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Material Safety Data Sheets (MSDS)

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PRODUCT NAME: TIOTECH WHITE FLOCK ADHESIVE
 PRODUCT CODE: 922-101

HMIS CODES: H F R P
 1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
 ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
 ST. LOUIS, MO 63105

EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
 INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
 NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	33.92

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): 1.21
 WEIGHT PER GALLON: 10.1 lb/gl EVAPORATION RATE: SLOWER THAN ETHER
 VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.71007 lb/gl
 SOLUBILITY IN WATER: N/A
 APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
 (LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
 BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
 INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
 PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE
CONDITIONS TO AVOID:
N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

EFFECTS OF OVEREXPOSURE:

ACUTE AND CHRONIC HEALTH EFFECTS:

- EYES:**
CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
- SKIN:**
PROLONGED OR REPEATED EXPOSURE CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.
- INHALATION:**
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, AND ASPHYXIATION.
- INGESTION:**
CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. IF SWALLOWED, CAN BE ABSORBED IN TOXIC AMOUNTS.

OTHER HEALTH EFFECTS:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH VARYING LEVELS OF NERVOUS SYSTEM DAMAGE AND POSSIBLE BRAIN DAMAGE.

=====SECTION VII - FIRST AID MEASURES =====

- EYES:**
FLUSH WITH LARGE QUANTITIES OF WATER AND GET MEDICAL ATTENTION.
- SKIN:**
WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.
- INHALATION:**
REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY.
- INGESTION:**
OBTAIN MEDICAL ASSISTANCE TO DETERMINE BEST TREATMENT. DO NOT INDUCE VOMITING.

NTP CARCINOGEN: No

IARC CARCINOGEN: No

OSHA REGULATED: Yes

===== SECTION VIII - ACCIDENTAL RELEASE MEASURES =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====

WASTE DISPOSAL METHOD:

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====

RESPIRATORY PROTECTION:

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

DO NOT TAKE INTERNALLY. DO NOT BREATHE VAPORS OR SPRAY MIST. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/OSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. ALL EQUIPMENT SHOULD BE GROUNDED AND BONDED TO REDUCE STATIC ELECTRICITY HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.)

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS ACCURACY OR COMPLETENESS.

THE CONDITIONS OF HANDLING, STORAGE, USE AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE
CONDITIONS TO AVOID:
N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

EFFECTS OF OVEREXPOSURE:

ACUTE AND CHRONIC HEALTH EFFECTS:

EYES:

CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.

SKIN:

PROLONGED OR REPEATED EXPOSURE CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.

INHALATION:

EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, AND ASPHYXIATION.

INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. IF SWALLOWED, CAN BE ABSORBED IN TOXIC AMOUNTS.

OTHER HEALTH EFFECTS:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH VARYING LEVELS OF NERVOUS SYSTEM DAMAGE AND POSSIBLE BRAIN DAMAGE.

=====SECTION VII - FIRST AID MEASURES =====

EYES:

FLUSH WITH LARGE QUANTITIES OF WATER AND GET MEDICAL ATTENTION.

SKIN:

WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.

INHALATION:

REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY.

INGESTION:

OBTAIN MEDICAL ASSISTANCE TO DETERMINE BEST TREATMENT. DO NOT INDUCE VOMITING.

NTP CARCINOGEN: No

IARC CARCINOGEN: No

OSHA REGULATED: Yes

===== SECTION VIII - ACCIDENTAL RELEASE MEASURES =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====**WASTE DISPOSAL METHOD:**

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====**RESPIRATORY PROTECTION:**

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

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=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.)

