Umaco Ultra-Polish 850 (Part A and Part B)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Umaco Ultra-Polish 850 (Part A)

MANUFACTURER: Umaco, Inc.

STREET ADDRESS: 60 Rear Newhall Street CITY, STATE, ZIP: Lowell, MA 01852

INFORMATION PHONE: 978-453-8881

EMERGENCY PHONE: Chemtrec 800-424-9300

FAX PHONE: 978-453-2416 DATE REVISED: 01/04/21

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

HMIS HAZARD CLASSIFICATION

HEALTH: 1 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 CONCENTRATIONS OF VAPOR.

EYES: INJURY IS UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO LISTED INGREDIENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %		
MODIFIED DIGLCIDYL ETHER OF							
BISPHENOL A	25068-38-6	NONE	NONE	NONE	60-100		
ALKYL GLYCIDYL ETHER	68609-97-2	NONE	NONE	NONE	10-30		
(fluroaliphatic polmeric esters) contains 2-p	ropenoic acid, 2-[M	ethyl](nonafluorobu	ıtyl) sulfonyl]am	ino]ethyl			
ester, telomere with mrthyloxirane polymer							
oxirane mono-prpenoate	1017237-78-3	none	none	none	<0.3%		
(fluroaliphatic polmeric esters) contains 1-Bo	utanesulfonamide, 1	I,1,2,2.3,3,4,4,4-non	afluoro-n-(2-hyd	Iroxyethyl)-N-methy	I-		
	34454-97-2	1mg/m3(skin)	none	none	<0.1%		
(fluroaliphatic polmeric esters) contain 2-propenoic acid, 2-[methyl]nonafluorobutyl)sulfonyl]amino]ethyl ester							
	67584-55-8	none	none	none	<0.1%		
(fluroaliphatic polmeric esters) contains poly							
NJTSF	RN 04499600-6437	none	none	none	<0.1%		
(7) 11 11 11 11 11 11 11 11 11 11 11 11 11							
(fluroaliphatic polmeric esters) contains 2-m			400	450	-0.40/		
	34590-94-8	600mg/m3(skin)	100ppm	150ppm	<0.1%		
(flure alimbatic malmaria actors) contain talua							
(fluroaliphatic polmeric esters) contain tolue	108-88-3	200,000	20	2000000	<0.1%		
4.2 Drananadial	57-55-6	200ppm NONE	20ppm NONE	300ppm NONE			
1,2-Propanediol		NONE	NONE	NONE	0.1-1		
Oxirane, Me, polymer with oxirane monobuty		NONE	NONE	NONE	0.4.4		
011	9038-95-3	NONE	NONE	NONE	0.1-1		
Siloxanes and silicones, di-me reactions pro		•			0.4.4		
all accounts and all accounts all according to	67762-90-7	none	none	none	0.1-1		
siloxanes and silicones, di-methyl (non-haza	,				0.4.4		
	63148-62-9	none	none	none	0.1-1		

"***INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CRF 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 15 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 MATERIALS ARE INGESTED, OTHERWISE DO NOT INDUCE VOMITING. IN EITHER CASE IMMEDIATELY CONSULT WITH A PHYSICIAN.

INHALATION:

REMOVE VICTIM TO FRESH AIR AREA AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, 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:

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.

Umaco Ultra-Polish 850 (Part A and Part B)

SECTION 8 NOTES:

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. 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 - AMBER CLEAR

BOILING POINT OR RANGE ⁰ F: 200 TO 560 DEG F

VAPOR DENSITY (AIR = 1): N/A SPECIFIC GRAVITY (H2O = 1): 1.1 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

Umaco Ultra-Polish 850 (Part A and Part B)

Component CAS# 57-55-6: LD50 = 20000 mg/kg

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

(fluroaliphatic polymeric esters) Ecological information not determined, Chemical fate information not determined.

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: 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.

Fluroaliphatic Polymeric Esters: may contain trace amounts of Section 313 toxic chemicals toluene CAS# 108-88-3. Components on TSCA list or in compliance. Contains chemicals that can cause birth defects or other reproductive harm. The Ingredients are on DSL Canada, Chinas inventory of chemical substances, EiNECS, Korean Existing Chemical Inventory Toluene is a California proposition 65 chemical (female reproductive toxin, developmental toxin) This component contains a TSCA section 12(b) chemical (CAS# 1017237-78-3), but is in a quantity less than 0.3%.

