-octanol/water:** N/A

**Decomposition Temperature:** N/A

## SECTION 10: STABILITY AND REACTIVITY

### STABILITY:

STABLE UNDER NORMAL CONDITIONS

### CONDITIONS TO AVOID (STABILITY):

AVOID EXCESSIVE HEAT OR OPEN FLAMES AS WELL AS ALL SOURCES OF IGNITIONS SUCH AS SPARKS, HEATERS, STATIC DISCHARGES, ETC. DO NOT EXPOSE TO SUNLIGHT.

### INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID WATER, AMINES, STRONG BASES, ALCOHOLS, METAL COMPOUNDS, AND SURFACE ACTIVE COMPOUNDS.

### HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

MAY FORM TOXIC CHEMICALS, CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NITROGEN, HCN AND HDI.

### HAZARDOUS POLYMERIZATION:

MOISTURE OR MATERIALS THAT REACT WITH ISOCYANATES AND TEMPERATURES ABOVE 400 DEGREES F MAY CAUSE POLYMERIZATION.

## SECTION 11: TOXICOLOGICAL INFORMATION

*\*No data for the product itself. The following is based on available Component Data\**

**Acute Oral Toxicity** – [HOMOPOLYMER OF HDI CAS# 28182-81-2: LD<sub>50</sub> >2500mg/kg, female rat, OECD 423]

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: LD<sub>50</sub> 746mg/kg, rat, OECD 401]

[XYLENE CAS# 1330-20-7: LC<sub>50</sub>(4h) 6700ppm, male rat, assessment: the component is moderately toxic after short term inhalation]

**Acute Inhalation Toxicity** - [HOMOPOLYMER OF HDI CAS# 28182-81-2: Harmful by inhalation - (LC<sub>50</sub>(4h) = 0.390 mg/l, female rat, OECD 403) (NOAEC(6h) = 3mg/m<sup>3</sup>, rat, OECD TG 403, TRGS – may cause respiratory irritation)]

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: LC<sub>50</sub>(4h) = 0.124 mg/l, rat, OECD 403]

**Acute dermal Toxicity** – [HOMOPOLYMER OF HDI CAS# 28182-81-2: LD<sub>50</sub> >2000mg/kg, rabbit & rat, OECD 402]

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: LD<sub>50</sub> >7000 mg/kg, rat, OECD 402]

[XYLENE CAS# 1330-20-7: LD<sub>50</sub> 1700 mg/kg, rabbit, assessment: the component is moderately toxic after single contact with skin]

**Skin corrosion/irritation** – [HOMOPOLYMER OF HDI CAS# 28182-81-2 & HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: not classified as irritating to skin, OECD 404, rabbit]

[XYLENE CAS# 1330-20-7: rabbit, 24h, result: irritating to skin]

[4-chlorobenzotrifluoride CAS# 98-56-6: may cause skin irritation in susceptible persons]

**Serious eye damage/irritation** – [HOMOPOLYMER OF HDI CAS# 28182-81-2 & HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: not classified as irritating to eyes, OECD 405, rabbit]

[XYLENE CAS# 1330-20-7: rabbit, result: irritating to eyes]

[4-chlorobenzotrifluoride CAS# 98-56-6: may cause irreversible eye damage]

**Respiratory or skin sensitization** - [HOMOPOLYMER OF HDI CAS# 28182-81-2 & HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: no pulmonary sensitization was observed in guinea pigs after either intradermal injection or inhalation induction with HDI polisocyanates. There is no indication from reports in exposed workers that the substance can cause respiratory sensitization if the risk management measures are respected. MAY CAUSE SENSITIZATION BY SKIN CONTACT]

# SAFETY DATA SHEET

PRODUCT CODE: 444X

[4-chlorobenzotrifluoride CAS# 98-56-6: lymph node assay, mouse, result: the product is a skin sensitizer category 1B]

**Carcinogenicity** – [HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: not considered a carcinogen – Inhalative, NOAEC Carc = 0.164 ppm, rat, OECD 453]

**Ethylbenzene (as a component of xylene) CAS# 100-41-4:** IARC Group 2B: Possibly carcinogenic to humans]

**cumene (as a component of xylene) CAS# 98-82-8:** IARC Group 2B: Possibly carcinogenic to humans]

**Germ cell mutagenicity** – [HOMOPOLYMER OF HDI CAS# 28182-81-2 & HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: not considered to be genotoxic]