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PRODUCT NAME: TIOTECH YELLOW FLOCK ADHESIVE
PRODUCT CODE: 922-304HMIS CODES: H F R P
1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
ST. LOUIS, MO 63105EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	41.01
PIGMENT YELLOW 74	PROPRIETARY		3.35

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): 1.04
WEIGHT PER GALLON: 8.66 lb/gal EVAPORATION RATE: SLOWER THAN ETHER
VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.84369 lb/gal
SOLUBILITY IN WATER: N/A
APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
(LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====

WASTE DISPOSAL METHOD:

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====

RESPIRATORY PROTECTION:

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====

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HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

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PRODUCT NAME: TIOTECH RED FLOCK ADHESIVE
PRODUCT CODE: 922-501HMIS CODES: H F R P
1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
ST. LOUIS, MO 63105EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	44.79
* PIGMENT RED 48:4	5280-66-0		2

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): .98
WEIGHT PER GALLON: 8.14 lb/gal EVAPORATION RATE: SLOWER THAN ETHER
VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.94616 lb/gal
SOLUBILITY IN WATER: N/A
APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
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BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

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SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

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VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

DO NOT TAKE INTERNALLY. DO NOT BREATHE VAPORS OR SPRAY MIST. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/OSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. ALL EQUIPMENT SHOULD BE GROUNDED AND BONDED TO REDUCE STATIC ELECTRICITY

HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.)

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THE CONDITIONS OF HANDLING, STORAGE, USE AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

PRODUCT NAME: TIOTECH WINE FLOCK ADHESIVE
PRODUCT CODE: 922-503HMIS CODES: H F R P
1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
ST. LOUIS, MO 63105EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	44.48
* PIGMENT RED 48:4	5280-66-0		3

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): .98
WEIGHT PER GALLON: 8.18 lb/gl EVAPORATION RATE: SLOWER THAN ETHER
VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.9393 lb/gl
SOLUBILITY IN WATER: N/A
APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
(LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====

WASTE DISPOSAL METHOD:

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====

RESPIRATORY PROTECTION:

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

DO NOT TAKE INTERNALLY. DO NOT BREATHE VAPORS OR SPRAY MIST. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/OSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. ALL EQUIPMENT SHOULD BE GROUNDED AND BONDED TO REDUCE STATIC ELECTRICITY

HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.)

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PRODUCT NAME: TIOTECH GREEN FLOCK ADHESIVE
 PRODUCT CODE: 922-601

HMIS CODES: H F R P
 1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
 ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
 ST. LOUIS, MO 63105

EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
 INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
 NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	43.97
PIGMENT YELLOW 74	PROPRIETARY		1.43
CARBON BLACK	001333-86-4		.17

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): .99
 WEIGHT PER GALLON: 8.27 lb/gl EVAPORATION RATE: SLOWER THAN ETHER
 VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.9355 lb/gl
 SOLUBILITY IN WATER: N/A
 APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
 (LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
 BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
 INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
 PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE
CONDITIONS TO AVOID:
N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

EFFECTS OF OVEREXPOSURE:

ACUTE AND CHRONIC HEALTH EFFECTS:

EYES:
CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
SKIN:
PROLONGED OR REPEATED EXPOSURE CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.

INHALATION:
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, AND ASPHYXIATION.

INGESTION:
CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. IF SWALLOWED, CAN BE ABSORBED IN TOXIC AMOUNTS.

OTHER HEALTH EFFECTS:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH VARYING LEVELS OF NERVOUS SYSTEM DAMAGE AND POSSIBLE BRAIN DAMAGE.

=====SECTION VII - FIRST AID MEASURES =====

EYES:
FLUSH WITH LARGE QUANTITIES OF WATER AND GET MEDICAL ATTENTION.
SKIN:
WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.
INHALATION:
REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY.
INGESTION:
OBTAIN MEDICAL ASSISTANCE TO DETERMINE BEST TREATMENT. DO NOT INDUCE VOMITING.

NTP CARCINOGEN: No

IARC CARCINOGEN: No No

OSHA REGULATED: Yes

===== SECTION VIII - ACCIDENTAL RELEASE MEASURES =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== SECTION IX - DISPOSAL CONSIDERATIONS =====

WASTE DISPOSAL METHOD:

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION =====

RESPIRATORY PROTECTION:

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== SECTION XI - HANDLING AND STORAGE =====

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

DO NOT TAKE INTERNALLY. DO NOT BREATHE VAPORS OR SPRAY MIST. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/OSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

ALL EQUIPMENT SHOULD BE GROUNDED AND BONDED TO REDUCE STATIC ELECTRICITY HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.)

