SAFETY DATA SHEET

PRODUCT CODE: Epoxy Base Coat

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Epoxy Base Coat PART A**
PRODUCT CODES: **Epoxy Base Coat A**

MANUFACTURER: QuestMark, Div of CentiMark Corporation.
STREET ADDRESS: 12 Grandview Circle
CITY, STATE, ZIP: Canonsburg, PA 15317

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Jason Krut

DATE REVISED: 6/16/16

Chemical Name or Class: Epoxy mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

.
GHS Classification: Serious eye damage/Eye irritation category 2A, **Skin irritation category 2, skin sensitizer category 1, Long term hazards to aquatic environment Category 2**
GHS Label Elements and Precautionary Statements:
Label Elements: Exclamation Mark, Aquatic Toxicity
Hazard Statements:
Warning: Causes serious eye irritation.
Warning: Causes skin irritation
Warning: May cause an allergic skin reaction
Toxic to aquatic life with long lasting effects
Precautionary statements:
P102 Keep out of reach of children.
P103 Read label before use
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
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.
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.
P391 Collect spillage.
P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws

Other Non-classifiable potential hazards
Carcinogen category 2

HMIS HAZARD CLASSIFICATION
HEALTH: 2 **FLAMMABILITY: 1** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: G**
POTENTIAL HEALTH EFFECTS
EYES:
MAY CAUSE IRRITATION BUT NO CORNEAL INJURY IS LIKELY.
SKIN:
MAY CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE.
INGESTION:
THIS MATERIAL HAS A PROBABLE LOW ACUTE ORAL TOXICITY.
INHALATION:
NO GUIDE FOR CONTROL KNOWN, HOWEVER, EXPOSURE TO HEATED VAPORS CAN CAUSE IRRITATION TO THE NOSE, THROAT OR MUCOUS MEMBRANES..
HEALTH HAZARDS (ACUTE AND CHRONIC):
EPOXY RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATION OF VAPOR. EYES: INJURY IF UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.
CARCINOGENICITY
OSHA: NO **NTP: yes** **IARC: yes**
ADDITIONAL CARCINOGENICITY INFORMATION:
Some colors may contain carbon black - Explanation Of Carcinogenicity for carbon: IARC MONOGRAPHS ON EVALUATION

OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 65, PG 149, 1996: GROUP 2B. Product may contain ethyl benzene as a component of xylene (IARC 2B). IARC has determined that crystalline silica inhaled in the form of quartz is carcinogenic to humans (Group 1- carcinogenic to humans). The NTP classifies respirable crystalline silica as reasonably anticipated to be a carcinogen. Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
MODIFIED DIGLYCIDYL ETHER OF BISPENOL A	25068-38-6	NONE	NONE	NONE	40-70
ALKYL GLYCIDYL ETHER	68609-97-2	NONE	NONE	NONE	10-30
Talc	14807-96-6	20mg/m3	20mg/m3	20mg/m3	15-40
*crystalline silica (as a component of talc)	14808-60-7	0.05 mg/m3	0.025 mg/m3	0.05 mg/m3	0.1-1
LIMESTONE	1317-65-3	15mg/m3	5MG/M3	NONE	10-30
*XYLENE	1330-20-7	100PPM	100PPM	150PPM	0.1-1
*ethyl benzene (as a component of xylene	100-41-4	100ppm	100ppm	125ppm	<0.1%
Siloxanes and silicones, di-me reactions products with silica (non-hazardous)	67762-90-7	none	none	none	0.1-1
siloxanes and silicones, di-methyl (non-hazardous)	63148-62-9	none	none	none	0.1-1
COLORS MAY CONTAIN @ 10-30%:					
Titanium Dioxide	13463-67-7	10mg/m3	10mg/m3	5mg/m3	
*CARBON	1333-86-4	3.5PPM	3.4PPM	NONE	<1.0
Silicon Dioxide	7631-86-9	6mg/m3	10mg/m3	NONE	
Ferric Oxide	1309-37-1	10mg/m3	8mg/m3	NONE	
Iron III hydroxide	20344-49-4	15mg/m3	5mg/m3	NONE	
Yellow Pigment	Not available	NONE	NONE	NONE	
Zinc Sulfide (component of yellow pigment)	1314-98-3	NONE	NONE	NONE	
Barium Sulfate (component of yellow pigment)	7727-43-7	NONE	NONE	NONE	
Pigment yellow 65 (component of yellow pigment)	6528-34-3	NONE	NONE	NONE	
C.I. Pigment Blue	147-14-8	1mg/m3	1mg/m3	NONE	
Aluminum Oxide	1344-28-1	15mg/m3	10mg/m3	NONE	
Iron Oxide Yellow	51274-00-1	15mg/m3	10mg/m3	NONE	

SECTION 3 NOTES: *Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372. XYLENE ACHIH STEL=150PPM

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

SECTION 4: FIRST AID MEASURES

EYES:
FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.

SKIN:
SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:
LOW IN TOXICITY, INDUCE VOMITING ONLY IF LARGE AMOUNTS OF MATERIAL ARE INGESTED, AND OTHERWISE DO NOT INDUCE VOMITING. IN EITHER CASE CONSULT WITH A PHYSICIAN.

INHALATION:
REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: not available** **LOWER: not available**

FLASH POINT: 200+F

METHOD USED:
SETA FLASH

EXTINGUISHING MEDIA:
FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:
DO NOT ENTER CONFINED AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL 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:
WEAR RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF THE SOURCE AT THE LEAK. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH AN ABSORBENT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
STORE IN A COOL DRY PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS
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 CAN NOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF

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. GENERAL EXHAUST IS USUALLY SUFFICIENT IN LIEU OF NIOSH RESPIRATOR
VENTILATION :
GENERAL EXHAUST IS USUALLY SUFFICIENT TO CONTROL VAPORS AND EXPOSURE HAZARDS
PROTECTIVE GLOVES:
IMPERVIOUS GLOVES – NEOPRENE OR RUBBER
EYE PROTECTION:
SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.
WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID IN VARYING COLORS
BOILING POINT OR RANGE: 200 TO 279F
VAPOR DENSITY (AIR = 1): N/A
SPECIFIC GRAVITY (H2O = 1): 1.5
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: NEGLIGIBLE

Odor Threshhold: 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 EXCESSIVE HEAT OR OPEN FLAMES.
INCOMPATIBILITY (MATERIAL TO AVOID):
CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
CO2, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.
HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.
Component data:

Component CAS# 25068-38-6: Moderate sensitizer, slight eye irritant, moderate skin irritant, Oral LD50 >5000 mg/kg (rat), Dermal LD50 >6000 mg/kg (rabbit)
Component CAS# 68609-97-2: possible sensitizer, eye and skin irritant, Oral LD50 >10000 mg/kg (rat), Inhalation LD50 – no microscopic changes
Component Titanium Dioxide: Inhalation 4 h LC50 > 6.82 mg/l; Oral LD50 > 5000 mg/kg, rat; In February 2006, IARC listed titanium dioxide as possibly carcinogenic to humans Group 2B.
Component CAS# 14807-96-6: Carcinogenic effects – this component may contain crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline Silica is also listed by the NTP as a known human carcinogen
Component Limestone: LD50 Oral (rat) = 6450 mg/kg. This product contains greater than 0.1% crystalline silica which is listed as a group ! carcinogen by IARC, a known carcinogen by NTP, OSHA and as A2 suspected human carcinogen by ACGIH
Component Xylene: Inhalation LC50 26800ppm, Skin LD50 2000 mg/kg, Ingestion LD50 4.3 g/kg. Exposure may effect skin, eye, liver, kidney, nervous system, respiratory system and lungs. High concentrations may lead to nervous system effects. Repeated overexposure has produced toxic effects in developing and young laboratory animals. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. Xylene may contain ethyl benzene, and toluene. Ethyl benzene has shown limited evidence of a carcinogenic effect.
Component Iron III hydroxide CAS# 20344-49-4: Acute Oral Toxicity LD50 >5000 mg/kg (rat).
Component Carbon: IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.. Acute oral value of 20 gm/kg or greater in rats

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component CAS# 25068-38-6: Biodegradability (Modified Sturm Method) 12%, Fish toxicity: Rainbow trout (96hr) LC50 1.5mg/l, Zebra Fish (96hr) LC50 2.4 mg/l. Invertebrate Toxicity: Daphnia Toxicity (24hr) EC 50 3.6 mg/l
Component Titanium Dioxide: Pimephales promelas (fathead minnow) < 1000 mg/l @ 96h LC50; Pseudokirchneriella subcapitate (green algae) 61 mg/l @ 72h EC50; Daphnia magna (water flea) > 1000 mg/l @ 48h EC50
Component CAS# 14807-96-6: There is no data that suggests that crystalline silica is toxic to birds, fish, invertebrates, microorganisms or plants.
Component Limestone: inert material
Component Xylene: Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l, Aquatic Invertabrates: Toxic 1 < LC/EC/IC50 <10mg/l, Algae: Toxic 1 < LC/EC/IC50 <10 mg/l. Mobility – floats on water. If it enters the soil it will be highly mobile and may contaminate groundwater. Oxidises rapidly by photo-chemical reactions in air.
Component Iron III hydroxide CAS# 20344-49-4: Acute and Prolonged Toxicity to fish LC0 >1000 mg/l (golden Orfe). Toxicity to Microorganisms EC0 > 10000mg/l (pseudomonas putida)
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:.
DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAW.

