Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 – United Kingdom (UK) and Australian Requirements

SAFETY DATA SHEET

Aero-Thane (AO-100 & Colors)

1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

PRODUCT NAME:	**Aero-Thane (AO-100 & Colors)**
PRODUCT NUMBER:	4-xxx
RECOMMENDED USE:	Aircraft Coatings and thinners
RESTRICTIONS ON USE:	Not applicable
SUPPLIER:	Poly-Fiber, Inc. P.O. Box 3129, Riverside, CA 92519, USA 4343 Fort Drive, Riverside, CA 92509, USA (951) 684-4280 (951) 809-7144 (760) 782-1947
EMERGENCY TELEPHONE:	(800) 424-9300 (Chemtrec- US) (703) 527-3887 (International – Call Collect)

* =White pigments
** =Yellow/Orange pigments
*** =Red pigments
**** =Black pigments

2 - HAZARDS IDENTIFICATION

GHS Hazard Category

Flammable liquid- Category 2
Eye Irritation - Category 2A
Skin Irritation- Category 2
Respiratory Irritation- Category 3
Specific target organ toxicity (single exposure) – Category 3, Central Nervous System H336

Label Elements

Pictograms

Signal Word

DANGER

Hazard Statements

Highly flammable. Irritating to eyes and skin
May cause drowsiness or dizziness
Harmful: danger of serious damage to health by prolonged exposure through inhalation
Possible risk of harm to the unborn child
Harmful: may cause lung damage if swallowed
This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area.
Vapors may cause drowsiness and dizziness.

Response

INHALATION:
Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.
INGESTION:
Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.
SKIN CONTACT:
Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

EYES CONTACT:
Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

Storage

Store in a well-ventilated Place. Keep container tightly closed. Keep cool. Store in a locked cabinet, cage or room.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

CLASSIFICATION (1999/45) XI, XN, F, R11, R36, R37, Repr. Cat 3, R67
This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

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3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Xylene	215-535-7	1330-20-7	20-30%	XN,R10, R20, R22, R36, R37, R38
Ethyl Acetate	205-500-4	147-78-6	10-20%	R11, R36, R66, R67, S16, S23, S29, S33
Titanium Dioxide	236-675-5	13463-67-7	10-20	No R-Phrases, S24/25
**C.I. Pigment Yellow 34/C.I. Pigment Red 104	215-693-7 235-759-9	1344-37-2 12656-85-8	10-20	T, N, R33, R45, R50/53, R61, R62, S45, S53, S60, S61 GHS: H351, H360Df, H373, H410, P201, P202, P210, P260, P273, P280, P308+P313, P314, P391, P405, P501 H226
Methyl Ethyl Ketone	201-159-0	78-93-3	0-10%	XI, F, R11, R36, R66, R67
***C.I. Pigment Red 104	235-759-9	12656-85-8	10-20	H226, H351, H360Df, H373, P201, P202, P210, P260, P273, P280, P308+P313, P314, P391, P405, P501
****Carbon Black	215-609-9	1333-86-4	0-10	XN, R40, S36/37 GHS: H351, H313, P201, P202, P280, P308+P313, P405, P501
Diisobutyl Ketone	203-620-1	108-83-8	0-10%	R10, R36, R37, R38, S24
Methyl n-Amyl Ketone	203-767-1	110-43-0	0-10%	R10, R22. S23
Ethyl 3-Ethoxypropionate	212-112-9	763-69-9	0-10%	R10,R66
2,4-pentanedione	204-634-0	123-54-6	0-10%	

				XI, R10, R38, R41, S26, S36
2-Phenoxyethanol	204-589-7	122-99-6	0-10%	R20, R21, R22, R36, S2, S26
Ethylbenzene	202-849-4	100-41-4	0-10%	R11. R20. S16 ,S24/25. S29

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15

COMPOSITION COMMENTS
The data shown are in accordance with the latest EC Directives
Two Opti-color colorants contain lead pigments: CY Medium Chrome Yellow and MO Molybdate Orange. One colorant, TW Titanium White, contains silica. When any of these three colorants are used: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

4- FIRST AID MEASURES

INHALATION:
Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.
INGESTION:
Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.
SKIN CONTACT:
Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

EYES CONTACT:
Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

5- FIRE FIGHTING PROCEDURES

EXTINGUISHING MEDIA:
Fire can be extinguished by using Foam, carbon dioxide, or dry powder Dry Chemicals, sand, dolomite, etc...
SPECIAL FIREFIGHTING PROCEDURES:
Do not use a direct stream of water. Product may float and can be reignited on the surface of the water. Do not enter a confined area without full bunker gear including a positive-pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point. Flammable material.

6-ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:
Wear protective clothing as described in Section 8.
ENVIRONMENTAL PRECAUTIONS:
Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.
SPILL CLEANUP METHODS:
Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

7-HANDLING AND STORAGE

USAGE PRECAUTIONS:
Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.
STORAGE PRECAUTIONS:
FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120°F.
STORAGE CLASS:
AMMABLE liquid storage.