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PRODUCT NAME: TIOTECH BROWN FLOCK ADHESIVE
 PRODUCT CODE: 922-701

HMIS CODES: H F R P
 1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
 ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
 ST. LOUIS, MO 63105

EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/17/2013
 INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
 NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	42.52
CARBON BLACK	001333-86-4		.99

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): 1.03
 WEIGHT PER GALLON: 8.57 lb/gal EVAPORATION RATE: SLOWER THAN ETHER
 VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.94046 lb/gal
 SOLUBILITY IN WATER: N/A
 APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
 (LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
 BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
 INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
 PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

===== **SECTION V - REACTIVITY DATA** =====

STABILITY: STABLE

CONDITIONS TO AVOID:

N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== **SECTION VI - HEALTH HAZARD DATA** =====

EFFECTS OF OVEREXPOSURE:

ACUTE AND CHRONIC HEALTH EFFECTS:

EYES:

CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.

SKIN:

PROLONGED OR REPEATED EXPOSURE CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.

INHALATION:

EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, AND ASPHYXIATION.

INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. IF SWALLOWED, CAN BE ABSORBED IN TOXIC AMOUNTS.

OTHER HEALTH EFFECTS:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH VARYING LEVELS OF NERVOUS SYSTEM DAMAGE AND POSSIBLE BRAIN DAMAGE.

===== **SECTION VII - FIRST AID MEASURES** =====

EYES:

FLUSH WITH LARGE QUANTITIES OF WATER AND GET MEDICAL ATTENTION.

SKIN:

WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.

INHALATION:

REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY.

INGESTION:

OBTAIN MEDICAL ASSISTANCE TO DETERMINE BEST TREATMENT. DO NOT INDUCE VOMITING.

NTP CARCINOGEN: No

IARC CARCINOGEN: No No

OSHA REGULATED: Yes

===== **SECTION VIII - ACCIDENTAL RELEASE MEASURES** =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====

WASTE DISPOSAL METHOD:

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====

RESPIRATORY PROTECTION:

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

DO NOT TAKE INTERNALLY. DO NOT BREATHE VAPORS OR SPRAY MIST. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/OSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. ALL EQUIPMENT SHOULD BE GROUNDED AND BONDED TO REDUCE STATIC ELECTRICITY

HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION =====

DOT SHIPPING NAME:
PAINT

DOT LABEL:
FLAMMABLE LIQUID

DOT HAZARD CLASS:
3

UN/NA NUMBER:
UN1263

PACKING GROUP:
PGII

CERCLA:
THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:
N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

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THE CONDITIONS OF HANDLING, STORAGE, USE AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

PRODUCT NAME: TIOTECH TAN FLOCK ADHESIVE
 PRODUCT CODE: 922-702

HMIS CODES: H F R P
 1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
 ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
 ST. LOUIS, MO 63105

EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
 INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
 NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	42.62

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): 1.03
 WEIGHT PER GALLON: 8.56 lb/gl EVAPORATION RATE: SLOWER THAN ETHER
 VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.95667 lb/gl
 SOLUBILITY IN WATER: N/A
 APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
 (LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
 BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:
 WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
 INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
 PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE
CONDITIONS TO AVOID:
N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

EFFECTS OF OVEREXPOSURE:

ACUTE AND CHRONIC HEALTH EFFECTS:

EYES:

CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.

SKIN:

PROLONGED OR REPEATED EXPOSURE CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.

INHALATION:

EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, AND ASPHYXIATION.

INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. IF SWALLOWED, CAN BE ABSORBED IN TOXIC AMOUNTS.

OTHER HEALTH EFFECTS:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH VARYING LEVELS OF NERVOUS SYSTEM DAMAGE AND POSSIBLE BRAIN DAMAGE.

=====SECTION VII - FIRST AID MEASURES =====

EYES:

FLUSH WITH LARGE QUANTITIES OF WATER AND GET MEDICAL ATTENTION.

SKIN:

WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.

INHALATION:

REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY.

INGESTION:

OBTAIN MEDICAL ASSISTANCE TO DETERMINE BEST TREATMENT. DO NOT INDUCE VOMITING.