SECTION 14: Transport Information

DOT: Not Regulated
IMO/IMDG: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS Bisphenol A Diglycidyl Ether Polymer), 9, PGIII, Marine Pollutant

SECTION 15: REGULATORY INFORMATION

No data for the product itself.
Component data:
Component CAS# 25068-38-6: Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, WHMIS class D2B; Is on the New Jersey Right to Know list,; is on the PA Right to Know List;
Component CAS# 68609-97-2: Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, Is on the New Jersey Right to Know list; is on the PA Right to Know List.
Component CAS# 14807-96-6 may contain Crystalline Silica (Silicon Dioxide) which is on the TSCA list. NTP list as a known human carcinogen, California proposition 65 list as a known carcinogen, Massachusetts Toxic Use Reduction Act list as toxic, Pennsylvania Worker and community right to know Act list as a hazardous substance.
Component Titanium Dioxide: Contains Proposition 65 Chemicals, is on the PA Hazardous substance list, is on the NJ right to know Regulated chemical List.
Titanium Dioxide is on inventory or in compliance with EINECS, TSCA, AICS, DSL, ENCS (JP), KECI (KR), PICCS (PH) and INV (CN.
Component Limestone: TSCA listed. Canada Exempt, naturally occurring Substance. EINECS, ECL, ENCS, CIES, PICCS listed. This product contains known to the state of California to cause cancer or reproductive effects.
Component Xylene: 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.
Siloxanes and silicones, di-me reactions products with silica: Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.
siloxanes and silicones, di-methyl: Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.
Component Carbon: Contains Proposition 65 Chemicals .Carbon: is listed on TSCA and DSL Canada
Component CAS# 7631-86-9: Component is on the Minnesota right to know list. Component is on TSCA list and Canada DSL.
Component CAS# 1309-37-1: Component is on the TSCA list and Canada DSL.
Component Iron III hydroxide CAS# 20344-49-4: Listed on TSCA Inventory. Potential exposure to all of the California proposition 65 chemicals have been determined to be below the No significant risk level (NSRL). Components are on the Pennsylvania right to know substance list. Component contains the following chemicals listed on the Pennsylvania RTK special hazardous Substance lists: chromium CAS# 7440-47-3 (0.02%) and nickel CAS# 7440-02-0 (0.015%). Component contains the following ingredients which are on the Massachusetts hazardous substance lists: Chromium CAS# 7440-47-3 (0.02%), arsenic CAS# 7440-38-2 (60ppm), Berrylium CAS# 7440-41-7 (1ppm) and Nickel CAS# 7440-02-0 (0.015%) Component contains the following chemicals on the California Proposition 65 list known to the state of California to be carcinogenic: Nickel CAS# 7440-02-0 (0.015%), arsenic CAS# 7440-38-2 (60ppm), Berrylium CAS# 7440-41-7 (1ppm) and Cobalt CAS# 7440-48-4 (70ppm)..
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.
Component CAS# 147-14-8: Component is on the TSCA List. and not controlled under WHMIS. Component is a CERCLA hazardous substance
Component CAS# 1344-28-1: Component is on the Massachusetts, New Jersey, Pennsylvania right to know lists. Component is on TSCA list and Canada DSL.
Component CAS# 51274-00-1: Component is on the TSCA list and Canada DSL.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein 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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Epoxy Base Coat PART B**
PRODUCT CODES: **Epoxy Base Coat B**

MANUFACTURER: QuestMark, Div of CentiMark Corporation.
STREET ADDRESS: 12 Grandview Circle
CITY, STATE, ZIP: Canonsburg, PA 15317

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Harry Jackson

DATE REVISED: 6/16/16

Chemical Name or Class: Polyamine mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Flammable liquid category 3, Specific target organ toxicity – single exposure category 3, Skin corrosion category 1B, Skin sensitization category 1, Serious eye damage category 1, Aquatic toxicity hazard (Acute) category 3, Aquatic toxicity hazard (Chronic) category 2

GHS Label Elements and Precautionary Statements:

Label Elements: Flame, Exclamation Mark, Corrosion, Aquatic Toxicity

Hazard Statements:

Warning: Flammable liquid and vapor
Warning: May causes drowsiness or dizziness.
Danger: Causes severe skin burns and eye damage
Warning: May cause an allergic skin reaction
Danger: Causes serious eye damage
Harmful to aquatic life
Toxic to aquatic life with long lasting effects
Precautionary statements:
P102 Keep out of reach of children.
P103 Read label before use
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.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray P271 Use only outdoors or in a well-ventilated area.
P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
Response;
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P370 + P378 In case of fire: Use FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL for extinction.
P403 + P235 Store in a well-ventilated place. Keep cool.
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.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363 Wash contaminated clothing before reuse.
P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P321 If skin irritation or burns develop, Call a doctor/physician .
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 If in eyes, immediately call a POISON CENTER or doctor/physician.
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.
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: 3 **FLAMMABILITY: 2** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: G**

POTENTIAL HEALTH EFFECTS
EYES:
CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING OR BLURRED VISION.
SKIN:
MAY CAUSE IRRITATION, DEFATTING AND DERMATITIS.
INGESTION:
CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA AND ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PHEUMONTITIS WHICH CAN BE FATAL.
INHALATION:
CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION DIZZINESS, WEAKNESS, FATIGUE, HEADACHE, AND POSSIBLE UNCONSCIOUSNESS.
HEALTH HAZARDS (ACUTE AND CHRONIC):
AMINE RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. OVER-EXPOSURE TO THIS MATERIAL CAN CAUSE CARDIAC ABNORMALITIES, ANEMIA, LIVER ABNORMALITIES, KIDNEY DAMAGE OR EVEN EYE DAMAGE.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE.
CARCINOGENICITY
OSHA: NO NTP: NO IARC: Yes

ADDITIONAL CARCINOGENICITY INFORMATION:
1,4-dioxane CAS# 123-91-1: Indication of possible carcinogenic effect in animal tests. IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	15-40
3-AMINOMETHYL-3,5,5-TRIMETHYL CYCLOHEXANE	2855-13-2	NONE	NONE	NONE	15-40
2-HYDROXYBENZOIC ACID	69-72-7	NONE	NONE	NONE	5-10
TRIS-2,4,6-DIMETHYLAMINOMETHYLPHENOL	90-72-2	NONE	NONE	NONE	3-7
Bis(dimethylaminomethyl) phenol	71074-89-0	NONE	NONE	NONE	10-30
PROPYLENE GLYCOL MONOMETHYL ETHER	107-98-2	100PPM	100PPM	150PPM	15-40
n-Butyl acetate	123-86-4	150ppm	150ppm	200ppm	0.1-1
*butan-2-ol	78-92-2	150ppm	100ppm	NONE	0.1-1
Propylene glycol derivative	Trade Secret	NONE	NONE	NONE	0.1-1
*1,4-dioxane	123-91-1	100ppm	20ppm(skin)	NONE	<0.005%