8-EXPOSURE CONTROL/PERSONAL PROTECTION

Name	Workplace Exposure Limits	Remarks
Methyl Ethyl Ketone	ACGIH: 200ppm TWA; 300ppm STEL NIOSH: 200ppm TWA;590 mg/m³ TWA; 3000ppm IDLH OSHA –Final PELs: 200ppm TWA; 590 mg/m³ TWA	Consult local authorities for acceptable exposure limits.
Diisobutyl Ketone	IDLH: 500ppm, OSHA 8hr TWA:50ppm OSHA PEL TWA: 25ppm NIOSH TWA: 10hr 25ppm	Same As Above
Methyl N-Amyl Ketone	ACGIH: 50 ppm TWA, OSHA: 100 ppm TWA	Same As Above
Ethyl Acetate	ACGIH: 400ppm TWA, NIOSH: 400 ppm TWA; 1400 mg/m3 TWA 2000 ppm IDLH, OSHA – Final PELs: 400 ppm TWA; 1400 mg/m3 TWA	Same As Above
Titanium Dioxide	ACGIH: 10 mg/m3 TWA NIOSH: 5000 mg/m3 IDLH OSHA-Final PELs: 15 mg/m3 TWA (Total Dust)	Same As Above
**C.I. Pigment Yellow 34/C.I. Pigment Red 104	ACGIH: 0.05 mg(Pb)/m3 TWA and 0.012 mg(Cr)/m3 TWA NIOSH: 0.10 mg(Pb)/m3 TWA and 0.001 mg(Cr(VI))/m3 TWA OSHA-Final PELs: 50 ug(Pb)/m3 TWA 8 hour(s), 30 ug(Pb)/m3 action level 8 hour(s) and 0.1 mg(CRO3)/m3 OSHA ceiling	Same As Above
***C.I. Pigment Red 104	ACGIH: 0.05 mg(Pb)/m3 TWA and 0.012 mg(Cr)/m3 TWA NIOSH: 0.10 mg(Pb)/m3 and 0.001 mg(Cr(VI))/m3 TWA OSHA-Final PELs: 50 ug(Pb)/m3 TWA 8 hour(s), 30 ug(Pb)/m3 action level 8 hour(s) and 0.1 mg(CRO3)/m3 OSHA ceiling	Same As Above
Xylene	ACGIH: TWA: 100 ppm 8 hours.STEL: 150 ppm 15 minutes. OSHA: TWA: 100 ppm 8 hrs.	Same As Above
****Carbon Black	ACGIH: 3.5 mg/m3 TWA NIOSH: 3.5 mg/m3 TWA OSHA-Final PEL: 3.5 mg/m3	Same As Above
Ethyl 3-Ethoxypropionate	ACGIH, NIOSH, OSHA-Final PELs: None listed	Same As Above
2,4-pentanedione	ACGIH, NIOSH, OSHA-Final PELs: None listed	Same As Above
2-Phenoxyethanol	ACGIH, NIOSH, OSHA-Final PELs: None listed	Same As Above
Ethylbenzene	ACGIH: TWA: 100 ppm 8 hours.STEL: 125 ppm 15 minutes. OSHA:TWA: 100 ppm 8 hrs.	Same As Above

WARNING:

As with all catalyzed polyurethanes, a fresh-air supplied spray mask is mandatory. Charcoal masks will not protect from poly-isocyanates in the spray mist.

NOTICE:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

PROTECTIVE EQUIPMENTS:

PROCESS CONDITIONS:	Provide eyewash station.
ENGINEERING MEASURES:	Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.
RESPIRATORY EQUIPMENT:	Wear respirator with appropriate cartridge for organic solvents and chemicals.
HANDPROTECTION:	Wear approved gloves such as Neoprene, Nitrile or Rubber types.
EYE PROTECTION:	Wear splash-proof goggles.
OTHER PROTECTION:	Wear appropriate clothing to prevent any possible skin contact.
HYGIENE MEASURES:	DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Opaque Liquid
COLOR:	Several colors
ODOR:	Aromatic solvents
BOILING POINT:	168-343°F
RELATIVE DENSITY:	0.970 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	60 degrees F / 15.6 degrees C (Closed Cup)
FLAMMABILITY LIMITS:	0.8 (Lower%)
SOLUBILITY VALUE (g/100g H_2O @ 20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (VOC):	542 g/L

10- STABILITY AND REACTIVITY

STABILITY:
Stable
CONDITIONS TO AVOID:
Heat and fires. Ignition sources.
INCOMPATIBILITY (MATERIALS TO AVOID):
Strong alkalines or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings. May react strongly with acids while in liquid form. .
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Hydrogen chloride and very small amounts of phosgene and chlorine.
HAZARDOUS POLYMERIZATION:
N/A

11-TOXICOLOGICAL INFORMATION

Methyl Ethyl Ketone (CAS# 78-93-3):LD50/rabbit/skin/draize test = 500mg/24H moderate; LC50/mouse/inhalation = 32mg/m3/4H; Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.
Diisobutyl Ketone (CAS#108-83-8) : LD50/rat/oral =>3200mg/kg,LC50/rat/inhalation = 1979ppm /6H, LD50/guinea pig/dermal >20ml/kg, Skin Irritation (guinea pig) = none, Eye Irritation (rabbit, unwashed eyes) = slight, Eye Irritation (rabbit, washed eyes) = slight, Skin Sensitization: (guinea pig= none) Carcinogenicity: Not listed by ACGIH, IARC, or NTP.
Methyl n-Amyl Ketone (CAS#110-43-0): LD50/rabbit/dermal = 12.6mL/kg;LD50/rat/oral = 1600mg/kg; Carcinogenicity: Not listed by IARC, NTP or OSHA.
Ethyl Acetate (CAS# 147-78-6): LD50/LC50: Inhalation, mouse: LC50 = 45 gm/m3/2H; Inhalation, rat: LC50 = 200 gm/m3; Oral, mouse: LD50 = 4100 mg/kg; Oral, rabbit: LD50 = 4935 mg/kg; Oral, rat: LD50 = 5620 mg/kg; Skin, rabbit: LD50 = >20 mL/kg;
Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: Cytogenetic Analysis: hamster fibroblast 9g/L Sex Chromosome Loss/Non-disjunction: S. cerevisiae 24400 ppm. Neurotoxicity: No information available.
****C.I. Pigment Yellow 34 (CAS#1344-37-2):** CARCINOGEN STATUS: NTP: Known Human Carcinogen; IARC: Human Inadequate Evidence, Animal Sufficient Evidence, Group 2B (Lead and inorganic lead compounds), Human Sufficient Evidence, Animal Sufficient Evidence, Group 1 (Hexavalent chromium compounds); ACGIH: A2 -Suspected Human Carcinogen TARGET ORGANS: immune system (sensitizer), nervous system, kidneys, teratogen
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: blood system disorders, heart or cardiovascular disorders, liver disorders, respiratory disorders, skin disorders and allergies
ADDITIONAL DATA: May be excreted in breast milk.

Titanium Dioxide (CAS#13463-67-7) LD50/Rat/Oral>5000mg/kg. **Carcinolgenicity:** Not listed by ACGIH, IARC, NTP, or CA Prop 65. **Epidemiology:** No data available. **Teratogenicity:** No data available. **Reproductive Effects:** No data available. **Mutagenicity:** No data available. **Neurotoxicity:** No data available.