NTP CARCINOGEN: No

IARC CARCINOGEN: No

OSHA REGULATED: Yes

===== SECTION VIII - ACCIDENTAL RELEASE MEASURES =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====**WASTE DISPOSAL METHOD:**

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====**RESPIRATORY PROTECTION:**

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

VENTILATION:

ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

DO NOT TAKE INTERNALLY. DO NOT BREATHE VAPORS OR SPRAY MIST. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/OSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. ALL EQUIPMENT SHOULD BE GROUNDED AND BONDED TO REDUCE STATIC ELECTRICITY HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WE RECOMMEND THAT CONTAINERS BE EITHER PROFESSIONALLY RECONDITIONED FOR REUSE BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY CERTIFIED FIRMS TO HELP REDUCE THE POSSIBILITY OF AN ACCIDENT. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.)

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PRODUCT NAME: TIOTECH BLUE FLOCK ADHESIVE
 PRODUCT CODE: 922-801

HMIS CODES: H F R P
 1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
 ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
 ST. LOUIS, MO 63105

EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
 INFORMATION PHONE : 314-725-6800 REVISION DATE : 04/18/13
 NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	43.78

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): 1.
 WEIGHT PER GALLON: 8.3 lb/gl EVAPORATION RATE: SLOWER THAN ETHER
 VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.9626 lb/gl
 SOLUBILITY IN WATER: N/A
 APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
 (LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
 BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
 INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
 PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE
CONDITIONS TO AVOID:
N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

EFFECTS OF OVEREXPOSURE:

ACUTE AND CHRONIC HEALTH EFFECTS:

- EYES:**
CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
- SKIN:**
PROLONGED OR REPEATED EXPOSURE CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.
- INHALATION:**
EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, AND ASPHYXIATION.
- INGESTION:**
CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. IF SWALLOWED, CAN BE ABSORBED IN TOXIC AMOUNTS.

OTHER HEALTH EFFECTS:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH VARYING LEVELS OF NERVOUS SYSTEM DAMAGE AND POSSIBLE BRAIN DAMAGE.

=====SECTION VII - FIRST AID MEASURES =====

- EYES:**
FLUSH WITH LARGE QUANTITIES OF WATER AND GET MEDICAL ATTENTION.
- SKIN:**
WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.
- INHALATION:**
REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY.
- INGESTION:**
OBTAIN MEDICAL ASSISTANCE TO DETERMINE BEST TREATMENT. DO NOT INDUCE VOMITING.

NTP CARCINOGEN: No

IARC CARCINOGEN: No

OSHA REGULATED: Yes

===== SECTION VIII - ACCIDENTAL RELEASE MEASURES =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====**WASTE DISPOSAL METHOD:**

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====**RESPIRATORY PROTECTION:**

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EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

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WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

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=====SECTION XII- TRANSPORTATION INFORMATION=====

DOT SHIPPING NAME:

PAINT

DOT LABEL:

FLAMMABLE LIQUID

DOT HAZARD CLASS:

3

UN/NA NUMBER:

UN1263

PACKING GROUP:

PGII

CERCLA:

THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100# WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE MIXTURE.

TSCA INVENTORY STATUS:

N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE HARMFUL OR FATAL. INTENTIONAL MISUSE BE DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

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PRODUCT NAME: TIOTECH BLACK FLOCK ADHESIVE
 PRODUCT CODE: 922-901

HMIS CODES: H F R P
 1 3 1

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: ELPACO COATINGS CORP.
 ADDRESS : 1378 KINGSLAND AVE, PO BOX 50256
 ST. LOUIS, MO 63105

EMERGENCY PHONE : 800-325-8153 DATE PRINTED : 4/18/2013
 INFORMATION PHONE : 314-725-6800 REVISION DATE : 03/15/11
 NAME OF PREPARER : N/A

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
* PETROLEUM HYDROCARBON SOLVENT	8052-41-3	.22 68F	45.61
CARBON BLACK	1333-86-4		2.48