***Indicates toxic chemicals subject to the reporting requirements of section 313 Title III of 40 CFR 372.**
Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:
FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.
SKIN:
SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.
INGESTION:
DO NOT INDUCE VOMITING, KEEP PERSON WARM AND CONSULT A PHYSICIAN IMMEDIATELY.
INHALATION:
REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.
NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: not available** **LOWER: not available**
FLASH POINT: 91+F
METHOD USED:
SETA FLASH
EXTINGUISHING MEDIA:
FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL
SPECIAL FIRE FIGHTING PROCEDURES:
DO NOT ENTER CONFINED AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL FIRE EXPOSED CONTAINERS WITH WATER. PRESENCE OF SOLVENTS IN PRODUCT MAY REQUIRE GROUNDING.
UNUSUAL FIRE AND EXPLOSION HAZARDS:

IF FIRE OCCURS, SOLVENTS MAY PRODUCE EXCESSIVE PRESSURE. SEALED DRUMS MAY RUPTURE AND IGNITE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND AND IGNITE BY ANY SOURCE OF IGNITION. NEVER USE A CUTTING OR WELDING TORCH NEAR CONTAINERS (EVEN EMPTY). ALL 5 GALLON AND LARGER CONTAINERS SHOULD BE GROUNDED BEFORE TRANSFERRING MATERIAL.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
WEAR RESPIRATOR AND PROTECTIVE CLOTHING. REMOVE ALL SOURCES OF IGNITIONS. REMOVE EXCESS WITH VACUUM TRUCK TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

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 TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ ALL MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS. KEEP AWAY FROM ALL SOURCES OF IGNITION.
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 THEREOF. WEAR APPROPRIATE SAFETY EQUIPMENT AND RESPIRATOR AT ALL TIMES WHEN VENTILATION IS NOT SUFFICIENT TO CONTROL VAPORS.

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 AND EXPOSURE.
VENTILATION:
PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST). VENTILATION TO MAINTAIN EXPOSURE BELOW TOXIC LEVEL VALUES.
PROTECTIVE GLOVES:
IMPERVIOUS GLOVES – NEOPRENE OR RUBBER
EYE PROTECTION:
SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.
WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: **LOW VISCOSITY LIQUID – SOLVENT ODOR**
BOILING POINT OR RANGE: **243 TO 401F**
VAPOR DENSITY (AIR = 1): **N/A**
SPECIFIC GRAVITY (H2O = 1): **1.0**
EVAPORATION RATE: **N/A**
SOLUBILITY IN WATER: **NEGLIGIBLE**

Odor Threshhold: **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 EXCESS HEAT OR OPEN FLAMES AS WELL AS ALL SOURCES OF IGNITIONS SUCH AS SPARKS, HEATERS, AND STATIC DISCHARGES ETC.
INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID EPOXY RESINS IN UNCONTROLLED AMOUNTS AND STRONG OXIDIZING AGENTS.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
MAY FORM TOXIC CHEMICALS, CARBON DIOXIDE, CARBON MONOXIDE AND VARIOUS HYDROCARBONS ETC.
HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component Benzyl Alcohol: Inhalation LC50 (4hr) >4178 mg/l (rat), Dermal LD50 2000 mg/kg (rabbit) Rats exposed to 800 mg/kg for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No observed Adverse effect level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in two year study with rats and mice.
Component CAS# 2855-13-2: Oral LD50 rat 1030 mg/kg, Skin irritation – Corrosive subcategory 1C where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days. Eye irritation – Risk of serious damage to eyes. Product Sensitization (Magnusson- Kingman test) guinea pig: may cause sensitization by skin contact. Product Teratogenicity oral rat NOEL (no observed effect level) 250 mg/kg
Component CAS# 69-72-7: Acute Oral Toxicity LD50 (rat) = 891 mg/kg (behavioral somnolence (general depressed activity, Behavioral muscle weakness)). Acute Inhalation LC50 (rat) >900 mg/m3, 1 hr. Acute Dermal LD50 (rabbit) >10,000 mg/kg. Skin Irritation (rabbit) – mild skin irritation -24hr. Eye Irritation (rabbit) – severe eye irritation.
Component CAS# 107-98-2: Ingestion LD50 rat 4016 mg/kg, Dermal LD50 rabbit >2000 mg/kg, Inhalation LC50 6 hr Vapor, rat >25.8 mg/l. May cause eye or skin irritation. May effect Kidney or liver. Has been reported to be toxic to fetus in laboratory animals.
Component n-Butyl acetate:
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.
Oral: Type of value: LD50, Species: rat (male/female), Value: > 10,000 mg/kg (other), Type of value: LD50, Species: rat, Value: 10,736 mg/kg
Inhalation: Type of value: LC50, Species: rat (male/female), Value: > 21.1 mg/l (OECD Guideline 403), Exposure time: 4 h, The vapour was tested. Type of value: LC0, Species: rat (male/female), Value: > 38.32 mg/l, Exposure time: 6 h, The vapour was tested.
Dermal: Type of value: LD50, Species: rabbit (male/female), Value: > 14,000 mg/kg (other)
Irritation / corrosion: Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes. May cause slight irritation to the eyes.
Skin: Species: rabbit, Result: non-irritant Method: OECD Guideline 404.
Eye: Species: rabbit, Result: non-irritant, Method: OECD Guideline 405, Species: rabbit, Result: Slightly irritating, Method: Draize test
Sensitization: Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.
Repeated dose toxicity: Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.
Genetic toxicity: No mutagenic effect was found in various tests with microorganisms and mammalian cell culture. The substance was not mutagenic in studies with mammals.The substance was not mutagenic in bacteria. The substance was not genotoxic in mammalian cell culture. The substance was not genotoxic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect.
Development: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental
Component butan-2-ol
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. If used as intended, this product is not expected to present a physical or health hazard.
Oral: Type of value: LD50, Species: rat, Value: 2,193 - 6,480 mg/kg, Literature data.
Inhalation: Type of value: LC50, Species: rat, Value: 25 - 49 mg/l, Exposure time: 4 h, Literature data.
Dermal: Type of value: LD50, Species: rat, Value: > 2,000 mg/kg, Literature data.
Irritation / corrosion: Assessment of irritating effects: Irritating to eyes. Not irritating to the skin.
Skin: Species: rabbit, Result: non-irritant, Method: OECD Guideline 404, Literature data.
Eye: Species: rabbit, Result: Irritant, Method: OECD Guideline 405, Literature data.
Sensitization: Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.
Repeated dose toxicity: Assessment of repeated dose toxicity: Repeated inhalative uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Experimental/calculated data: similar to OECD guideline 413 rat (Fischer 344), (male/female) Inhalation 90d 0, 1250, 2500, or 5000 ppm.
NOAEL: 2500 ppm.
LOAEL: 5000 ppm. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Genetic toxicity: The substance was not mutagenic in bacteria. The substance was not genotoxic in ammalian cell culture.
Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect. Literature data.
Development: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. Literature data.
Component Propylene glycol derivative
Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.
Oral: Type of value: LD50, Species: rat (male/female), Value: > 5,000 mg/kg. Type of value: LD50, Species: rat (male/female), Value: > 5,000 mg/kg.
Inhalation: Type of value: LC0, Species: rat, Value: (other), Exposure time: 6 h, The vapour was tested.
Dermal: Type of value: LD50, Species: rat, Value: > 2,000 mg/kg (other), Type of value: LD0, Species: rat, Value: > 5,000 mg/kg
Irritation / corrosion: Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes. May cause slight irritation to the eyes.
Skin: Species: rabbit, Result: non-irritant, Method: other, Species: rabbit, Result: non-irritant.
Eye: Species: rabbit, Result: non-irritant, Method: other, Species: rabbit, Result: Slightly irritating.
Sensitization: Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Repeated dose toxicity: Assessment of repeated dose toxicity: Repeated dermal exposure to large quantities may affect certain organs. The product has not been tested. The statement has been derived from the structure of the product. Repeated inhalation exposure to large quantities may affect certain organs. Repeated oral uptake of the substance did not cause substance-related effects. Prolonged or repeated contact may cause mild skin irritation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The substance may cause damage to the olfactory epithelium after repeated inhalation. The substance may cause damage to the liver after repeated inhalation.
Experimental/calculated data: rat (Fischer 344) (male/female) Inhalation 2 weeks 0, 300, 1000, 3000 ppm. NOAEL: 6.2 mg/l 650 ppm, mouse (B6C3F1) (male/female) Inhalation 2 weeks 0, 300, 1000, 3000 ppm. NOAEL: 1.62 mg/l 300 ppm
Genetic toxicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in bacteria. The substance was not mutagenic in ammalian cell culture. The substance was not genotoxic in mammalian cell culture.
Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The results of animal studies gave no indication of a fertility impairing effect.
Development: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from ubstances/products of a similar structure or composition. No indications of a developmental toxic / teratogenic effect were seen in animal studies.
Component 1,4-dioxane: Carcinogenicity Information on: Indication of possible carcinogenic effect in animal tests. IARC (International Agency for Research on Cancer)
has classified this substance as group 2B (The agent is possibly carcinogenic to humans).
Component CAS# 90-72-2 and CAS# 71074-89-0: Oral LD50 (rat) 1200 mg/kg; Dermal LD50 (rabbit) 1280 mg/kg; Inhalation LC50 (rat) > 0.5 mg/liter/1 hour; Severe irritant to eyes of a rabbit. Severe irritant to the skin of a rabbit. Corrosive to the skin of a rabbit.