Xylene (CAS#1330-20-7): LD50/LC50: Draize test, rabbit, eye: 87 mg Mild; Draize test, rabbit, eye: 5 mg/24H Severe; Draize test, rabbit, skin: 100% Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, rat: LC50 = 5000 ppm/4H; Oral, mouse: LD50 = 2119 mg/kg; Oral, rat: LD50 = 4300 mg/kg; Skin, rabbit: LD50 = >1700 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: 175 workers were exposed to 21 ppm of xylene for 7 years. Subjective symptoms such as anxiety, forgetfulness, inability to concentrate and dizziness were reported. Xylenes accounted for >70% of the total exposure. Liver & kidney effects were not reported. Teratogenicity: No increased incidence of birth defects was reported in a study of lab workers exposed to xylene during early pregnancy. Exposure to other solvents and chemicals also occurred. An increased incidence of spontaneous abortions was reported. Animal information suggests that xylene is not teratogenic or embryotoxic at exposure levels that are not harmful to the mother. Reproductive Effects: An increase in menstrual disorders has been reported in women exposed to organic solvents such as benzene, toluene, and xylenes. It is not possible to attribute these effects to xylenes in particular. Mutagenicity: Xylene does not appear to be a mutagen. Neurotoxicity: Xylene may be ototoxic (damages hearing or enhances sensitivity to noise) in chronic occupational exposures, probably from a neurotoxic mechanism

***C.I. Pigment Red 104 (CAS#12656-85-8): LD50 oral (rat): > 10000 mg/kg bodyweight (OECD 401 method), LD50 dermal (rat): No Data Available, LD 50 inhalation (rat): No Data Available. Skin Corrosion/irritation: Not classified (No Data Available). Serious eye damage/irritation: Not Classified (No Data Available). Respiratory or skin sensitization: Not Classified. Germ cell mutagenicity: Not Classified. Carcinogenicity: Suspected of causing cancer. Reproductive toxicity: May damage the unborn child. Suspected of damaging fertility. Specific target organ toxicity (single exposure): Not Classified. Specific target organ toxicity (repeated exposure): May cause damage to organs through prolonged or repeated exposure. (route: oral, target organs: liver, kidney, blood production/hematopoiesis). Aspiration hazard: Not Classified.

****Carbon Black (CAS#1333-86-4) : LD50/LC50: Oral, rat: LD50 = >15400 mg/kg; Skin, rabbit: LD50 = >3 gm/kg;
Carcinogenicity: ACGIH: Not listed. California: carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size. NTP: Not listed. IARC: Group 2B carcinogen.
Epidemiology: No data available.
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: See actual entry in RTECS for complete information. Neurotoxicity: No information found

Ethyl 3-Ethoxyproprionate (CAS#763-69-9): Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Toxicity to Animals: Acute oral toxicity (LD50): 5000 mg/kg [Rat]. Acute dermal toxicity (LD50): 10000 mg/kg [Rabbit]. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified + (PROVEN) by OSHA. Classified None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant). Slightly hazardous in case of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

2,4-pentadione (CAS#123-54-6): LD50/LC50: Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, skin: 11.2 mL/6H (Intermittent) Mild; Draize test, rabbit, skin: 33.6 mL/6H (Intermittent) Moderate; Draize test, rabbit, skin: 11.2 mL/2D (Intermittent) Moderate; Oral, mouse: LD50 = 951 mg/kg; Oral, rat: LD50 = 55 mg/kg; Oral, rat: LD50 = 55 mg/kg; Skin, rabbit: LD50 = 810 uL/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65.Epidemiology: No information found. Teratogenicity: Inhalation, rat: TCLo = 398 ppm/6H (female 6-15 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus). Reproductive Effects: No information found. Mutagenicity: Dominant Lethal Test: Inhalation, rat = 694 ppm/6h/5D.; Mutation in Mammalian Somatic Cells: Hamster, Ovary = 80 mg/L. Neurotoxicity: No information found

2-Phenoxyethanol (CAS#122-99-6): Carcinogen: NTP: No IARC: No OSHA: No Oral Toxicity: LD50: 1260 Mg/Kg (Rat) Eye Toxicity: MOD 6 Mg (Rabbit) Eye Toxicity: SEV 250 ug/24H (Rabbit) Skin Toxicity: LD50: 5000 Mg/Kg (Rabbit) Skin Toxicity: MLD 500 Mg (Rabbit) Skin Toxicity: MOD 500 Mg/24H (Rabbit)

Ethyl Benzene (CAS#100-41-4). Acute Dermal LD50 Rabbit: 17800 mg/kg, Acute Oral LD50 Rat: 3500 mg/kg. Carcinogenicity: ACGIH- A3 Confirmed animal carcinogen with unknown relevance to humans. IARC Monographs: 2B Possibly carcinogenic to humans. Skin corrosion/irritation: Causes skin irritation. Epidemiology: No epidemiological data is available for this product. Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Neurological effects: High vapor/aerosol concentrations (attainable only at elevated temperatures) may cause central nervous system effects such as dizziness, drowsiness or headaches. Central and/or peripheral nervous system damage. Reproductive effects Contains no ingredient listed as toxic to reproduction. Teratogenicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

12-ECOLOGICAL INFORMATION

Methyl Ethyl Ketone (CAS#78-93-3): Ecotoxicity : Fish/Fathead Minnow/LC50 = 3220mg/l; Environmental : Substance evaporates in water with T1/2=3D (rivers) to 12D (lakes); Physical : Substance photodegrades in air with T1/2=2.3 days.

Diisobutyl Ketone (CAS#108-83-8): Oxygen Demand Data:BOD-5: 170 mg/g,ThBOD: 2,920 mg/g; Acute Aquatic Effects Data: 96 h LC-50 (fathead minnow): >100 microliter(s)/l, 96 h LC-50 (daphnid): >100 microliter(s)/l. This product cannot accumulate in living tissue, this product is readily and rapidly biodegradeable in the presence of oxygen; biodegration of 39% & 88% in 10 & 20 days; half life in air is estimated at 22 hours Ecotoxicity: Fish, Shrimp: 65 ppm/ 24 hr.

Methyl n-Amyl Ketone (CAS#110-43-0): Ecotoxicity: No data available.

Ethyl Acetate (CAS# 147-78-6): Ecotoxicity: Fish: Fathead Minnow: 230mg/L; 96H; Daphnid LC50=2500 mg/L/96H Golden orfe LC50=270 mg/L/48H . Environmental: Terrestrial: Expected to have high mobility in soil. Volatilization of ethyl acetate from moist soil surfaces is expected to be important. Aquatic: Not expected to adsorb to suspended solids and sediment in water. Atmospheric: Expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase ethyl acetate is degraded in the atmosphere by reaction with photo chemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 10 days. Physical: Substance biodegrades at a high rate with little bioconcentration.