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

N/A

**SARA ITEMS BELOW 1% NOT REPORTED

===== SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 200 SPECIFIC GRAVITY (H2O=1): .97
 WEIGHT PER GALLON: 8.08 lb/gal EVAPORATION RATE: SLOWER THAN ETHER
 VAPOR DENSITY: HEAVIER THAN AIR COATING V.O.C.: 3.99196 lb/gal
 SOLUBILITY IN WATER: N/A
 APPEARANCE AND ODOR: AROMATIC ODOR

===== SECTION IV - FIREFIGHTING MEASURES =====

FLASH POINT: 23 - 80 METHOD USED: T
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: .5 UPPER: 6.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL (SMALL FIRES) ALCOHOL-TYPE FOAM
 (LARGE FIRES) CLASS B FIRE EXTINGUISHER. WATER IS AN UNSUITABLE EXTINGUISHER ON
 BURNING LIQUIDS.

SPECIAL FIREFIGHTING PROCEDURES:

WATER SPRAY MAY BE USED FOR COOLING CONTAINERS. FULL PROTECTIVE EQUIPMENT,
 INCLUDING SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED AND NEEDED TO
 PROTECT FIREFIGHTERS FROM ANY HAZARDOUS COMBUSTION PRODUCTS.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. CONTAIN AND REMOVE WITH ABSORBENT MATERIAL AND NON-SPARKING TOOLS.

===== **SECTION IX - DISPOSAL CONSIDERATIONS** =====

WASTE DISPOSAL METHOD:

SANITARY LANDFILL OR INCINERATION ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

===== **SECTION X - EXPOSURE CONTROLS/PERSONAL PROTECTION** =====

RESPIRATORY PROTECTION:

APPROVED MECHANICAL FILTER RESPIRATOR TO REMOVE SOLID AIRBORNE PARTICLES OF OVERSPRAY DURING SPRAY APPLICATION IN OPEN AREAS WITH UNRESTRICTED VENTILATION. APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICULATES AND VAPOR IN RESTRICTED VENTILATION AREAS. APPROVED AIR LINE TYPE RESPIRATORS OR HOODS IN CONFINED AREAS.

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ADEQUATE VENTILATION TO MAINTAIN VAPOR LEVELS OF INGREDIENTS LISTED IN SECTION II BELOW INDICATED TLV'S IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1910 -. REMOVE DECOMPOSITION PRODUCTS FORMED DURING WELDING OR FLAME CUTTING OF SURFACES COATED WITH THIS PRODUCT.

PROTECTIVE GLOVES:

SOLVENT-RESISTANT NEOPRENE OR BUNA A RUBBER WHEN NEEDED.

EYE PROTECTION:

GOGGLES OR FULL FACE MASK IF NEEDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

SOLVENT RESISTANT APRON OR BOOTS IF DESIRED. EYE BATH AND SAFETY SHOWER.

WORK/HYGIENIC PRACTICES:

SEE YOUR SUPERVISOR.

===== **SECTION XI - HANDING AND STORAGE** =====

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

DO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED AND PROTECTED FOR STORAGE OF NFPA CLASS B FLAMMABLE OR COMBUSTIBLE LIQUIDS.

OTHER PRECAUTIONS:

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HAZARD. USE NON-SPARKING TOOLS.

=====SECTION XII- TRANSPORTATION INFORMATION =====

DOT SHIPPING NAME:
PAINT

DOT LABEL:
FLAMMABLE LIQUID

DOT HAZARD CLASS:
3

UN/NA NUMBER:
UN1263

PACKING GROUP:
PGII

CERCLA:
THE CERCLA REPORTABLE QUANTITY (RQ) FOR THIS MIXTURE IS 100#
WHICH IS BASED ON THE RQ OF EACH INGREDIENT AND ITS PERCENT IN THE
MIXTURE.