Component CAS# 57-55-6: Listed on TSCA and DSL

Component CAS# 9038-95-3: Listed on TSCA and Canada DSL

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.

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

Umaco Ultra-Polish 850 (Part A and Part B)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Umaco Ultra-Polish 850 (Part B)

MANUFACTURER: Umaco, Inc.

STREET ADDRESS: 60 Rear Newhall Street CITY, STATE, ZIP: Lowell, MA 01852

INFORMATION PHONE: 978-453-8881

EMERGENCY PHONE: Chemtrec 800-424-9300

FAX PHONE: 978-453-2416 DATE REVISED: 01/04/21

Chemical Name or Class: Polyamine mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: : Acute oral toxicity category 4, Specific target organ toxicity following repeated exposure category 2, Skin corrosion/irritation category 1, skin sensitizer category 1B, Serious eye damage category 1, Acute toxicity inhalation category 4, Acute hazard to aquatic environment category 2, Chronic hazards to aquatic environment category 2

GHS Label Elements and Precautionary Statements:

Label Elements: Exclamation Mark, Corrosion, Health Hazard, Aquatic Toxicity









Hazard Statements:

Warning: Harmful if swallowed

Warning: May cause damage to organs through prolonged or repeated exposure (skin, central nervous system (CNS).

Danger: Causes Severe skin burns and eye damage

Warning: May cause an allergic skin reaction

Danger: Causes serious eye damage.

Warning: Harmful if inhaled

Warning: Suspected of damaging the fertility of the unborn child.

Toxic 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

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P271 Use only outdoors or in a well-ventilated area

P273 Avoid release to the environment.

Response;

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

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.

P310 Immediately call a POISON CENTER or doctor/physician.

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.

P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

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.

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

P391 Collect spillage.

Storage:

Umaco Ultra-Polish 850 (Part A and Part B)

P405 Store locked up.

Disposal:

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

Other Non-classifiable potential hazards

Germ cell mutagenicity category 2

HMIS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0 PERSONAL PROTECTIVE EQUIPMENT: G

POTENTIAL HEALTH EFFECTS

EYES:

WILL CAUSE BURNS TO THE EYES. HIGH VAPOR CONCENTRATIONS CAN CAUSE SEVERE IRRITATION TO THE EYES.

SKIN:

CAN CAUSE SKIN IRRITATION OR POSSIBLE BURNS TO THE SKIN

INGESTION:

LIQUID CAN CAUSE SEVERE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.

INHALATION:

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

HEALTH HAZARDS (ACUTE AND CHRONIC):

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

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO LISTED INGREDIENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	10-30
3-Aminomethyl-3,5,5-Trimethyl Cyclohexane	2855-13-2	NONE	NONE	NONE	10-30
NONYL PHENOL	84852-15-3	NONE	NONE	NONE	10-30
M-XYLENE DIAMINE	1477-55-0	NONE	.1mg/m3	NONE	10-30
BENZENEMETHANAMINE, N,N-DIMETHYL-B	ENZYLDIMETHYL	AMINE	· ·		
	103-83-3	NONE	NONE	NONE	10-30
accelerator NJTSRN 299433	00001-5715P	NONE	NONE	NONE	1-5

*INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE 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:

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

SKIN.

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

INGESTION:

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

INHALATION:

REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY.

SECTION 5: FIRE-FIGHTING MEASURES

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

FLASH POINT: 230+F METHOD USED:

SETA FLASH EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

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

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NONE KNOWN.

Umaco Ultra-Polish 850 (Part A and Part B)

SECTION 6: RELEASE MEASURES

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

AVOID CONTACT WITH MATERIAL. WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING. PUMP LIQUID TO SALVAGE TANK. TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS. RESEAL PARTIALLY USED CONTAINERS. PROPERLY LABEL ALL CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. OBSERVE CONDITIONS OF GOOD INDUSTRIAL HYGIENE AND SAFE WORKING PRACTICES.

OTHER PRECAUTIONS:

MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS OF ALL COMPONENTS TO BECOME FAMILIAR WITH ALL HAZARDS PRIOR TO USING THIS PRODUCT.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

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

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

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES - NEOPRENE OR RUBBER

EYE PROTECTION:

SPLASH 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: AMBER CLEAR LIQUID WITH AMINE ODOR.