**C.I. Pigment Yellow 34 (CAS#1344-37-2)/ C.I. Pigment Red 104 (CAS#12656-85-8):

LC50 fishes 1	> 10000 mg/l Leuciscus idus 96h (test method comparable to OECD 203)
EC50 Daphnia 1	> 100 mg/l Daphnia magna 48h (test method comparable to OECD 202) Based on review of lead (Pb): 300 ug/l Daphia magna (3 weeks) Based on review of hexavalent chromium (Cr(VI)): 2000 ug/l Daphia magna (3 weeks)
EC50 other aquatic organisms 1	> 10000 mg/l Pseudomonas putida 30m
EC50 other aquatic organisms 2	> 100 ml/l Desmodesmus subspicatus72h (OECD 201)
LOEC (acute)	Based on review of lead (Pb): 13 ug/l Onchorhynchus mykiss (3 weeks)
NOEC chronic fish	Based on review of hexavalent chromium (Cr(VI)): 1 mg/l Pimephales promelas 412 d
NOEC chronic algae	> 50 mg/l Desmodesmus subspicatus72h (OECD 201)

LC50 fishes 1: >10000 mg/l Leucisus idus 96h, LC50 other aquatic organisms 1: >100 mg/l Desmodesmus subspicatus 72h, EC50 Daphnia 1: >100 mg/l Daphnia magna 48h, EC50 other aquatic organismas 1: >10000 mg/l Pseudomonas putida 30m, EC50 other aquatic organisms 2: >100 ml/l Desmodesmus subsicatus 72h, LOEC (acute): Based on review of lead (Pb): 13 ug/l Onchorhynchus mykiss (3 weeks), NOEC chronic fish: Based on review of hexavalent chromium: 1 mg/l Pimephales promelas 412d, NOEC chronic algae: >100 mg/l Desmodesmus subspicatus 72h.

***C.I. Pigment Red 104 (CAS#12656-85-8): LC50 fishes 1: >10000 mg/l Leucisus idus 96h, LC50 other aquatic organisms 1: >100 mg/l Desmodesmus subspicatus 72h, EC50 Daphnia 1: >100 mg/l Daphnia magna 48h, EC50 other aquatic organismas 1: >10000 mg/l Pseudomonas putida 30m, EC50 other aquatic organisms 2: >100 ml/l Desmodesmus subsicatus 72h, LOEC (acute): Based on review of lead (Pb): 13 ug/l Onchorhynchus mykiss (3 weeks), NOEC chronic fish: Based on review of hexavalent chromium: 1 mg/l Pimephales promelas 412d, NOEC chronic algae: >100 mg/l Desmodesmus subspicatus 72h.

Titanium Dioxide (CAS#13463-67-7) : Ecotoxicity: Daphnia: Daphnia: LC50 = 32-32.5 mg/L; 30D; ECO Bacteria; ECO = 5 g/L Pseudomonas fluorescens: ECO > 10000 mg/L / 24HPseudomonas fluorescens: ECO > 5000 mg/L / 24HFish:Phoxinus phoxinus: LCO >=1000 mg/L / 30DCCoregonus autumnalis migratorius G: LCO = 3mg/L / 30DCyprinodon variegatus: LC50 <370 >240 mg/L/ 96HOpossum shrimp:Mysidopsis almyra: LC50 <400 >300 mg/L / 96H **Environmental:** No information available
Physical: No information available. **Other:** No information available

Xylene (CAS# 1330-20-7): Ecotoxicity: Fish: Rainbow trout: LC50 = 13.5 mg/L; 96 Hr; Unspecified Fish: Goldfish: LD50 = 13 mg/L; 24 Hr; Unspecified Fish: Fathead Minnow: LC50 = 46 mg/L; 1 Hr; Static bioassay Acute and long-term toxicity to fish and invertebrates: LD50 for goldfish is 13 mg/L/24 Hr.Cas#1330-20-7:LC50(96Hr.) rainbow trout = 8.05 mg/L, Static condition;LC50(96Hr.) fathead minnow = 16.1 mg/L, flow-through conditions; LC50(96Hr.) bluegill = 16.1 mg/L, flow-through;EC50 (48 Hr.) water flea = 3.82 mg/L, flow-through conditions;EC50(24 Hr.) photo bacterium phosphoreum = 0.0084 mg/L, Microtox test.
Environmental: In air, xylenes degrade by reacting with photo chemically produced hydroxyl radicals. In soil it will volatilize and leach into groundwater. Little bioconcentration is expected.
Physical: ATMOSPHERIC FATE: According to a model of gas/particle partitioning of semi volatile organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photo chemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 14-26 hours. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.
Ethyl 3-Ethoxyproprionate (CAS#763-69-9): Ecotoxicity: Not available. BOD5 and COD: Not available. Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
2,4-pentadione (CAS#123-54-6):Ecotoxicity: No data available. released to soil, acetyl acetone is expected to leach readily (estimated Koc range of 6 to 28) and volatilize from dry soil surfaces. One screening study suggests that biodegradation may be the predominant fate process in water. Although this study is not specific to soil media, it suggests that biodegradation in soil may be important. If released to water, hydrolysis, aquatic oxidation, adsorption to sediment and bioconcentration in aquatic organisms are not expected to be environmentally important removal processes of acetylacetone. Environmental: Volatilization half-lives of 15 and 170 days have been estimated for a model river (one meter deep) and a model environmental pond, respectively. If released to the atmosphere, acetyl acetone is expected to exist in the vapor phase. Vapor-phase acetyl acetone is expected to degrade by reaction with photo chemically produced hydroxyl radicals (estimated half-life of 14 days). Based on its high water solubility, removal from air via wet deposition may occur. Physical: No information available.
2-Phenoxyethanol (CAS#122-99-6): Keep out of waterways. LC50: 345 Mg/L 96H (Flathead Minnow) LC50: 32.4 ppm 5 Min (Photo bacterium Phosphoreum)
Ethyl Benzene (CAS#100-41-4): EC50 Water flea (Daphnia magna): 1.37 mg/l 48.00 hours. LC50 Rainbow trout, Donaldson trout (Oncorhynchus mykiss): 4.2 mg/l 96.00 hours. Ecotoxicity: Toxic to aquatic life. Environmental effects: Bioaccumulation is unlikely to be significant because of the low water solubility of this product. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

I certify that all chemicals in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

14 – TRANSPORT INFORMATION

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 – United Kingdom (UK) and Australian Requirements

DOT / ADR / RID Classification:

DOT PROPER SHIPPING NAME: PAINT
PRIMARY HAZARD CLASS/DIVISION: 3
UN/UA NUMBER: UN1263
PACKING GROUP: II

IMDG and ADN Classification:

IMDG PROPER SHIPPING NAME: PAINT
IMDG UN CLASS: 3
IMDG UN NUMBER: UN1263
IMDG PACKING GROUP: II
IMDG LABEL: FLAMMABLE LIQUID
IMDG VESSEL STOWAGE: B

Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.