TSCA INVENTORY STATUS:
N/A

===== SECTION XIII - DISCLAIMER =====

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL
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INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING MAY BE
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REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS
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REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY
FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED
WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

DonJer Suede-Text Nylon Fiber

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: NYLON POLYAMIDE FIBER

ADDRESS: P.O. BOX 716, ROCKFORD, IL 61105 PHONE NO. 815-964-8619

CHEMICAL NAME AND SYNONYMS: N/A DOT LABEL: N/A

DOT SHIPPING NAME: N/A DOT HAZARD CLASS/I.D. NO.: N/A

CAS REGISTRY NO. SEE BELOW PREVIOUS REV: NOV 1997 REVISION DATE: DEC 2000

U.S SURFACE FREIGHT CLASSIFICATION: FIBER, SYNTHETIC STAPLE

HAZARDOUS COMPONENT INFORMATION

SARA Hazard Notification

Hazard Categories under criteria of SARA Title III rules (40 CFR Part 370): Not Applicable

<u>Material</u>	<u>CAS Number</u>	<u>%</u>
Titanium Dioxide (TiO ₂)	13463-67-2	<5
Nylon 6,6 Polyamide	32131-17-2	91.5-99
Water, Absorbed	7732-18-5	0-4.5

HEALTH HAZARD SUMMARY

PRIMARY ROUTES OF EXPOSURE:

Nylon polyamide fiber

Skin contact

TWA Inhalation

OSHA PEL:
(Nuisance dust)

EXPOSURE LIMITS:

None established
10 mg/m₃ (Respirable)TWA

Titanium dioxide (wt. % <5)

Skin contact

TWA Inhalation

OSHA PEL:
ACGIH TLV (1986-7):

10 mg/m₃
5 mg/m₃

TOXICOLOGICAL PROPERTIES

Oral - Rat LD₅₀:

Dermal - Rabbit LD₅₀:

Eye Irritation - Rabbit:

Skin Irritation - Rabbit:

>10,000 mg/kg, Practically Nontoxic

>5,010 mg/kg, Practically Nontoxic

(FHSA) 12.0 on a scale of 110.0, Sl. Irritating

(FHSA) 0.0 on a scale of 8.0, Nonirritating

A single large exposure (10,000 mg/kg) by ingestion produced only a slight initial weight loss. Two-year tests in rats and one-year tests in dogs at levels of 10% in the diet produced no adverse effects.

On the basis of human patch tests, it has been concluded that this product is not a primary or cumulative skin irritant, or a sensitizing agent.

EMERGENCY AND FIRST AID PROCEDURES

CONTACT: Treat as nuisance dust hazard. Flush eyes with water for 15 minutes. If irritation persists, obtain medical attention.

SKIN CONTACT: Treat as nuisance dust hazard. Flush contaminated skin with soap and water. If irritation persists, obtain medical attention.

INHALATION: Remove to fresh air. Other measures are usually unnecessary. If irritation persists, obtain medical attention.

INGESTION: No special precautions necessary.

PHYSICAL DATA

BOILING POINT:	N.A.	SPECIFIC GRAVITY (H₂O=1):	1.14 @ 20/20°C
VAPOR PRESSURE:	N.A.	MELTING POINT:	≈250°C/482°F
HEAT SHRINKAGE @ 200°C:	10%	DISCOLORATION TEMPERATURE:	300°F/5 hr.

SOLUBILITY: Soluble in conc. formic acid. Not soluble in water, alcohol, xylene, benzene, acetone.

Stable to fungal or bacterial attack.

FIRE AND EXPLOSION DATA

FLASH POINT: 325°C (617°F)

AUTOIGNITION TEMPERATURE: 420°C (788°F)

FLAMMABLE LIMITS (% BY VOLUME): LEL N.A. UEL N.A.

EXTINGUISHING MEDIA: Water spray or any Class A extinguishing agent.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Firefighters and others who may be exposed to products of combustion should wear full protective equipment including self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.

REACTIVITY DATA

STABILITY:

Unstable: _____ Stable: X

CONDITIONS TO AVOID: Avoid packing or storage at temperatures above 80°C (176°F)

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous gases/vapors produced are carbon monoxide, ammonia, traces of hydrogen cyanide and oxides of nitrogen.

HAZARDOUS POLYMERIZATION:

Will occur: _____ Will not occur: X

OCCUPATIONAL CONTROL PROCEDURES

EYE PROTECTION: None normally required. However, good safety and industrial hygiene practices should be followed.

SKIN PROTECTION: None normally required. However, good safety and industrial hygiene practices should be followed.