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component Benzyl Alcohol: EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD_2 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (Lepomis macrochinus), LC50 (96hr) 460 ml/lFathead minnow (Pimephales promelas), Toxicity to Algae: IC50 (72hr) 700 mg/l
Component CAS# 2855-13-2: Biodegradability 42% and is not readily biodegradable. Bioaccumulation: - no significant accumulation of the substance in organisms is to be expected. Mobility: The soil mobility of the substance is only minimally affected by adsorption to soil components. Toxicity to fish: LC50 Lauciscus idus 110 mg/l (96hr). Toxicity to Daphnia NOEC 3 mg/l (504hr). EC50 Daphnia magna 23 mg/l (48 hr). ErC50 scenedesmus subspicatus 50 mg/l (72 hr). NOEC scenedesmus subspicatus 1.5 mg/l (72 hr). Toxicity to bacteria: EC10 Pseudomonas putida 1120 mg/l (18 hr).
Component CAS# 69-72-7: Toxicity to Fish LC50 (Leuciscus idus – 96 mg/l. Toxicity to Daphnia magna – 105mg/l, 24 hr.
ComponentMutagenic Effects: Mutagenic for bacteria and/or yeast. Developmental toxicity: Classified reproductive syste/toxin/female, development toxin possible.
Component CAS@ 107-98-2: Bioconcentration potential is low (BCF less than 100). Potential for mobility in soil is high (KOC between 0 and 50). Material is readily biodegradable and is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100mg/l in the most sensitive species tested.. LC50 fathead minnow 96 hr 20800 mg/l, LC50 water flea 48 hr lethally 23300 mg/l, EbC50 green algae biomass growth inhibition 7 d >1000 mg/l. Toxicity to microorganisms IC50 activated sludge > 1000 mg/l
Component n-Butyl acetate and Component butan-2-ol and Component Propylene glycol derivative:
Fish
Acute:
Fish/LC50 (96 h): 10 - 100 mg/l
Chronic:
No data available.
Aquatic invertebrates
Acute:
daphnia/LC50 (48 h): > 100 mg/l
Chronic:
No data available.
Aquatic plants
Toxicity to aquatic plants:
algae/EC50 (72 h): > 100 mg/l
Microorganisms
Toxicity to microorganisms:
bacteria/EC50 (0.5 h): > 100 mg/l Safety Data Sheet
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.
All Ecological data has been derived from the properties of the individual components.
Component CAS# 90-72-2 and CAS# 71074-89-0: Toxicity: LC50 fish 447.8 mg/l (96 hr). LC50 Crust 28.2 mg/l (48 hr). EC50 alga 34.8 mg/l (96 hr)

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:
DISPOSE OF MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS PROPYLENE GLYCOL MONOMETHYL ETHER), 3, PG III,
IMO/IMDG : UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS PROPYLENE GLYCOL MONOMETHYL ETHER, ISOPHORONE DIAMINE), 3, PG III, Marine pollutant

SECTION 15: REGULATORY INFORMATION

No data for the product itself.
Component data:
Component Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada
Component CAS# 2855-13-2: Acute health hazard. Ingredients on TSCA. International Chemical status listed/registered – EINECS/ELINCS, DSL, AICS, MITI, TCOL, PICCS, China, New Zealand.
Component CAS# 69-72-7: Component is on the Pennsylvania and New Jersey right to know lists. Component is on the TSCA and Canada DSL lists.
Component CAS# 107-98-2; on the PA right to know list. Product is on the TSCA list and DSL Canada
Component n-Butyl acetate and Component butan-2-ol and Component Propylene glycol derivative:
Federal Regulations
Registration status: Chemical TSCA, US released / listed
OSHA hazard category: This material is classified as hazardous under OSHA regulations.
EPCRA 311/312 (Hazard categories): Acute; Chronic; Fire; Sudden release of pressure
EPCRA 313: CAS Number Chemical name
78-92-2 butan-2-ol
123-91-1 1,4-dioxane
CERCLA RQ CAS Number Chemical name
5000 LBS 123-86-4 n-Butyl acetate
1000 LBS 80-62-6 Methyl methacrylate
100 LBS 78-92-2; 123-91-1 butan-2-ol; 1,4-dioxane
State regulations
State RTK CAS Number Chemical name
MA, NJ, PA 123-86-4 n-Butyl acetate
MA, NJ, PA 78-92-2 butan-2-ol
MA, NJ, PA 123-91-1 1,4-dioxane
CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER
Component CAS# 90-72-2 and 71074-89-0 EEC symbol – Harmful, harmful if swallowed (R22) Irritating to eyes and skin (R36/38). Component is on the Canada DSL, TSCA, EINECS, AICS, ENCS, ECL, SEPA, PICCS lists

SECTION 16: DISCLAIMER

DISCLAIMER: The information Contained herein 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: Urethane Topcoat

CTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Urethane Topcoat part A (clear)**
PRODUCT CODES: **Urethane Topcoat A**

MANUFACTURER: QuestMark Flooring, Div of CentiMark Corporation
STREET ADDRESS: 12 Grandview Circle
CITY, STATE, ZIP: Canonsburg, Pa 15317

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Jason Krut

DATE REVISED: 1/28/16

Chemical Name or Class: Solvent mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Flammable liquid category 4, Skin corrosion/irritation category 2, Serious eye irritation category 2A, Specific target organ toxicity repeat exposure category 2, Acute oral toxicity category 4, Acute inhalation toxicity category 4, Acute dermal toxicity category 4, Chronic Aquatic hazard category 3, Chronic hazards to aquatic environment category 3

GHS Label Elements and Precautionary Statements:
Label Elements: Health Hazard Exclamation Mark
Hazard Statements:
Warning: Combustable liquid
Warning: Causes skin irritation
Warning: Causes serious eye irritation
Warning: May cause damage to organs through prolonged or repeated exposure
Warning: Harmful if swallowed.
Warning: Harmful if inhaled.
Warning: Harmful in contact with skin.
Harmful to aquatic life
Harmful to aquatic life with long lasting effects
Precautionary statements:
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash hands thoroughly after handling.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area
P273 Avoid release to the environment.
Response:
P370 + P378 In case of fire: Use **Foam, alcohol foam, CO2, dry chemical f**or extinction.
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P312 Call a POISON CENTER or doctor/physician if you feel unwell
P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
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.
P308 + P311 IF exposed or concerned: Call a poison center/doctor or get medical advice/attention.
P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
P330 Rinse mouth.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse
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.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool
P405 Store locked up.
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: 3** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: G**

POTENTIAL HEALTH EFFECTS
EYES:
May cause serious eye irritation.
SKIN:

May cause irritation. May cause defatting, dryness, cracking, rash, redness or dermatitis.

SKIN ABSORPTION:
Not normally a route of exposure.

INGESTION:
Can cause irritation to the digestive tract including sore throat, abdominal pain, nausea, vomiting and diarrhea.
Vomiting may Cause Aspiration of solvents resulting in chemical pneumonitis.

INHALATION health risks and symptoms of exposure:
Solvent vapors are irritating to the eyes, nose and throat and respiratory tract resulting in dryness of the throat and tightness in the chest. Other symptoms include headache, nausea, narcosis, fatigue and loss of appetite.