**Reproductive toxicity** – [HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: is not considered hazardous to the reproduction – (Inhalative, NOAEC Dvlp/Tera Tox = 0.3ppm, rat, OECD 414) (Inhalative, NOAEC Maternal Tox = 0.005 ppm, rat, OECD 414) (Inhalative, NOEC Fert = 0.3ppm, rat, OECD 422)]

**Specific target organ toxicity (single exposure)** – [XYLENE CAS# 1330-20-7: (assessment: may cause respiratory irritation)]

[4-chlorobenzotrifluoride CAS# 98-56-6: the substance is classified as specific target organ toxicant single exposure category 3 with narcotic effects]

**Specific target organ toxicity (repeated exposure)** – [XYLENE CAS# 1330-20-7: (target organs: central nervous system, kidney, liver – assessment: the component is classified as specific target organ toxicant, repeated exposure category 2)

**Aspiration toxicity** – [XYLENE CAS# 1330-20-7: may be fatal if swallowed and enters airways]

## SECTION 12: ECOLOGICAL INFORMATION

*\*No data for the product itself. The following is based on available Component Data\**

**Acute (short term) toxicity** – The product does not have any known adverse effects on the aquatic organisms tested: [HOMOPOLYMER OF HDI CAS# 28182-81-2: (EC10/72h static = 370mg/l, desmodesmus subspicatus, EU C.3) (EL50/48h static = 127 mg/l, daphnia magna, EU C.2) (ErC50(0-72h) static = >1000mg/l, desmodesmus subspicatus, EU C.3) (LL0/96h = ≥ 82.8 mg/l, brachydanio rerio, EU C.1)]

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: (EC0/48h static = ≥ 89.1 mg/l, daphnia magna, EU C.2) (ErC50(0-72h) static = >77.4 mg/l, desmodesmus subspicatus, EU C.3) (LC0/96h static = ≥ 82.8 mg/l, brachydanio rerio, EU C.1) (NOEC/72h static = 11.7 mg/l, desmodesmus subspicatus, EU C.3)]

[4-chlorobenzotrifluoride CAS# 98-56-6: (LC50, danio rerio(zebra fish), 3mg/l(96h) semi-static, assessment: toxic to aquatic life) (IC50, daphnia magna(water flea), 2mg/l(48h) semi-static. Assessment: toxic to aquatic life)]

**Chronic (long term) toxicity** – [4-chlorobenzotrifluoride CAS# 98-56-6: assessment: toxic to aquatic life with long lasting effects]

**Persistence and degradability** – Not biodegradable: [HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: (BOD28 = 42% bacteria, EU C.4-D) (DT50 @ 25C, 48.44h, photolysis, AOPWIN v1.92) (DT50 @ 23C, 0.23h, hydrolysis, ASTM D4666)] – reacts with water and forms and insoluble solid precipitate (polyuria)

**Bioaccumulative potential** – Not bioaccumulable: [HOMOPOLYMER OF HDI CAS# 28182-81-2: BCF, 3.2(fish), BCFWIN v. 2.17)]

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: BCF, 58(fish), BCFWIN v2.17]

[cumene (as a component of xylene) CAS# 98-82-8: partition coefficient: n-octanol/water, low Pow – 3.55 @ 23C]

**Mobility in soil** – formation of insoluble polyuria - [HOMOPOLYMER OF HDI CAS# 28182-81-2: Log Koc, 7.8(.), PCKOC v1.66]

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: Log Koc, 5861(.), PCKOC v1.66]

**Exotoxical effects**

– sludge, OECD 209] Behavior in sewage processing plants: [HOMOPOLYMER OF HDI CAS# 28182-81-2: EC50/3h static = 3828 mg/l activated

[HEXAMETHYLENE DIISOCYANATE (HDI) CAS# 822-06-0: EC50/3h static = 842 mg/l bacteria, OECD 209]

**\*An environmental hazard cannot be excluded in the event of unprofessional handling or disposal\***

## SECTION 13: WASTE DISPOSAL

### WASTE DISPOSAL METHOD:

DISPOSAL MUST BE MADE ACCORDING TO FEDERAL, STATE AND LOCAL REGULATIONS. CONTAMINATED PACKAGING MATERIALS MUST BE DISPOSED OF IN THE SAME MANNER AS THE PRODUCT. DISCHARGING WASTE INTO RIVERS AND DRAINS IS FORBIDDEN! INSINERATE AT A LICENSED INSTALLATION. THOROUGHLY EMPTIED AND CLEAN PACKAGINGS MAY BE RECYCLED.