RESPIRATORY PROTECTION: Avoid breathing dust. Use NIOSH/MSHA approved equipment when airborne exposure is excessive. Respiratory protection must comply with 29 CFR 1910.134.

OTHER PROTECTIVE EQUIPMENT: Eye wash station and safety shower should be near work area.

VENTILATION: Local and general exhaust ventilation should be used as needed to prevent irritation and avoid dust accumulation.

SPILL, LEAK AND DISPOSAL INFORMATION

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

Reclaim for processing if possible.

WASTE DISPOSAL METHOD:

Material is not a "hazardous waste" as defined in 40 CFR 261; therefore, disposal is permitted by landfill or by incineration. Comply with local, state and federal regulations.

SPECIAL STORAGE/HANDLING REQUIREMENTS

Avoid extreme conditions of heat and humidity. Avoid dust accumulation. Store boxes and bales in accordance with good materials handling practices.

LABEL REQUIREMENTS

No special labeling requirements.

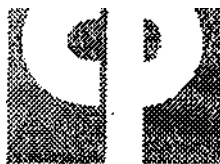
ADDITIONAL COMMENTS

This fiber is not biodegradable.

If you have any questions regarding the information contained in this MSDS, please call 815-964-8619.

This information relates to the particular product described and is the best available data possessed by Cellusuede Products on the subject. This data may not be relevant to any end use product that combines other substances with this product. It is the User's responsibility to determine the accuracy and completeness of this information in the context of its own business purposes.

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MATERIAL SAFETY DATA SHEET

PRODUCT NAME: RAYON.FIBERS

ADDRESS: P.O. BOX 716. ROCKFORD. IL 61105 PHONE NO. 815-964-8619

CHEMICAL NAME AND SYNONYMS: REGENERATED CELLULOSE DOT LABEL: N/A

DOT SHIPPING NAME: N/A DOT HAZARD CLASS/LD. NO.: N/A

CAS REGISTRY NO.: 61788-77-0 PREVIOUS REV: NOV 2010 REV DATE: OCT 2011

U.S. SURFACE FREIGHT CLASSIFICATION: FIBER. SYNTHETIC STAPLE

HAZARDOUS COMPONENT INFORMATION

<u>Material</u>	<u>CAS No.</u>	<u>%</u>
Viscose Rayon	68442-85-3	87-90
Titanium Dioxide (if present)	13463-67-7	0-1
Carbon Black (if present)	1333-86-4	2-3
Water, absorbed	7732-18-5	9-10

This material is not hazardous as defined by the Occupational Safety and Health. Administration's Hazard Communication Standard (29 CFR 1910.1200) dated August 24,1992.

This fiber may have been produced with carbon black and/or titanium dioxide. These compounds, as present in this material, are not water soluble and are encapsulated in the polymer. They are not extracted or released in normal processing and handling. Therefore these compounds are not expected to present a hazard in normal handling, processing, use and disposal.

HEALTH HAZARD SUMMARY

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

EYE: Dust may cause mechanical irritation.

SKIN: None expected or likely under normal conditions of use.

INHALATION: Dust may produce mechanical irritation of the mucous membranes of the nose, throat and upper respiratory tract.

INGESTION: Essentially nontoxic and inert.

500 N. Madison Street ♦ P.O. Box 716 ♦ Rockford, IL 61105 Phone (815) 964-8619

••Fax (815) 964-7949 • Email: info@cellusuede.com ♦ www.cellusuede.com

EMERGENCY AND FIRST AID PROCEDURES:

In the unlikely event that a skin irritation develops, the worker should stop handling the suspect product immediately. The worker should then have (he skin irritation examined by a physician.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:

None known

HMISCODE: (Health:0) (Flammability:0) (Reactivity:0)

NFPACODE: (Health:0) (Flammability:0) (Reactivity:0)

CANCER INFORMATION:

The ingredients of this product are not listed as carcinogens by the National Toxicology Program (NTP), nor the International Agency for Research on Cancer (IARC). The ingredients of this product are not regulated as carcinogens by the Occupational Safety and Health Administration (OSHA).