BOILING POINT OR RANGE: 401-560 F VAPOR DENSITY (AIR = 1): N/A SPECIFIC GRAVITY (H2O = 1): 1.1 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

Umaco Ultra-Polish 850 (Part A and Part B)

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component CAS# 1477-55-0:

Draize test, rabbit, eye: 50 ug/24H Severe; Draize test, rabbit, skin: 750 ug/24H Severe; Inhalation, rat: LC50 = 700 ppm/1H;

Oral, rat: LD50 = 930 mg/kg; Skin, rabbit: LD50 = 2 gm/kg;

Component 3-Aminomethyl-3,5,5-Trimethyl Cyclohexane: Oral LD50 rat 1030 mg/kg, Skin irritation – Corrosive sucategory 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- Kigman test) guinea pig: may cause sensitization by skin contact. Product Teratogenicity oral rat NOEL (no observed effect level) 250 mg/kg

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 Nonyl Phenol: Median Lethal Dose Oral: LD50 0.58g/kg (rat) moderately toxic. Dermal LD50 2.14g/kg (rabbit) slightly toxic. Skin Draize Test, rabbit,: 500 mg/m3 24hr – corrosive. Eyes Draize test rabbit, 57.00/110 – extremely irritating. Component is a possible risk of impaired fertility.

Component CAS# 103-83-3 Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Corrosive to skin, eyes, and respiratory system Skin contact may result in sensitization.

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component CAS# 1477-55-0: Ecotoxicity: Fish: LD50=155.8mg/L; 48 hrs.; Semi Static System Bioconcentration = <.3,<2.7(Carp, Continous flow system: 6 weeks)

Component 3-Aminomethyl-3,5,5-Trimethyl Cyclohexane: 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 Benzyl Alcohol: EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD₂ 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (Lepomis macrochinus), LC50 (96hr) 460 ml/l Fathead minnow (Pimephales promelas), Toxicity to Algae: IC50 (72hr) 700 mg/l

Component Nonyl Phenol: Ecotoxicity: Daphnia EC50: 0.14-0.44 mg/l, 48 hr. Component is not readily biodegradable, log Pow: 3-4. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.. Aquatic Toxicity LC50 96 hr, toxicity rating is <0.10 ppm – extremely toxic

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

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

SECTION 14: Transport Information

DOT: UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS M-XYLENE DIAMINE, NONYL PHENOL), 8, PG III, MARINE POLLUTANT

IMO/IMDG: UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS M-XYLENE DIAMINE, NONYL PHENOL), 8, PG III, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

Component CAS@ 1477-55-0: Component is listed on the TSCA And Canada DSL inventory. Component is on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Component 3-Aminomethyl-3,5,5-Trimethyl Cyclohexane: 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 Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada

Component Nonyl Phenol: This component is listed on TSCA, EINECS, ACIS, MITI and Canada DSL lists.

Component CAS# 103-83-3: Component is on the TSCA and DSL Inventory. EINECS Number (EEC)

R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R34- Causes burns. R52- Harmful to aquatic organisms.

R53- May cause long-term adverse effects in the aquatic environment. Japanese Regulatory Data Not available

Umaco Ultra-Polish 850 (Part A and Part B)

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

Umaco Ultra-Polish 850 Accelerator

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Umaco Ultra-Polish 850 Accelerator

MANUFACTURER: Umaco, Inc.

STREET ADDRESS: 60 Rear Newhall Street CITY, STATE, ZIP: Lowell, MA 01852

INFORMATION PHONE: 978-453-8881

EMERGENCY PHONE: Chemtrec 800-424-9300

FAX PHONE: 978-453-2416

DATE REVISED: 01/04/21

Chemical Name or Class: Epoxy-amine Accelerator

SECTION 2: HAZARDS IDENTIFICATION

SECTION 2. HAZANDO IDENTILIDATION

Hazard Overview

GHS Classification: (H225 Flammable liquids category 2), (H302 Acute toxicity, oral Category 4), (H318 Serious eye damage/eye irritation category 1)

GHS Label Elements and Precautionary Statements: Label Elements: Flame, Exclamation Mark, Corrosion