GHS LABEL: 

DANGER

HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.
Refer to SDS for additional information on safe handling / use. - Keep out of reach of children. For Industrial Use Only.

Contains: Xylene (20-30%), Ethyl Acetate (10-20%), Methyl Ethyl Ketone (0-10%), Diisobutyl Ketone (0-10%), Methyl n-Amyl Ketone (0-10%), Ethyl 3-Ethoxypropionate (0-10%), 2,4-pentanedione (0-10%), 2-Phenoxyethanol (0-10%), and Ethylbenzene (0-10%). WARNING: This product can expose you to chemicals including Ethylbenzene & Pentanedione, which is known to the State of California to cause cancer & reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Hazards: Highly flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure: Inhalation - neuropsychological effects, auditory dysfunction and effects on color vision. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

Precautionary Statement(s): Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area.

First Aid: Inhalation - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention. **Eye Contact** - If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms occur obtain medical attention. **Ingestion** - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention.

15-REGULATORY INFORMATION

Hazards: Highly flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure: Inhalation - neuropsychological effects, auditory dysfunction and effects on color vision. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

Precautionary Statement(s): Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area.

CODES:

XI and XN

F

XI=Irritant
XN=Harmful
F=Highly Flammable

R-Phrases:

R10:	Flammable
R11:	Highly Flammable
R20:	Harmful by inhalation
R21:	Harmful in contact with skin
R22:	Harmful if swallowed
R36:	Irritating to eyes
R37:	Irritating to respiratory system
R38:	Irritating to skin
R41:	Risk of serious damage to the eyes
R66:	Repeated exposure may cause skin dryness or cracking
R67:	Vapors may cause drowsiness and dizziness

S-Phrases:

S2:	Keep out of the reach of children
S16:	Keep away from sources of ignition - No smoking
S23:	Do not breathe gas/fumes/vapor/spray
S24:	Avoid contact with skin
S24/25:	Avoid contact with skin and eyes
S26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S33:	Take precautionary measures against static discharges
S36:	Wear suitable protective clothing

16a- REFERENCED COLOR CODES

W-3665	M-9350	B-9163	M-9522	J-9555	X-5680	X-5749					
R-4869	F-2406	M-9512	M-9501	F-6285	N-3353	M-9521	E-6428	M-9526	P-8600	C-2065	B-3534
Q-1050	Q-1916	B-4243	J-9545	K-7641	W-9170	X-5260	M-9518	Z-7245	R-8175	Y-9775	R-8174
F-7790	Y-6100	R4870	D-9270								

16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.

SAFETY DATA SHEET

Urethane Catalyst

1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

PRODUCT NAME:	**Urethane Catalyst**
PRODUCT NUMBER:	U-865 (Aerothane Part B)
RECOMMENDED USE:	Aircraft coatings and cleaners
RESTRICTIONS ON USE:	Not applicable
SUPPLIER:	Poly-Fiber, Inc. P.O. Box 3129, Riverside, CA 92519, USA 4343 Fort Drive, Riverside, CA 92509, USA (951) 684-4280 (951) 809-7144 (760) 782-1947
EMERGENCY TELEPHONE:	**(800) 424-9300 (Chemtrec- US)** **(703) 527-3887 (International – Call Collect)**

2 - HAZARDS IDENTIFICATION

WARNING:
As with all catalyzed polyurethanes, a fresh-air supplied spray mask is mandatory. Charcoal masks will not protect from polyisocyanates in the spray mist

NOTICE:
Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

GHS Hazard Category

⚠ **WARNING:** This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer. For more information go to www. P65Warnings.ca.gov

Flammable Liquid, category 2
Skin Sensitizer, category 1
Eye Irritation, category 2
Acute Toxicity, Inhalation, category 4
Respiratory Sensitizer, category 1
STOT, single exposure, category 3, RTI
STOT, single exposure, category 3, NE
Carcinogenicity, category 2
STOT, repeated exposure, category 2

Label Elements

Pictograms

Signal Word

DANGER

Hazard Statements

H225 **Highly flammable liquid and vapor.**
H317 **May cause an allergic skin reaction.**
H319 **Causes serious eye irritation.**
H332 **Harmful if inhaled.**
H334 **May cause allergy or asthma symptoms or breathing difficulties if inhaled.**
H335 **May cause respiratory irritation.**
H336 **May cause drowsiness or dizziness.**
H351 **Suspected of causing cancer.**
H373 **May cause damage to organs through prolonged or repeated exposure.**

Precautionary Statements

Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground/bond container and receiving and equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.

Response

P362+P364 Take off contaminated clothing and wash it before reuse
P370+P378 in case of fire: Use appropriate method to extinguish

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

INGESTION:
P308+P313 If exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER/doctor/physician if you feel unwell.
P321 Specific treatment (see first aid section on this label).
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician

SKIN CONTACT:
P302+P352 **IF ON SKIN:** Wash with plenty of water
P303+P361+P353 **IF ON SKIN** (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

EYES CONTACT:
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.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal

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

NOTICE:
Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

CLASSIFICATION (1999/45) Xi, Xn, F, T, Eye Irrt. 2, Skin Sens 1, R10, R20/21, R36/37/38, R67

3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Homo Polymer of HDI	500-060-2	28182-81-2	40-50%	Eye Irrt. 2, Skin Sens 1, H317, H319
Glycol Ether PM Acetate	203-603-9	108-65-6	10-20%	XI, R10, R36, S16, S25, S36/37/39
HDI	212-485-8	822-06-0	0-10%	T, R21/22, R36/37/38, R42/43, S26, S38, S45, S28A
n- Butyl Acetate	204-658-1	123-86-4	0-10%	R10, R66, R67, S25
Xylene	215-535-7	1330-20-7	0-10%	XN, R10, R20/21, R36/38, S25
Ethyl Benzene	202-849-4	100-41-4	0-10%	XN, R10, R20/21, R36/38, S25

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15

COMPOSITION COMMENTS
The data shown are in accordance with the latest EC Directives

4- FIRST AID MEASURES

WARNING:
As with all catalyzed polyurethanes, a fresh-air supplied spray mask is mandatory. Charcoal masks will not protect from polyisocyanates in the spray mist.