REPORTED HUMAN EFFECTS:

Based on various safety assessments (human patch tests, health data supplied by raw material manufacturers) that have been conducted, the fibers that are covered by this MSDS do not indicate a potential for dermal irritation or allergy, and are expected to be safe products for skin contact

REPORTED ANIMAL EFFECTS:

Subchronic animal feeding studies have demonstrated no adverse effects with diets containing <5% polymer.

PHYSICAL DATA

BOILING POINT:	N/A	SOLUBILITY IN WATER:	NEGLIGIBLE
VAPOR PRESSURE AT 20°C:	N/A	SPECIFIC GRAVITY:	1.48-1.54
VAPOR DENSITY:	N/A	pH:	N/A
% VOLATILE:	N/A	MELTING POINT:	Chars
EVAPORATION RATE:	N/A		

FIRE AND EXPLOSION DATA

FLASHPOINT:	None, but will burn.
FLAMMABLE LIMITS:	N/A
EXTINGUISHING MEDIA:	Water spray, dry chemical, foam, carbon dioxide, or halon

SPECIAL FIRE FIGHTING PROCEDURES: Standard procedures for class A fires. Use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Fiber/air mixtures may be explosive within certain concentration limits and sufficiently high ignition energies. Minimize airborne fiber concentrations with aggressive housekeeping procedures and effective ventilation, especially in areas of potential stray fiber movement.

FIRE AND EXPLOSION PREVENTIVE MEASURES:

- Minimize the escape of fiber from process equipment or ventilation systems.
- Use dust collection systems and filters.
- Provide access to hidden areas to permit regular inspection and cleaning.
- Clean fiber residues in all areas at regular intervals.
- Use cleaning methods that minimize airborne fiber, especially if potential ignition sources are present.
- Use appropriate electrical equipment and wiring methods.
- Control static electricity, including proper grounding of equipment.
- Control smoking, open flames, and sparks.
- Separate heated surfaces and systems from fiber residue.

REACTIVITY DATA

- STABILITY: Unstable: _____ Stable: ____ X.
- HAZARDOUS DECOMPOSITION: Will occur: _____ Will not occur:
- INCOMPATIBILITY WITH: Avoid contact with strong oxidants, perchloric acids, nitrates.
- HAZARDOUS POLYMERIZATION: Will not occur.

OCCUPATIONAL CONTROL PROCEDURES

- EYE PROTECTION: Safety glasses
- SKIN PROTECTION: None normally required
- RESPIRATORY PROTECTION: Avoid breathing fiber and dust. Use NIOSH/OSHA approved equipment when airborne exposure is excessive.
- OTHER PROTECTIVE EQUIPMENT: Eyewash stations and safety showers should be near work areas.
- VENTILATION: Local and general exhaust ventilation should be near work area.

SPECIAL STORAGE/HANDLING PROCEDURES

Store in a sprinklered warehouse. Keep temperatures below 60°C (140°F) for quality control. This product may react with strong oxidants, nitrates and perchloric acid and should not be stored near such materials.

SPILL, LEAK AND DISPOSAL INFORMATION

SPILL PROCEDURES:

If material is not contaminated, place into clean containers for use. If contaminated, place into containers for disposal.

WASTE DISPOSAL METHOD:

Landfilling in a licensed facility in accordance with local, state and federal industrial waste regulations is the recommended disposal method. Incineration in a licensed facility is a suitable alternative. Mixing the waste with wood or paper waste aids in assuring complete combustion.

REGULATORY INFORMATION

TRANSPORTATION:

DOT	Not Regulated
DMDG	Not Regulated
IATA	Not Regulated

TSCA Status:

All components of this product are listed on the TSCA Inventory.

SARA Title HI Sections 311,312,313:

Reactive Hazard:	No
Pressure Hazard:	No
Fire Hazard:	No
Acute/Immediate:	No
Chronic/Delayed:	No

This product does not contain any toxic chemicals listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.

CERCLA Reportable Quantity: Not
Applicable

This product is not a Hazardous Chemical as regulated under OSHA Hazard Communication Standard 29 CFR 1910.1200.

This product is not regulated in accordance with EC-directives or respective national laws.

Canadian WHM3S Classification:
Not Regulated

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