HEALTH HAZARDS (ACUTE AND CHRONIC):
Chronic Exposure to organic solvents has been associated with various neurotoxic effects including brain damage, nervous system damage or death. Prolonged vapor contact may cause conjunctivitis. Chronic inhalation may also include loss of memory, loss of intellectual ability and loss of coordination. Repeated Exposure to solvents can cause anemia, liver abnormalities, kidney damage or cardiac abnormalities.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Respiratory conditions or other allergic response.

CARCINOGENICITY
OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:
No additional data known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
DIPROPYLENE GLYCOL METHYL ETHER ACETATE	88917-22-0	none	none	none	30-60
URETHANE BIS OXAZOLIDINE	59719-67-4	none	none	none	7-13
DIBUTYLIN DILURATE	77-58-7	0.1mg / m3	0.1mg / m3	0.1mg / m3 5-10	
Precipitated Silica	112926-00-8	NONE	80mg/m3	NONE	7-13
PENTANEDIONE - 2,4	123-54-6	none	none	none	7-13
Additive	NJTSRN 800963-5023	none	none	none	0.1-1
Siloxanes and silicones, di-me reactions products with silica (non-hazardous)	67762-90-7	none	none	none	0.1-1
siloxanes and silicones, di-methyl (non-hazardous)	63148-62-9	none	none	none	0.1-1

SECTION 3 NOTES: *Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372.
Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:
Flush eyes with water for at least fifteen minutes and consult a physician.

SKIN:
Wash affected area with soap and water and remove contaminated clothing promptly. Contact physician if irritation develops.

INGESTION:
Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

INHALATION:
Remove victim to fresh air area and administer oxygen if necessary. Consult a physician if necessary.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% BY VOLUME) **UPPER: not available** **LOWER: not available**

FLASH POINT: 186 degrees F
METHOD USED:
Seta Flash

EXTINGUISHING MEDIA:
Foam, alcohol foam, CO2, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES:
Do not enter confined fire area without full bunker gear including a positive pressure NIOSH approved self-contained breathing apparatus. Cool all fire exposed containers with water. Minimize contact with material.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers may explode when exposed to extreme heat. Toxic vapors could be evolved from the combustion of this material.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Remove all sources of ignition and ventilate the area. Wear appropriate protective equipment as necessary to prevent exposure. Dike and absorb the material with absorbent such as clay and place in disposal containers.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Store in cool dry area. 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 MSDS's of all the components prior to using the material. Properly label all containers.Store away from all sources of ignition.
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 thereof. Supply appropriate ventilation or engineering controls prior to using this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:
Use only in a well ventilated area. If exceeding TLV's or if working in a confined space, wear suitable respiratory protection. Always consider the hazards from all components in the mixed material state.
VENTILATION :
Exhaust ventilation sufficient to keep the airborne concentrations of the solvents and other hazardous materials below the toxic level concentrations.
PROTECTIVE GLOVES:
Impervious gloves – neoprene or rubber.
EYE PROTECTION:
Splash goggles or glasses with side shields. If the environment warrants, a full face shield should be employed.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
Wear body covering clothing and other coverings as necessary such as an apron and appropriate footwear to avoid contact.
WORK HYGIENIC PRACTICES:
Observe good general hygienic practices.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: medium viscosity liquid with faint solvent odor.
BOILING POINT OR RANGE: not determined
VAPOR DENSITY (AIR = 1): not available
SPECIFIC GRAVITY (H2O = 1): 1.0-1.1
EVAPORATION RATE: not available
SOLUBILITY IN WATER: negligible
Odor Threshhold: 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 excessive heat or open flames. This material should not be mixed with phosphorous containing material or oxidizers.
INCOMPATIBILITY (MATERIAL TO AVOID):
Can react Vigorously with strong oxidizing agents and phosphorous containing materials.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
carbon monoxide and carbon dioxide, hydrocarbon compounds as well as other hazardous compounds.
HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component DIPROPYLENE GLYCOL METHYL ETHER ACETATE CAS# 88917-22-0: Toxicity to Animals LD50: Not available. LC50: Not available. Chronic Effects on Humans: The substance is toxic to lungs. Other Toxic Effects on Humans:Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant, permeator), of inhalation.
Component Dibutylin Dilurate CAS# 77-58-7: ACUTE ORAL TOX (LD50,RAT) 3200.00 MG/KG. ACUTE DERMAL TOX (LD50,RABBIT) >2000 MG/KG (NO DEATHS). ACUTE INHAL TOX (LC50, RAT) >8.10 MG/L/1 HR. AMES TEST: NEG (ACTIVATED & NONACTIVATED) INDUST CHEMS SUC H AS THIS MATL W/ACUTE TOX VALUES SHOWN & WHOSE VAPS/MISTS ARE NOT LIKELY TO BE

ENCOUNTERED BY HUMANS WHEN USED IN ANY REASONABLY FORESEEABLE MANNER WOULD NOT REQ TOXIC LBL ACCORD TO U.S. DOMESTIC & INTERNATIONAL TRANSPORT REQS. IRRIT EFTS DAT: SEV IRRITANT TO EYES OF RABBIT. MOD IRRITANT TO SKIN OF RABBIT.

Component PENTANEDIONE - 2,4 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;

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).
Mutagenicity: Dominant Lethal Test: Inhalation, rat = 694 ppm/6h/5D.; Mutation in Mammalian Somatic Cells: Hamster, Ovary = 80 mg/L.
Component CAS# 112926-00-8: LD50 (rat >5000 mg/kg, LD50 dermal (rat) >2000 mg/kg
Component URETHANE BIS OXAZOLIDINE CAS# 59719-67-4: Mutagenicity : or critical hazards. Teratogenicity : No known significant effects or critical hazards. Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.
Component additive NJTSRN 800963-5023: Acute oral toxicity: LD50 rat>8,000,000 mg/kg; skin irritation rabbit – no skin irritation

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component DIPROPYLENE GLYCOL METHYL ETHER ACETATE CAS# 88917-22-0: 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 products of degradation are more toxic.
Component PENTANEDIONE - 2,4 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 photochemically produced hydroxyl radicals (estimated half-life of 14 days). Based on its high water solubility, removal from air via wet deposition may occur.
Component CAS# 112926-00-8: Ecotoxicity: EC50 (fish) .10000 mg/l (daphnia >10000 mg/l

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:
Dispose of the material in a waste disposal site in accordance with local, state, and federal laws. Empty containers should be handled with care due to product residue and possible vapor from organic solvents. Never use a gas or electric torch to cut the drums.

SECTION 14: Transport Information

Bulk shipments DOT: NA1993, COMBUSTIBLE LIQUID N.O.S. (CONTAINS 2,4-Pentanedione, Dipropylene Glycol Methyl Ether Acetate), 3, PG III
Non-Bulk shipments DOT: Not regulated

IMO/IMDG: Not dangerous goods

SECTION 15: REGULATORY INFORMATION

No data for the product itself.
Component data:
Component DIPROPYLENE GLYCOL METHYL ETHER ACETATE CAS# 88917-22-0: Federal and State Regulations:
Pennsylvania RTK: Dipropylene glycol monomethyl ether acetate Massachusetts RTK: Dipropylene glycol monomethyl ether acetate TSCA 8(b) inventory: Dipropylene glycol monomethyl ether acetate Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).Other Classifications: WHMIS (Canada): CLASS B-3: Combustible liquid. DSCL (EEC): R38- Irritating to skin. R41- Risk of serious damage to eyes. Component is on the TSCA and Canada DSL lists.