NOTE: POLYISOCYANATES HAVE THE POTENTIAL TO CAUSE AN ALLERGIC RESPONSE IN SOME INDIVIDUALS. THIS RESPONSE CAN RANGE FROM MILD WHEEZING TO A SEVERE ASTHMATIC TYPE ATTACK. IF ONE CONTINUES TO EXHIBIT THIS RESPONSE DESPITE THE USE OF PROPER PROTECTIVE MEASURE, HE MAY BE SENSITIZED. SENSITIZED INDIVIDUALS SHOULD AVOID ALL CONTACT WITH ISOCYANATES.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:
May cause irritation of the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction).
SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:
Skin contact may cause irritation. Symptoms of skin irritation may be reddening, swelling, scaling or blistering. Eye contact may cause tearing, reddening and swelling of the eyes.
SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:
Skin absorption may cause systemic effects similar to those identified under inhalation effects.
INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE:
Ingestion may result in irritation and possible corrosive action in the mouth, stomach and digestive tract.
HEALTH HAZARDS (ACUTE AND CHRONIC):
Acute: May cause irritation of the mucous membranes, eyes, skin and throat. Other symptoms are headache, nausea, fatigue and loss of appetite. Ingestion may cause vomiting which may result in aspiration of the solvent resulting in chemical pneumonitis.
Chronic: May cause lung damage, skin sensitization and neurotoxic effects including permanent brain and nervous system damage.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: Yes OSHA REGULATED: No
This material contains ethyl benzene which is classified as "possibly carcinogenic to humans" (2B) by IARC.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT:
Asthma and any other respiratory disorders (bronchitis, emphysema, hyper-reactivity), skin allergies and eczema.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION:
REMOVE TO FRESH AIR. APPLY ARTIFICIAL RESPIRATION IF NECESSARY.
SPLASH (EYES):
FLUSH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.
SPLASH (SKIN):

WASH AFFECTED AREAS THOROUGHLY WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND WASH. THOROUGHLY BEFORE REUSE
FOR SEVERAL EXPOSURES, GET UNDER SAFETY SHOWER AFTER REMOVING CLOTHING, THEN GET MEDICAL ATTENTION.
INGESTION:
DO NOT INDUCE VOMITING. GIVE 1 TO 2 CUPS OF MILK OR WATER TO DRINK. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. CONSULT PHYSICIAN IMMEDIATELY

5- FIRE FIGHTING PROCEDURES

EXTINGUISHING MEDIA:
Alcohol foam, CO2, Dry Chemical
SPECIAL FIREFIGHTING PROCEDURES:
Full emergency equipment with self-contained breathing apparatus should be worn. During a fire, irritating and toxic gases and smoke from the decomposition products may be present. Isolate from heat, sparks, electrical equipment and open flame. Water is not usually effective in fighting liquid fires. Do not enter a confined area without full bunker gear including a positive-pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers may explode if contaminated with water or basic materials, such as caustic soda, ammonia, amines or certain acids or alcohols; therefore, containers suspected to be contaminated should not be resealed.
Water spray may be used to cool closed containers to help prevent explosion when exposed to extreme heat. Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point. Flammable material.

6-ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Remove all spark sources, flames and hot surfaces. Maintain adequate ventilation. Avoid breathing vapors. Add absorbent to spill area. Recover free liquid. Keep chemical products out of streams and waterways. Flush with water to a tank or to an opened well-ventilated area. Absorb or remove to container and dispose of properly in conformity with local government restrictions.
PERSONAL PRECAUTIONS:
Wear protective clothing as described in Section 8.
ENVIRONMENTAL PRECAUTIONS:
Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.
SPILL CLEANUP METHODS:
Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

7-HANDLING AND STORAGE

USAGE PRECAUTIONS:
Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.
STORAGE PRECAUTIONS:
Avoid storage in high temperature areas or near fire or open flame. Store in tightly closed containers in cool, dry, isolated, well-ventilated area away from heat or flame, sources of ignition and incompatible materials. Transfer small amounts left over into small containers. Ground lines, containers and other equipment during product transfer. Do not store in glass containers due to the danger of breaking. Do not pour into containers that held highly flammable materials, static electricity may result. Use good hygiene practices. Wash hands before eating, drinking, etc.
OTHER PRECAUTIONS:
Avoid contact with eyes and prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of vapor. Do not ingest. Keep containers tightly closed. Replace all bungs tightly before shipping or storing. Avoid contact with amines
STORAGE CLASS:
FLAMMABLE liquid storage.

8-EXPOSURE CONTROL/PERSONAL PROTECTION

Name	Workplace Exposure Limits	Remarks
Homo Polymer of HDI	ACGIH: 200ppm TWA; 300ppm STEL. NIOSH: 200ppm TWA;590 mg/m³TWA; 3000ppm IDLH OSHA –Final PELs: 200ppm TWA; 590	Consult local authorities for acceptable exposure limits.

	mg/m³ TWA	
HDI	ACGIH: 0.005ppm TWA; NIOSH: 0.005ppm TWA; 0.035 mg/m³ TWA; OSHA – Final PEL:	Same As Above
Butyl Acetate	ACGIH: 150 ppm TWA; 200 ppm STEL NIOSH: 150 ppm TWA; 710 mg/m3 TWA 1700 ppm IDLH OSHA-Final PELs: 150 ppm TWA; 710 mg/m3 TWA	Same As Above
Glycol Ether PM Acetate	ACGIH: None listed NIOSH: None listed OSHA-Final PELs: None listed	Same As Above
Xylene	ACGIH: 100 ppm TWA; 150 ppm STEL NIOSH: None listed OSHA-Final PELs: 100 ppm TWA; 435 mg/m3 TWA	Same As Above
Ethyl Benzene	ACGIH: 100 ppm TWA; 125 ppm STEL NIOSH: 100 ppm TWA; 435 mg/m3 TWA 800 ppm IDLH (10% LEL) OSHA-Final PELs: 100 ppm TWA; 435 mg/m3 TWA	Same As Above

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

PROTECTIVE EQUIPMENTS:

PROCESS CONDITIONS:	Provide eyewash station.
ENGINEERING MEASURES:	Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.
RESPIRATORY EQUIPMENT:	Wear respirator with appropriate cartridge for organic solvents and chemicals.
HANDPROTECTION:	Wear approved gloves such as Neoprene, Nitrile or Rubber types.
EYE PROTECTION:	Wear splash-proof goggles.
OTHER PROTECTION:	Wear appropriate clothing to prevent any possible skin contact.
HYGIENE MEASURES:	DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Liquid
COLOR:	Pale Yellow
ODOR:	Mild
BOILING POINT:	259-286 ° F
RELATIVE DENSITY:	1.03 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	110 ° F (43 ° C) (Closed Cup)
FLAMMABILITY LIMITS:	NA (Lower) 7.6 % (Upper)
SOLUBILITY VALUE (g/100g H_2O @ 20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (VOC):	513 g/L

10- STABILITY AND REACTIVITY

STABILITY:
Stable
CONDITIONS TO AVOID:
Not classified as dangerous under EC criteria.
INCOMPATIBILITY (MATERIALS TO AVOID):
Water, amines, strong bases, alcohols, metal compounds and surface active materials that react with isocyanates
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Carbon dioxide, carbon monoxide, oxides of nitrogen, traces of HCN and HDI.