Hazard Statements:

Danger: Highly flammable liquid and vapor

Warning: Harmful if swallowed Danger: Causes serious eye damage

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.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P312 IF SWALLOWED: Call POISON CENTER/doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

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

Storage:

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

Disposal:

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

HMIS HAZARD CLASSIFICATION

HEALTH: 3 FLAMMABILITY: 3 REACTIVITY: 0 PERSONAL PROTECTIVE EQUIPMENT: D

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. INGESTION CAN BE HARMFUL OR TOXIC. INHALATION:

Umaco Ultra-Polish 850 Accelerator

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, HEADACHE AND POSSIBLE UNCONSCIOUSNESS

HEALTH HAZARDS (ACUTE AND CHRONIC):

PRODUCT 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:

ETHANOL IS LISTED AS A GROUP 1 CARCINOGENIC TO HUMANS BY IARC

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO. INGREDIENT **OSHA PEL ACGIH TLV OSHA STEL WEIGHT % ETHANOL** 64-17-5 NONE 1000 ppm NONE 30-50 NITRIC ACID, AMMONIUM CALCIUM SALT 15245-12-2 NONE NONE **NONE** 30-50

SECTION 3 NOTES:

(*) INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE 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

GENERAL ADVICE:

MOVE OUT OF DANGEROUS AREA. CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. EYES:

SMALL AMOUNTS SPLASHED INTO EYES CAN CAUSE IRREVERSIBLE TISSUE DAMAGE AND BLINDNESS. IN THE CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. CONTINUE RINSING EYES DURING DRANSPORT TO HOSPITAL. REMOVE CONTACT LENSES. KEEP EYE WIDE OPEN WHILE RINSING. IF EYE IRRITATION PERSISTS, CONSULT A SPECIALIST.

SKIN:

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

INGESTION:

KEEP RESPIRATORY TRACT CLEAR. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF SYMPTOMS PERSIST, CALL A PHYSICIAN. TAKE VICTIM IMMEDIATELY TO HOSPITAL.

INHALATION:

REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/A

(% by volume) LOWER: N/A

FLASH POINT: 66F METHOD USED: SETA FLASH

SUITABLE EXTINGUISHING MEDIA:

ALCOHOL-RESISTANT FOAM, CO2, DRY CHEMICAL

UNSUITABLE EXTINGUISHING MEDIA:

HIGH VOLUME WATER JET

SPECIFIC HAZARDS DURING FIREFIGHTING:

DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES.

HAZARDOUS COMBUSTION PRODUCTS:

CARBON OXIDES

FURTHER INFORMATION:

COLLECT CONTAMINATED FIRE EXTINGUISHING WATER SEPARATELY. THIS MUST NOT BE DISCHARGED INTO DRAINS. FIRE RESIDUES AND CONTAMINATED FIRE EXTINGUISHING WATER MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS. FOR SAFETY REASONS IN CASE OF FIRE, CANS SHOULD BE STORED SEPARATELY IN CLOSED CONTAINMENTS. USE A WATER SPRAY TO COLL FULLY CLOSED CONTAINERS.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.

Umaco Ultra-Polish 850 Accelerator

SECTION 6: RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

USE PERSONAL PROTECTIVE EQUIPMENT. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS 7 AND 8, BEWARE OF VAPORS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPORS CAN ACCUMULATE IN LOW AREAS.

ENVIRONMENTAL PRECAUTIONS:

PREVENT PRODUCT FROM ENTERING DRAINS. PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. IF THE PRODUCT CONTAMINATED RIVERS AND LAKES OR DRAINS INFORM RESPECTIVE AUTHORITIES.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

CONTAIN SPILLAGE, AND THEN COLLECT WITH NON-COMBUSTIBLE ABSORBENT MATERIAL. (SAND. EARTH, DIATOMACEOUS EARTH, VERMICULITE) AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL/NATIONAL REGULATIONS (SEE SECTION 13)

SECTION 7: HANDLING AND STORAGE

ADVICE ON PROTECTION AGAINST FIRE AND EXPLOSION:

DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL. TAKE NECESSARY ACTION TO AVOID STATIC ELECTRICITY DISCHARGE (WHICH MIGHT CAUSE IGNITION OF ORGANIC VAPORS). USE ONLY EXPLOSION-PROOF EQUIPMENT. KEEP AWAY FROM OPEN FLAMES, HOT SURFACES AND SOURCES OF IGNITION.