Component Dibutylin Dilurate CAS# 77-58-7: Sara Title III Information: TOXIC SUBSTANCES CONTROL ACT (TSCA): ALL COMPONENTS ARE INCL IN EPA TOXIC SUBSTANCES CTL ACT (TSCA) CHEM SUBSTANCE INVENTORY. OSHA HAZARD COMMUNICATION STD (29CFR1910.1200) HAZARD CLASS(ES): IRRITANT.KIDNEY TOXIN. EPA SARA TITLE III SECTION 312 (40CFR370) HAZARD CLASS. IMMED HLTH HAZARD. EPA SARA TITLE III 313 (40CFR372) TOXIC CHEMICALS "DE MINIMIS" LEVEL ARE NONE. Federal Regulatory Information: CANADA DSL-INCL ON INVENTORY. HAZARD CLASSIFICATION-CLASS D DIVISION 2B..(EEC). EINECS /ELINCS MASTER INVENTORY-INCLUDED ON INVENTORY. EEC SYMBOL-HARMFUL (XN). EEC RISK (R) PHRASES-IRRITATING TO EYES & SKIN (R36/38). HARMFUL BY INHAL (R20). EEC SFTY PHRASES-IN CASE OF CONT W/EYES, RINSE IMMED W/PLENTY OF WATER & SEEK MED ADVICE (S26). AUSTRAILA-AICS-INCLUDED ON INVENTORY. State Regulatory Information: STATE REGS: PROPOSITION

65 SUBSTANCES (COMPONENT(S) KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER AND/OR REPRODUCTIVE TOXICITY & SUBJECT TO WARNING & DISCHARGE REQUIREMENTS UNDER "SAFE DRINKING WATER A ND TOXIC ENFORCEMENT ACT OF 1986"):NONE.
Component PENTANEDIONE - 2,4 CAS# 123-54-6: Component is on the New Jersey, Pennsylvania, Massachusetts right to know lists. Component is on the TSCA and Canada DSL lists.
Component CAS# 112926-00-8: Is not classified as dangerous. National Chemical Inventory listings include – AICS, DSL, IECSC, EINECS, ENCS, KECI, NZLOC, PICCS, TSCA,
Component URETHANE BIS OXAZOLIDINE CAS# 59719-67-4: Component is on the TSCA and Canada DSL lists.
Component additive NJTSRN 800963-5023: on TSCA List. Not a California Prop 65 chemical
Component Siloxanes and silicones, di-me reactions products with silica: Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.
Component siloxanes and silicones, di-methyl: Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein 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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Urethane Topcoat part B**
PRODUCT CODES: **Urethane TopcoatB**

MANUFACTURER: **QuestMark Flooring, Div of CentiMark Corporation .**
STREET ADDRESS: **12 Grandview Circle**
CITY, STATE, ZIP: **Canonsburg, PA 15317**

INFORMATION PHONE: **724-483-9300**
EMERGENCY PHONE: **Chemtrec 800-424-9300**
FAX PHONE: **724-483-9306**

PREPARED BY: **Harry Jackson**

DATE REVISED: **1/28/16**

Chemical Name or Class: HDI isocyanate

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: **Respiratory sensitization category 1B, skin sensitizer category 1B, Serious eye irritation category 2A, Skin corrosion/irritation category 3, Acute toxicity inhalation category 4, Acute hazard to aquatic environment category 3, Chronic hazards to aquatic environment category 2**

GHS Label Elements and Precautionary Statements:
Label Elements:Exclamation Mark, Health Hazard, aquatic
Hazard Statements:
Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Warning: May cause an allergic skin reaction
Warning: Causes serious eye irritation
Warning: Causes mild skin irritation.
Warning: Harmful if inhaled
Harmful to aquatic life
Toxic to aquatic life with long lasting effects.
Precautionary statements:
P102 Keep out of reach of children.
P103 Read label before use
P284 Wear respiratory protection 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.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area
P273 Avoid release to the environment.
Response
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.
P342 + P311 IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.
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.
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
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
P391 Collect spillage.
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: 1** **REACTIVITY: 1** **PERSONAL PROTECTIVE EQUIPMENT: G**

POTENTIAL HEALTH EFFECTS
EYES:
Can cause irritation, redness, tearing or blurred vision as well as corneal opacity and conjunctivitis.
SKIN:
May cause irritation, defatting, and dermattitis.
SKIN ABSORPTION:
Can cause reddening, swelling, rash, scaling or blistering. Overexposure may cause sensitization resulting in reaction to contact of small amounts.
INGESTION:

Can cause gastrointestinal irritation, nausea, vomiting, diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Can cause corrosive action to mucous membranes and digestive tracts.

INHALATION health risks and symptoms of exposure:

Can cause nausea and respiratory irritation, dizziness, weakness, nausea, headache. Burning sensation to mucous membranes, shortness of breath and flu like symptoms may occur.

HEALTH HAZARDS (ACUTE AND CHRONIC):

May cause asthma or other respiratory disorders, bronchitis, emphysema, hyperactivity and eczema.

Chronic Inhalation: as a result of previous repeated overexposures or a single large dose of isocyanates, certain individuals will develop isocyanate sensitization (chemical asthma), which will cause them to react to a later xposure to isocyanate at levels well below the TLV or MGL. These symptoms, which include chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed up to several hours after exposure. Similar to many nonspecific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in several years. Chronic overexposure to isocyanates has been reported to cause lung damage, including decrease in lung function, which may be permanent. Sensitization may either be temporary or permanent. Acute skin Contact: Isocyanates react with the skin protein and moisture and can cause irritation. Symptoms of skin irritation may be reddening, swelling, rash, scaling, or blistering. Some persons may develop skin sensitization from skin contact. Chronic Skin contact: Prolonged contact with the isocyanate can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material or even as a result of vapor-only exposure.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Respiratory conditions or other allergic response.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
Hopolymer of HDI	28182-81-2	1 mg/m3	NONE	NONE	60-100
*Hexamethylene Diisocyanate (HDI)	822-06-0	NONE	.005 PPM	NONE	<0.3%

***Indicates toxic chemical (s) subject to the reporting requirements of section 313 Title III and of 40 CFR 372. All Components are on the TSCA list.**

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

SECTION 4: FIRST AID MEASURES

EYES:

Flush eyes with water for at least fifteen minutes and consult a physician.

SKIN:

For extreme exposure use a safety shower immediately. Wash affected area with soap and water and remove contaminated clothing promptly.

INGESTION:

Give 2-3 glasses of water to drink and induce vomiting. Keep person warm and consult a physician immediately.

INHALATION:

Remove victim to fresh air area and administer oxygen if necessary. Obtain medical assistance, asthmatic type symptoms may occur immediately or be delayed for several hours. Treatment is symptomatic.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% BY VOLUME) **UPPER: not available** **LOWER: not available**

FLASH POINT: 300F

METHOD USED:

Closed Cup

EXTINGUISHING MEDIA:

Foam, alcohol foam, CO2, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES:

Do not enter confined fire area without full bunker gear including a positive pressure NIOSH approved self-contained breathing apparatus..Remove all soures of ignition.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Sealed drums may rupture and ignite. During a fire, HDI vapors and other toxic gasses may be evolved. Containers may burst if contaminated with water.

SECTION 6: RELEASE MEASURES

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

Wear respirator and protective clothing. Remove all sources of ignitions. Remove excess with an absorbent such as clay and place in disposal containers. Contained air respirator may be necessary.

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 MSDS's of all the components prior to using material. Properly label all containers. Keep material away from all sources of ignition and water sources.
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 thereof. 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 and 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 airborne concentrations of HDI below their TLV and MGL maximum. Refer to Patty's Industrial Hygiene and Toxicology- Volume 1 (3rd edition) Chapter 17 and Volume III (1st edition) Chapter 3 for details.
PROTECTIVE GLOVES:
Impervious gloves – neoprene or rubber.
EYE PROTECTION:
Splash goggles or glasses with side shields. Do not wear contact lenses when using this product.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
Wear body covering clothing and other coverings as necessary such as an apron and appropriate footwear to avoid contact.
WORK HYGIENIC PRACTICES:
Observe good general hygienic practices.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: **Pale yellow liquids, odorless**
BOILING POINT OR RANGE: **not determined**
VAPOR DENSITY (AIR = 1): **not available**
SPECIFIC GRAVITY (H2O = 1): **1.12**
EVAPORATION RATE: **not available**
SOLUBILITY IN WATER: **reacts with water**

Odor Threshhold: **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 excessive heat or open flames as well as all sources of ignition such as sparks, heaters, static discharges, etc.
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 dioxide carbon monoxide, 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

COMONENT Homopolymer of HDI: Acute Oral Toxicity LD50 >5000 mg/kg (rat). Acute Inhalation Toxicity LC50 390-453 mg/m3, arosol, 4 hrs (rat). Acute Dermal Toxicity LD50 >5000 mg/kg (rabbit). Eye and skin irritation: Slightly irritating (rabbit, Draize). Sensitization: dermal: Sensitizer (guinea pig, Maximization test (GPMT); Dermal: non-sensitizer (guinea pig, Buehler), Inhalation: non-sensitizer (guinea pig).