HAZARDOUS POLYMERIZATION:
May occur

11-TOXICOLOGICAL INFORMATION

HOMOPOLYMER OF HDI (CAS#28182-81-2):LD50/rat/oral >5000 mg/kg, EYE EFFECTS: Severe irritant capable of inducing corneal injury (Rabbit); maximum primary eye irritation score: 54.6/110 for a 24 hour exposure. SKIN EFFECTS: Moderate irritant; primary dermal irritation score: 3.4/8.0 (Rabbit). SENSITIZATION: Pulmonary and dermal sensitizer in animals and humans. Evidence exists that cross-sensitization between HDI and other isocyanates, particularly hydrogenated MDI and TDI, can occur. SUBCHRONIC TOXICITY : Rats exposed to an HDI homopolymer (biuret type, at 3.7, 17.5 and 76.6 mg/cu m for three weeks (6 hrs/day, 5 days/wk) exhibited respiratory distress and many inflamed areas of tissue in the lungs and upper respiratory tract when exposed to 17.5 mg/cu m and above. The No Observable Effect Level (NOEL) was 3.7 mg/cu m.Rats exposed for three months (6 hrs/day, 5 days/wk) to a HDI homopolymer (biuret type, at aerosol concentrations of 0.4, 3.4 and 21 mg/m3 exhibited lung weight increases at the highest dose. Histopathologic diagnosis of the test animals revealed swelling and thickening in the lower respiratory tract as well as thickening of the bronchio-alveolar areas of the lung and thickening of the septum in the 21 mg/m3 animals. There were no effects noted in the upper and central respiratory tract. The (NOEL) in this study is considered to be 3.4 mg/m3.
HDI (CAS#28182-81-2): Acute Toxicity: ORAL LD50: Estimated to be greater than 10000 MG/KG (rats), DERMAL LD50: Estimated to be greater than 5000 MG/KG (rabbits), INHALATION LC50: Lower Respiratory (Pulmonary) Irritant., LC 50 Value Range from 137-1150 MG/M3 were obtained in rats exposed to aerosols, (4H EXP.), Severe irritant capable of inducing corneal injury (rabbit), Maximum primary eye irritant score: 54.6/110 for 24 hour skin effects: Moderate and Dermal. Primary dermal irritation score: 3.4/8.0 (rabbit). Pulmonary and dermal sensitizer in animals and humans. Carcinogenicity: OSHA: No data ACGIH: No data NTP: No data IARC: No data

N-BUTYL ACETATE (CAS#123-86-4): LD50/rabbit/oral = 7.4 g/kg. LD50/LC50: Draize test, rabbit, eye: 100 mg Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, mouse: LC50 = 6 gm/m3/2H; Inhalation, rat: LC50 = 390 ppm/4H; Oral, mouse: LD50 = 6 gm/kg; Oral, rabbit: LD50 = 3200 mg/kg; Oral, rat: LD50 = 10768 mg/kg; Skin, rabbit: LD50 = >17600 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information found. Teratogenicity: Exposure to n-butyl acetate vapors throughout gestation did not cause significant teratogenicity in rabbits, rats, or mice. Reproductive Effects: No information found. Mutagenicity: No information found. Neurotoxicity: No information found
Glycol Ether PM Acetate (CAS# 108-65-6) Acute toxicity: Oral LD50: LD50 Oral - rat - 8,532 mg/kg Inhalation LC50: no data available. Dermal LD50: LD50 Dermal - rabbit - > 5,000 mg/kg. Skin corrosion/irritation: Skin - rabbit - No skin irritation. Serious eye damage/eye irritation : no data available. Respiratory or skin sensitization: Maximization Test - guinea pig - Did not cause sensitization on laboratory animals. Germ cell mutagenicity: no data available. Carcinogenicity: IARC: No possible or confirmed human carcinogen by IARC. ACGIH: Not identified as a carcinogen or potential carcinogen by ACGIH. NTP: Not identified as a known or anticipated carcinogen by NTP. OSHA: Not identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity: no data available. Teratogenicity: no data available. Aspiration hazard: no data available. Potential health effects:
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Ingestion: May be harmful if swallowed
Skin: May be harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation. Synergistic effects: no data available
Xylene (CAS#1330-20-7): LD50/LC50: Draize test, rabbit, eye: 87 mg Mild; Draize test, rabbit, eye: 5 mg/24H Severe; Draize test, rabbit, skin: 100% Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, rat: LC50 = 5000 ppm/4H; Oral, mouse: LD50 = 2119 mg/kg; Oral, rat: LD50 = 4300 mg/kg; Skin, rabbit: LD50 = >1700 mg/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: 175 workers were exposed to 21 ppm of xylene for 7 years. Subjective symptoms such as anxiety, forgetfulness, inability to concentrate and dizziness were reported. Xylenes accounted for >70% of the total exposure. Liver & kidney effects were not reported. Teratogenicity: No increased incidence of birth defects was reported in a study of lab workers exposed to xylene during early pregnancy. Exposure to other solvents and chemicals also occurred. An increased incidence of spontaneous abortions was reported.Animal information suggests that xylene is not teratogenic or embryotoxic at exposure levels that are not harmful to the mother. Reproductive Effects: An increase in menstrual disorders has been reported in women exposed to organic solvents such as benzene, toluene, and xylenes. It is not possible to attribute these effects to xylenes in particular. Mutagenicity: Xylene does not appear to be a mutagen. Neurotoxicity: Xylene may be ototoxic (damages hearing or enhances sensitivity to noise) in chronic occupational exposures, probably from a neurotoxic mechanism.
Ethyl Benzene (CAS#100-41-4). Acute Dermal LD50 Rabbit: 17800 mg/kg, Acute Oral LD50 Rat: 3500 mg/kg. Carcinogenicity: ACGIH- A3 Confirmed animal carcinogen with unknown relevance to humans. IARC Monographs: 2B Possibly carcinogenic to humans. Skin corrosion/irritation: Causes skin irritation. Epidemiology: No epidemiological data is available for this product. Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Neurological effects: High vapor/aerosol concentrations (attainable only at elevated temperatures) may cause central nervous system effects such as dizziness, drowsiness or headaches. Central and/or peripheral nervous system damage. Reproductive effects Contains no ingredient listed as toxic to reproduction. Teratogenicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects

12-ECOLOGICAL INFORMATION

Homo Polymer of HDI (CAS# 28182-81-2) : No data
HDI (CAS#28182-81-2) : No data
Butyl Acetate (CAS# 123-86-4) : Ecotoxicity: Fish: Fathead Minnow: LC50 = 18.0 mg/L; 96 Hr.; Unspecified Fish: Bluegill/Sunfish: LC50 = 100.0 mg/L; 96 Hr.; Static condition Water flea EC50 = 44.0 mg/L; 48 Hr.; 23 degrees CAlgae: LC50 =320.0 mg/L; 96 Hr.; Unspecified Bacteria: Phytobacterium phosphoreum: EC50 =3100.0-130 mg/L; 5, 15 minutes; Microtox test, 15 degrees CDaphnia: Daphnia: 44-205 mg/l; 96 H; LC50 No data available. Environmental: Based on estimated Koc values of 34 and 233, n-butyl acetate

may be subject to moderate-to-high leaching. Volatilization from dry soil surfaces is likely to be rapid. n-Butyl acetate may be susceptible to significant biodegradation in natural water. Physical: n-Butyl acetate will exist almost entirely in the vapor-phase in the ambient atmosphere due to its relatively high vapor pressure. The half-life for the vapor-phase reaction of n-butyl acetate with photo chemically produced hydroxyl radicals has been estimated to be about 6 days in an average atmosphere indicating that this reaction will be the dominant removal mechanism. Other: ThOD: 2.207 g oxygen/gBOD-5: 1.020 g oxygen/gBOD-20: 1.45 g oxygen/g

Glycol Ether PM Acetate (CAS# 108-65-6) : Toxicity: Mortality LC50/- Salmo gairdneri = 100 - 180 mg/l -96 h; Toxicity to daphnia and other aquatic invertebrates. Immobilization EC50 - Daphnia magna (Water flea) > 500 mg/l - 48 h. Persistence and degradability: Readily biodegradable. Bioaccumulative potential: no data available. Mobility in soil: no data available. PBT and vPvB assessment: no data available. Other adverse effects: Biochemical Oxygen Demand (BOD): 0.36 mg/l, Chemical Oxygen Demand (COD): 1.74 mg/g. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.
Xylene (CAS# 1330-20-7) : Ecotoxicity: Fish: Rainbow trout: LC50 = 13.5 mg/L; 96 Hr; Unspecified Fish: Goldfish: LD50 = 13 mg/L; 24 Hr; Unspecified Fish: Fathead Minnow: LC50 = 46 mg/L; 1 Hr; Static bioassay Acute and long-term toxicity to fish and invertebrates: LD50 for goldfish is 13 mg/L/24 Hr.Cas#1330-20-7:LC50(96Hr.) rainbow trout = 8.05 mg/L, Static condition;LC50(96Hr.) fathead minnow = 16.1 mg/L, flow-through conditions; LC50(96Hr.) bluegill = 16.1 mg/L, flow-through;EC50 (48 Hr.) water flea = 3.82 mg/L, flow-through conditions;EC50(24 Hr.) photobacterium phosphoreum = 0.0084 mg/L, Microtox test. Environmental: In air, xylenes degrade by reacting with photo chemically produced hydroxyl radicals. In soil it will volatilize and leach into groundwater. Little bioconcentration is expected.
Physical: ATMOSPHERIC FATE: According to a model of gas/particle partitioning of semi volatile organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photo chemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 14-26 hours. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.
Ethyl Benzene (CAS# 100-41-4) : EC50 Water flea (Daphnia magna): 1.37 mg/l 48.00 hours. LC50 Rainbow trout, Donaldson trout (Oncorhynchus mykiss): 4.2 mg/l 96.00 hours. Ecotoxicity: Toxic to aquatic life. Environmental effects: Bioaccumulation is unlikely to be significant because of the low water solubility of this product. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

I certify that all chemicals in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

14 – TRANSPORT INFORMATION

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 – United Kingdom (UK) and Australian Requirements

DOT / ADR / RID Classification:

DOT PROPER SHIPPING NAME: PAINT
PRIMARY HAZARD CLASS/DIVISION: 3
UN/UA NUMBER: UN1263
PACKING GROUP: III

IMDG and ADN Classification:

IMDG PROPER SHIPPING NAME: PAINT
IMDG UN CLASS: 3
IMDG UN NUMBER: UN1263
IMDG PACKING GROUP: III
IMDG LABEL: FLAMMABLE LIQUID
IMDG VESSEL STOWAGE: A

Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.

GHS LABEL:

DANGER

HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.

Refer to SDS for additional information on safe handling / use. - Keep out of reach of children. For Industrial Use Only.

⚠ **WARNING: This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer. For more information, go to www. P65Warnings.ca.gov**

Contains: Homo Polymer of HDI (40-50%), Glycol Ether PM Acetate (10-20%), HDI (0-10%), n-Butyl Acetate (0-10%), Xylene (0-10%), and Ethyl benzene (0-10%). This product contains one or more chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

Hazards: Flammable liquid and vapor. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Causes severe skin burns and eye damage. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s): Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area.

First Aid: Inhalation - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention. **Eye Contact** - If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms occur obtain medical attention. **Ingestion** - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention

15-REGULATORY INFORMATION

Hazards: Flammable liquid and vapor. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Causes severe skin burns and eye damage. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s): Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection. Do not breathe mist/vapours/spray. Use only outdoors or in a well-ventilated area.

CODES:

XI and XN

F

T

XI=Irritant
XN=Harmful
F=Highly Flammable
T=Toxic

R-Phrases:
R10: Flammable
R11: Highly Flammable

R20: Harmful by inhalation
R21/22: Harmful in contact with skin and if swallowed
R36: Irritating to eyes
R37/37/38: Irritating to eyes, respiratory system and skin
R42/43: May cause sensitization by inhalation and skin contact
R66: Repeated exposure may cause skin dryness or cracking
R67: Vapors may cause drowsiness and dizziness

S-Phrases:
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28A: After contact with skin, wash immediately with plenty of water
S38: In case of insufficient ventilation wear suitable respiratory equipment
S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.