ADVICE ON SAFE HANDLING:

DO NOT BREATHE VAPORS/DUST, AVOID CONTACT WITH SKIN AND EYES, FOR PERSONAL PROTECTION SEE SECTION 8, SMOKING. EATING AND DRINKING SHOULD BE PROHIBITED IN THE APPLICATION AREA. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES. CONTAINER MAY BE OPENED ONLY UNDER EXHAUST VENTILATION HOOD. OPEN CONTAINERS CAREFULLY AS CONTENTS MAY BE UNDER PRESSURE.

CONDITIONS FOR SAFE STORAGE:

NO SMOKING. KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE. OBSERVE LABEL PRECAUTIONS. KEEP IN PROPERLY LABELED CONTAINERS. STORE AT TEMPERATURES BETWEEN (43-82F/6-28C).

MATERIALS TO AVOID:

STRONG ACIDS, STRONG BASES, STRONG OXIDIZING AGENTS.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

NO PERSONAL RESPIRATORY PROTECTIVE EQUIPMENT NORMALLY REQUIRED.

VENTILATION:

PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST) VENTILATION.

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES - NITRILE OR BUTYL-RUBBER SOLVENT RESISTANT GLOVES

EYE PROTECTION:

TIGHTLY FITTING SAFETY GOGGLES (KEEP EYE WASH BOTTLE WITH PURE WATER AT HAND).

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

CHOOSE BODY PROTECTION ACCORDING TO THE AMOUNT AND CONCENTRATION OF THE DANGEROUS SUBSTANCE AT THE WORK PLACE. RECOMMENDATION - IMPERVIOUS CLOTHING.

WORK HYGIENIC PRACTICES:

DO NOT EAT, DRINK OR SMOKE WHILE USING PRODUCT. WASH HANDS BEFORE BREAKS AND AT THE END OF THE DAY.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID WITH ALCOHOL-LIKE ODOR

BOILING POINT OR RANGE: 151F VAPOR DENSITY (AIR = 1): N/A SPECIFIC GRAVITY (H2O = 1): 1.17

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: PARTIALLY SOLUBLE

Odor Threshhold: N/A

pH: 5.6

Melting point/freezing point: N/A Vapor Pressure: 59hPa

Auto Ignition Temperature: N/A

Partition Coefficient: n-octanol/water: N/A Decomposition Temperature: >392F

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SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:

NO DANGEROUS REACTION KNOWN UNDER CONDITIONS OF NORMAL USE.

CHEMICAL STABILITY:

STABLE UNDER NORMAL CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS:

VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR.

CONDITIONS TO AVOID:

HEAT, FLAMES AND SPARKS.

INCOMPATIBLE MATERIALS:

NONE KNOWN

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE

SECTION 11: TOXICOLOGICAL INFORMATION

Acute oral toxicity:

Product - Acute toxicity estimate: 1,041 mg/kg (calculation method)

Acute inhalation toxicity:

Component (ethanol) - LC50 (rat, male and female): 116.9 mg/l, 4h, test atmosphere: vapor (OECD 403)

Acute dermal toxicity:

Component (nitric acid, ammonium calcium salt) – LD50 (rat, male and female) : >2,000 mg/kg (OECD 402), assessment: no acute dermal toxicity Component (ethanol) – LD50 (rabbit) : >2,000 mg/kg (OECD 402)

Skin corrosion/irritation:

Product - may cause skin irritation in susceptible persons

Serious eye damage/eye irritation:

Component (nitric acid, ammonium calcium salt) - rabbit; result: irreversible effects on the eye (OECD 405)

Component (ethanol) - rabbit; result: mild eye irritant (OECD 405)

Respiratory or skin sensitization:

Product - skin, guinea pig; result: does not cause skin sensitization.

Germ cell mutagenicity:

Component (ethanol) – genotoxicity in vitro: in vitro mammalian cell gene mutation test, mouse lymphoma cells, 33.99mg/ml, with and without metabolic activation (OECD 476), result: negative. Reverse mutation assay, salmonella typhimurium, 10 mg/plate, with and without metabolic activation (OECD 471), result: negative.