Repeated Dose Toxicity: 3 wks, inhalation: NOAEL: 3.7-4.3 mg/m3 (rat), 90 ds, inhalation: NOAEL: 3.3 – 3.4 mg/m3 (rat), irritation to lungs and nasal cavity. Mutagenicity: Genetic Toxicity in Vitro- Ames: negative (salmonella typhimurium. Metabolic Activation, with/without).

SECTION 12: ECOLOGICAL INFORMATION

COMONENT Homopolymer of HDI: Biodegradation: 0%, Exposure time: 28 days, not readily biodegradable. Acute and Prolonged Tocicity to fish LC0 > 100 mg/l (zebra fish, 96 h). Acute toxicity to aquatic invertebrates: EC0 > 100 mg/l (water flea, 48 h. Toxicity to aquatic plants EC50 > 1000 mg/l (green algae, 72 h. Toxicity to Microorganisms: EC50 > 1000 mg/l (activated sludge microorganisms, 3 h).

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:
Dispose of the material in a waste disposal site in accordance with local, state, and federal laws.

SECTION 14: Transport Information

DOT: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS HEXAMETHYLENE DIISOCYANATE) , 9, PGIII,

IMO/IMDG: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS HEXAMETHYLENE DIISOCYANATE) , 9, PGIII, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

COMPONENT Homopolymer of HDI: OSHA hazard rating – Hazardous. Listed on the TSCA and Canada DSL lists. Component is on the Massachusetts, New Jersey, and Pennslvania Rigth to Know Lists.
COMPONENT Hexamethylene Diisocyanate: OSHA hazard rating – Hazardous. Listed on the TSCA and Canada DSL lists. Component is on the Massachusetts, New Jersey, and Pennslvania Rigth to Know Lists.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein 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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Urethane Topcoat part C AGGREGATE**
PRODUCT CODES: **Urethane Topcoat Aggregate**

MANUFACTURER: QuestMark Flooring, Div of CentiMark Corporation
STREET ADDRESS: 12 Grandview Circle
CITY, STATE, ZIP: Canonsburg, PA 15317

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Harry Jackson

DATE REVISED: 6/1/15

Chemical Name or Class: white aluminum oxide

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Not classified as dangerous according to the regulations

GHS Label Elements and Precautionary Statements:
Label Elements: None
Hazard Statements:
P102 Keep out of reach of children.
P103 Read label before use
Precautionary statements:
None

Other Non-Classifiable hazards information
Hazard Statements:
P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P280: Wear Eye Protection/face protection
P285: In case of inadequate ventilation, use respiratory protection.
Precautionary statements:
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lense, if present and easy to do. Continue rinsing.
P302+P352: If on skin, wash with plenty of soap and water.

HMIS HAZARD CLASSIFICATION
HEALTH: 1 **FLAMMIBILITY: 0** **REACTIVITY: 0** **PERSONAL PROTECIVE EQUIPMENT: E**

POTENTIAL HEALTH EFFECTS
EYES:
MAY CAUSE REDDENING OF THE EYES OR EYE IRRITATION FROM AIRBORNE PARTICLES
SKIN:
NONE KNOWN
INGESTION:
NONE KNOWN
INHALATION:
NO DATA AVAILABLE
HEALTH HAZARDS (ACUTE AND CHRONIC):
INHALATION OF DUST GENERATED MAY AGGREVATE PRE-EXISTING CONDITIONS
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
PULMONARY CONDITIONS OR OTHER SIMILAR AILMENTS CAN BE AGGREVATED BY EXPOSURE.
CARCINOGENICITY
OSHA: NO **NTP: NO** **IARC: NO**
NO CARCINOGENICITY PROPERTIES ARE KNOWN TO EXIST.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
Fused white aluminium oxide	1344-28-1	5MG/M3	10MG/M3	NONE	100

SECTION 3 NOTES: *No toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372. All components are on the TSCA list.

SECTION 4: FIRST AID MEASURES

EYES:
FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSCIAN IF CONDITION WARRANTS.
SKIN:
SKIN CONTACT WILL NORMALLY CAUSE NO HEALTH RISKS.
INGESTION:
IF INGESTED, CONSULT A PHYSCIAN.
INHALATION:
REMOVE VICTIM TO FRESH AIR AND ADMIINISTER OXYGEN IF NECESSARY, CONSULT WITH A PHYSICIAN IF CONDITIONS WARRANT.
NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: N/A** **LOWER: N/A**

FLASH POINT: N/A
METHOD USED:
N/A
EXTINGUISHING MEDIA:
NONE KNOWN
SPECIAL FIRE FIGHTING PROCEDURES:
ALUMINUM OXIDE IS NEITHER A FIRE NOR AN EXPLOSION HAZARD.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
NO UNUSUAL FIRE HAZARDS KNOWN

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
WEAR RESPIRATOR AND USE DUSTLESS HANDLING EQUIPMENT TO CLEAN UP LARGE SPILLS. PLACE IN SUITABLE CONTAINERS FOR DISPOSAL. FLUSH AREA WITH WATER AFTER PICKUP OF MATERIAL.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
STORE IN A COOL DRY PLACE. PROPERLY LABEL ALL CONTAINERS AND RESEAL ALL PARTIALLY USED CONTAINERS. AVOID CREATING ANY DUST WHEN WORKING WITH THIS MATERIAL.

OTHER PRECAUTIONS:
AVOID BREATHING DUST GENERATED FROM THIS MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYDIENE AND SAFE WORKING PRACTICES.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:
USE A NIOSH APPROVED RESPIRATOR OR DUST MASK AS REQUIRED TO PREVENT OVER-EXPOSURE TO DUST. PROVIDE SUFFICIENT EXHAUST TO KEEP EXPOSURE LEVELS BELOW THE ACGIH PEL.
VENTILATION:
USE EXHAUST SUFFICIEINT TO MAINTAIN AIRBORNE PARTICULATES BELOW THE ACGIH PEL LIMITS ESTABLISHED.
PROTECTIVE GLOVES:
N/A
EYE PROTECTION:
SPLASH PROOF GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
PROVIDE ANY EQUIPMENT NECESSARY TO PREVENT THE INHALATION OF DUST.
WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: WHITE POWDER FORM
BOILING POINT OR RANGE: N/A
VAPOR DENSITY (AIR = 1): N/C
SPECIFIC GRAVITY (H2O = 1): 1.5
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: N/A

Odor Threshhold: 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):
NONE KNOWN
INCOMPATIBILITY (MATERIAL TO AVOID):
NONE KNOWN
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
NONE KNOWN
HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

Component Fused white aluminium oxide CAS# 1334-28-1: Special Remarks on Chronic Effects on Humans: May cause cancer (tumorigenic) according to animal data. No human data found. Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Nuissance Dust. Dust may cause mechanical eye irritation. Inhalation: Nuissance Dust. Material is irritating to mucous membranes and upper respiratory tract. May cause lung injury. Ingestion: May be harmful if swallowed. Ingestion of large amounts mat cause gastrointestinal tract irritation. It is expected to be a low hazard for normal industrial handling.

SECTION 12: ECOLOGICAL INFORMATION

Component Fused white aluminium oxide CAS# 1334-28-1: 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.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:
DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: NOT REGULATED

IMO/IMDG: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

Component Fused white aluminium oxide CAS# 1334-28-1: Federal and State Regulations: Illinois toxic substances disclosure to employee act: Aluminum oxide Rhode Island RTK hazardous substances: Aluminum oxide Minnesota: Aluminum oxide Massachusetts RTK: Aluminum oxide New Jersey: Aluminum oxide New Jersey spill list: Aluminum oxide California Director's list of Hazardous Substances: Aluminum oxide TSCA 8(b) inventory: Aluminum oxide
SARA 313 toxic chemical notification and release reporting: Aluminum oxide Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. Other Classifications: WHMIS (Canada): Not controlled under WHMIS (Canada). DSCL (EEC): R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately

SECTION 16: OTHER INFORMATION

DISCLAIMER:
THE INFORMATION CONTAINED HEREIN 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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Urethane Topcoat pigment pack**
PRODUCT CODES: **Urethane Topcoat pigment packs**

MANUFACTURER: QuestMark Flooring, Div of CentiMark Corporation
STREET ADDRESS: 12 Grandview Circle
CITY, STATE, ZIP: Canonsburg, PA 15317

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Jason Krut

DATE REVISED: 6/1/15

Chemical Name or Class: pigments

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Not classified as dangerous according to the regulations

GHS Label Elements and Precautionary Statements:
Label Elements: None
Hazard Statements:
P102 Keep out of reach of children.
P103 Read label before use
Precautionary statements:
None

Other Non-Classifiable hazards information
Hazard Statements:
P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P280: Wear Eye Protection/face protection
P285: In case of inadequate ventilation, use respiratory protection.
Precautionary statements:
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lense, if present and easy to do. Continue rinsing.
P302+P352: If on skin, wash with plenty of soap and water.