## SECTION 14: Transport Information

**DOT:** UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS Xylene, Ethylbenzene), 3, PG III

**IMO/IMDG:** UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS Xylene, Ethylbenzene), 3, PG III

## SECTION 15: REGULATORY INFORMATION

**Homopolymer of HDI CAS# 28182-81-2:** Listed on the TSCA, AICS, CIECS, EINECS/ELINCS, ENCS, KECI, PICCS and Canadian DSL lists. Component is on the Massachusetts, New Jersey, and Pennsylvania Right to Know Lists.

**Hexamethylene Diisocyanate (HDI) CAS# 822-06-0:** (CERCLA RQ 100#) Listed on the TSCA, AICS, CIECS, EINECS/ELINCS, ENCS, KECI, PICCS and Canadian DSL lists. Component is on the Massachusetts, New Jersey, and Pennsylvania Right to Know Lists.

**XYLENE CAS# 1330-20-7:** (CERCLA RQ 100#) This component is subject to reporting levels established by SARA Title III, Section 313. Component is listed under the US Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489). This component is listed under the US Clean Water Act Section 311, Tables 116.4A & Table 117.3. Component is on the Massachusetts, Pennsylvania & New Jersey Right to know lists. Component is listed on the TSCA, AICS, NZIoC, ENCS, KECI, PHIL, IECS and Canadian DSL lists. This component may contain (benzene CAS# 71-43-2), (toluene CAS# 108-88-3), & (naphthalene CAS# 91-20-3) as constituents, which are listed under the US Clean Water Act Section 311, Tables 116.4A & 117.3). This component may contain (benzene CAS# 71-43-2) & (naphthalene CAS# 91-20-3) as constituents which are known to the State of California, under California Prop 65, to cause cancer. This component may contain (toluene CAS# 108-88-3) & (benzene CAS# 71-43-2) as

# SAFETY DATA SHEET

PRODUCT CODE: 444X

constituents which are known to the state of California, under California Prop 65, to cause birth defects or other reproductive harm. For more info go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**[Ethylbenzene (as a component of xylene) CAS# 100-41-4:** (CERCLA RQ 1000#) This component is subject to reporting levels established by SARA Title III, Section 313. Component is listed as HAP under US Clean Air Act Section 12 (40 CFR 61). Component is listed under the US Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489). Component is listed as a toxic pollutant under the US Clean Water Act Section 307. This component is listed under the US Clean Water Act Section 311, Tables 116.4A & Table 117.3. Component is on the Massachusetts, Pennsylvania & New Jersey Right to know lists. Component is listed on the TSCA, AICS, NZIoC, ENCS, KEIC, PHIL, IECSC and Canadian DSL lists. Component is listed under California Prop 65 as a chemical known to the state of California to cause cancer. For more info go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). **[cumene (as a component of xylene) CAS# 98-82-8:** Component is on the Pennsylvania & New Jersey Right to know lists. Component is listed on the TSCA, AICS, NZIoC, ENCS, KEIC, PHIL, IECSC and Canadian DSL lists. Under California Prop 65, this chemical is known to the state of California to cause cancer. For more info go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**[4-chlorobenzotrifluoride CAS# 98-56-6:** Listed on the TSCA, Canadian DSL, AICS, NZIoC, ENCS, KEIC, PICCS & IECSC. Component is on the New Jersey and Pennsylvania Right to Know lists.

---

## SECTION 16: OTHER INFORMATION

---

**DISCLAIMER:** THE INFORMATION HERE IN IS BASED ON THE DATA AVAILABLE AND IS BELIEVED TO BE ACCURATE, HOWEVER, THE MANUFACTURER MAKES NO WARRANTY EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS OBTAINED FROM THE USE THEREOF. ACCORDINGLY, WE ASSUME NO RESPONSIBILITY FOR INJURY FROM THE USE OF THIS PRODUCT.

N/A = Not Available

See Section 1 for date of preparation