Carcinogenicity:

Component (ethanol) – rat, NOAEL: > 3,000 mg/kg body weight (OECD 451). IARC: Group 1 Carcinogenic to humans. ACGIH: confirmed animal carcinogen with unknown relevance to humans.

Reproductive toxicity:

Component (nitric acid, ammonium calcium salt) – Effects on fertility: rat, male and female, oral (OECD 422). Effects on fetal development: rat, female, oral; general toxicity maternal: no observed adverse effect level: 1,500 mg/kg body weight (OECD 422), result: no teratogenic effects.

Component (ethanol) – Effects on fertility: rat, general toxicity – parent: no observed adverse effect level: 5,200 mg/kg body weight. Effects on fetal development: mouse, male or female, oral: result: Teratogenic effects.

STOT - single exposure: no data

STOT - repeated exposure: no data

Repeated dose toxicity:

Component (nitric acid, ammonium calcium salt) - rat, male and female, NOAEL: > 1000 mg/kg/d, ingestion, 672h, 7d, subacute toxicity.

Component (ethanol) - rat, male, NOAEL: > 1.28 g/kg, ingestion, 14 weeks, 7d, sub chronic toxicity.

Aspiration toxicity: no data

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish:

Component (nitric acid, ammonium calcium salt) - LC50 (oncorhynchus mykiss / rainbow trout) : > 98.6 mg/l, 96h, static test (OECD 203).

Component (ethanol) – LC50 (oncorhynchus mykiss / rainbow trout): 13,000 mg/l, 96h (OECD 203).

Toxicity to daphnia and other aquatic invertebrates:

Component (nitric acid, ammonium calcium salt) - EC50 (daphnia magna / water flea): 490 mg/l, 48h, fresh water

Component (ethanol) - LC50 (daphnia magna / water flea): 12,340 mg/l, 48h

Toxicity to algae/aquatic plants:

Component (ethanol) – EC50 (chlorella vulgaris / fresh water algae): 275 mg/l, 72h, static test, fresh water (OECD 201). NOEC (lemna gibba / gibbous duckweed): 280 mg/l (OECD 201).

Chronic toxicity to daphnia and other aquatic invertebrates:

Component (ethanol) - NOEC (daphnia magna / water flea): 9.6 mg/l, 10d, semi-static test, fresh water. NOEC (ceriodaphnia dubia / water flea): 9.6 mg/l, 7d, semi-static test, fresh water.

Toxicity to microorganisms:

Component (nitric acid, ammonium calcium salt) – EC50 (activated sludge): > 1,000 mg/l, 3h (OECD 209)

Component (ethanol) - (activated sludge): 440 mg/l

Acute aquatic toxicity:

 $Component \ (nitric \ acid, \ ammonium \ calcium \ salt) - Has \ no \ known \ Eco-toxicological \ effects.$

Chronic aquatic toxicity:

Umaco Ultra-Polish 850 Accelerator

Component (nitric acid, ammonium calcium salt) - Has no known Eco-toxicological effects.

Biodegradability:

Component (ethanol) – 97% (OECD 301B)

Biochemical Oxygen Demand (BOD):

Component (ethanol) – 1.67 g/g, 5d Chemical Oxygen Demand (COD):

Component (ethanol) - 1990 mgO2/g

Bioaccumulation:

Component (ethanol) - Bioconcentration factor (BCF): 0.66 - 3.2

Partition coefficient: n-octanol/water: Component (ethanol) – low Pog: -0.31 Hazardous to the ozone laver:

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82,

Subpart A, App.A + B)

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: UN1170, Flammable Liquids (Ethanol), 3, PGII

IMO/IMDG: UN1170, FLAMMABLE LIQUIDS (ETHANOL), 3, PG II

SECTION 15: REGULATORY INFORMATION

CERCLA Reportable Quantity:

Butanone CAS# 78-93-3 - RQ=5000# (Calculated product RQ exceeds reasonably attainable upper limit)

SARA 311/312 Hazards:

Flammable, acute toxicity (any route of exposure), serious eye damage or eye irritation

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

TSCA, DSL, CH INV, AICS, NZIoC, ENCS, KEIC, PICCS, IECSC, TCSI listed

SECTION 16: OTHER INFORMATION

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N/A = Not Available

See Section 1 for date of preparation