Other Non-classifiable potential hazards
Carcinogen category 2

HMIS HAZARD CLASSIFICATION
HEALTH: 1 FLAMMIBILITY: 1 REACTIVITY: 0 PERSONAL PROTECIVE EQUIPMENT: G

POTENTIAL HEALTH EFFECTS
EYES:
MAY CAUSE IRRITATION AND POSSIBLE CORNEAL DAMAGE.
SKIN:
MAY CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE.
INGESTION:
CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, OR VOMITING. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.
INHALATION:
NO GUIDE FOR CONTROL KNOWN, HOWEVER, EXPOSURE TO HEATED VAPORS CAN CAUSE IRRITATION TO THE NOSE, THROAT OR MUCOUS MEMBRANES.
HEALTH HAZARDS (ACUTE AND CHRONIC):
CAN CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE. NO OTHER HAZARDS KNOWN.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE.
CARCINOGENICITY
OSHA: NO NTP: NO IARC: yes
ADDITIONAL CARCINOGENICITY INFORMATION:
Some colors may contain carbon black - Explanation Of Carcinogenicity: IARC MONOGRAPHS ON EVALUATION OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 65, PG 149, 1996: GROUP 2B. Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
2-(3-heptyl)-N-butyl-1,3-aoxazolidine	165101-57-5	none	none	none	1-5
aluminum hydroxide	21645-51-2	none	10mg/m3	none	1-5

proprietary additive	**NJTSRN 567057-00001-5382P**	**none**	**none**	**none**	**1-5**
non hazardous component	**NJTSRN 56705700001-5027P**	**none**	**none**	**none**	**15-40**

Depending on color may also contain the following pigments or products @ 40-70%

Titanium dioxide	**13463-67-7**	**10mg/m3**	**10mg/m3**	**5mg/m3**
Additive	**NJTSRN 678290-00-2-50028-P**	**none**	**none**	**none**
yellow iron oxide	**51274-00-1**	**5mg/m3**	**10mg/m3**	**none**
iron oxide	**1332-37-2**	**5mg/m3**	**10mg/m3**	**none**
copper phthalocyanine	**147-14-8**	**none**	**none**	**none**
C.I. Pigment Violet 19	**1047-16-1**	**none**	**none**	**none**
carbon	**1333-86-4**	**3.5PPM**	**3.4PPM**	**NONE**
C.I. pigment green 7	**1328-53-6**	**none**	**none**	**none**

SECTION 3 NOTES:
*****No 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:
FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.
SKIN:
SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINTED CLOTHING PROMPTLY.
INGESTION:
DO NOT INDUCE VOMITING AND CONSULT A PHYSICIAN.
INHALATION:
REMOVE VICTIM TO FRESH AIR AREA AND ADMINISTER OXYGEN IF NECESSARY. CONSULT PHYSICIAN IF NECESSARY.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: N/A** **LOWER: N/A**
FLASH POINT: >200F
METHOD USED:
SETA FLASH
EXTINGUISHING MEDIA:
FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG
SPECIAL FIRE FIGHTING PROCEDURES:
DO NOT ENTER CONFINED FIRE AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS, COOL ALL FIRE EXPOSED CONTAINERS WITH WATER.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
NO UNUSUAL FIRE HAZARDS KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
WEAR RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF THE SOURCE AT THE LEAK. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH AN ABSORBANT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

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 TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFOR, READ THE MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS.

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 THEREOF.

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.
VENTILATION :

GENERAL EXHAUST IS USUALLY SUFFICIENT TO CONTROL VAPORS AND EXPOSURE HAZARDS. HOWEVER, IF VENTILATION IS NOT SUFFICIENT TO CONTROL VAPORS, A NIOSH APPROVED RESPIRATOR MUST BE USED.
PROTECTIVE GLOVES:
IMPERVIOUS GLOVES – NEOPRENE OR RUBBER
EYE PROTECTION:
SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
WEAR BODY COVERING CLOTHING AND OTHER COVERING AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.
WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: medium viscosity liquid in various colors
BOILING POINT OR RANGE: not determined
VAPOR DENSITY (AIR = 1) ^{0} F: N/A
SPECIFIC GRAVITY (H2O = 1): varies by color
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: NEGLIGIBLE

Odor Threshhold: 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 EXCESSIVE HEAT OR OPEN FLAMES.
INCOMPATIBILITY (MATERIAL TO AVOID):
CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS. CAN REACT MILDLY WITH WATER.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
CO2, ALDEHYDES, ACIDS, CARBON COMPOUNDS, HYDROGEN COMPOUNDS ETC.
HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component 2-(3-heptyl)-N-butyl-1,3-aoxazolidine CAS# 165101-57-5: LD50 >2000 mg/kg (rat)
Component Titanium Dioxide: Inhalation 4 h LC50 > 6.82 mg/l; Oral LD50 > 5000 mg/kg, rat; In February 2006, IARC listed titanium dioxide as possibly carcinogenic to humans Group 2B.
Component Carbon: IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component 2-(3-heptyl)-N-butyl-1,3-aoxazolidine 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 E0C50 – 5.6 mg/l
Component Titanium Dioxide: Pimephales promelas (fathead minnow) < 1000 mg/l @ 96h LC50; Pseudokirchneriella subcapitate (green algae) 61 mg/l @ 72h EC50; Daphnia magna (water flea) > 1000 mg/l @ 48h EC50

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD: DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: NOT REGULATED

IMO/IMDG: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

No data for the product itself.
Component data:
Component 2-(3-heptyl)-N-butyl-1,3-aoxazolidine CAS# 165101-57-5: Component is on the TSCA list. DSL/NDSL (Canadian Domestic Substance List / Non-Domestic Substance List) Registered. EINEC (European Inventory of Existing Chemical Substances) Level VII B.
Component Titanium Dioxide: Contains Proposition 65 Chemicals, is on the PA Hazardous substance list, is on the NJ right to know Regulated chemical List. Titanium Dioxide is on inventory or in compliance with EINECS, TSCA, AICS, DSL, ENCS (JP), KECI (KR), PICCS (PH) and INV (CN.
Component Carbon: Contains Proposition 65 Chemicals .Carbon: is listed on TSCA and DSL Canada
Component proprietary additive NJTSRN 567057-00001-5382P: Component is on the TSCA, EINECS, Canada DSL, TCCL lists.
Component Additive NJTSRN 56705700001-5027P: Component is on the TSCA, EINECS, Canada DSL, TCCL lists.
aluminum hydroxide CAS# 21645-51-2: Component is on the TSCA, EINECS, Canada DSL, TCCL lists.
Component Additive NJTSRN 678290-00-2-50028-P: Component is on the TSCA, EINECS, Canada DSL lists.
Component iron oxide CAS# 1332-37-2: Component is on the TSCA, EINECS, Canada DSL, New Zealand, TCCL lists.
Component yellow iron oxide CAS# 51274-00-1: Component is on the TSCA, EINECS, Canada DSL, New Zealand, AICS, MITI, China, TCCL lists.
Component copper phthalocyanine CAS# 147-14-8: : Component is on the TSCA, Canada DSL lists.
Component C.I. Pigment Violet 19 CAS# 1047-16-1: Component is on the TSCA, Canada DSL lists.
Component C.I. pigment green 7 CAS# 1328-53-6: Component is on the TSCA, Canada DSL lists.

SECTION 16: OTHER INFORMATION

DISCLAIMER: THE INFORMATION CONTAINED HEREIN 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