

SAFETY DATA SHEET

Nukote Polyprime II, A-Side May 07, 2015

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: Nukote Polyprime II, A-Side
Product Name: Nukote Polyprime II, A-Side

Revision Date: May 07, 2015 Date Printed: May 11, 2015

Version: 1.0 Supersedes Date: N.A.

Manufacturer's Name: Nukote Coating Systems

Address: 2100 Reliance Pkwy, Bedford, TX, US, 76021

Emergency Phone: Chemtrec:800-4249300 (account:CCN16118) OR International:703-5273887 (account:CCN16118)

Information Phone : 682-5036799

Fax : (682) 503-6512

Product/Recommended Uses: For Further Information, Refer to the Product Technical Data Sheet.

SECTION 2) HAZARDS IDENTIFICATION

Classification:

Specific Target Organ Toxicity -Single Exposure (Respiratory Tract Irritation) - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1

Aspiration Hazard - Category 1

Skin Irritation - Category 2

Eye Irritation - Category 2A

Respiratory Sensitizer (Solid/Liquid) - Category 1

Skin Sensitizer - Category 1

Carcinogenicity - Category 2

Flammable Liquids Category 4

Acute toxicity Inhalation Vapor Category 4

Pictograms:





Signal Word:

Danger

Hazardous Statements - Physical:

H227 - Combustible Liquid

Hazardous Statements - Health:

H332 - Harmful if inhaled

H304 - May be fatal if swallowed and enters airways

H351 - Suspected of causing cancer.

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H372 - Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary Statements - General:

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.

Precautionary Statements - Prevention:

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271 Use only outdoors or in a well-ventilated area.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P264 Wash thoroughly after handling.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P284 [In case of inadequate ventilation] wear respiratory protection.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P270 Do not eat, drink or smoke when using this product.
- P233 Keep container tightly closed.

Precautionary Statements - Response:

- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 Do NOT induce vomiting.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical advice/attention.
- P370 + P378 In case of fire: Check Section-5 (Fire Fighting Measures)
- P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P321 Specific treatment (see section 4 on this SDS).
- P332 + P313 If skin irritation occurs: Get medical advice/attention.
- P362 + P364 Take off contaminated clothing. And wash it before reuse.
- P333 + P313 If skin irritation or a rash occurs: Get medical advice/attention.
- P314 Get Medical advice/attention if you feel unwell.

Precautionary Statements - Storage:

- P405 Store locked up.
- P403 Store in a well-ventilated place.
- P403 + P405 Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal:

P501 - Dispose of contents/ container to an approved waste disposal plant.

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% by Weight
0009016-87-9	POLYMETHYLENE POLYPHENYL ISOCYANATE	25% - 46%
0000101-68-8	4,4'-METHYLENEDIPHENYL DIISOCYANATE	18% - 34%
0064742-88-7	MEDIUM MINERAL SPIRITS	16% - 30%

0026447-40-5 MDI (MONOMER) 6% - 10%

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell or concerned.

Eliminate all ignition sources if safe to do so.

Skin Contact:

IF exposed or concerned: Get medical advice/attention.

Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard.

Eye Contact:

Avoid direct contact. Wear chemical protective gloves, if necessary.

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

IF exposed or concerned: Get medical advice/attention.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Dry chemical, foam, carbon dioxide is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media:

Water may be ineffective but can be used to cool containers exposed to heat or flame.

Specific Hazards in Case of Fire:

Keep container tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard.

Fire-fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions:

Wear NIOSH approved self-contained breathing apparatus in positive pressure mode with full-face piece. Boots, gloves (neoprene), googles, and full protective clothing are also required.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up:

Ventilate and remove with inert absorbent.

Waste may be hazardous as defined under the resource conservation and recovery act (RCRA) 40 CRF 261. Waste from these products must be tested for ignitability. Waste from ultra-bond 20 wash primer must be tested for chromium and zinc estractability.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - extinguish all flames, pilot lights, and heaters - turn off stoves, electric tools and appliances, and any other sources of ignition.

These products must be mixed with other components before use. Before opening the packages, read and follow warning labels on all components.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

Ground and bond containers and receiving equipment. Avoid static electricity by grounding.

DOL Storage Category: 1B

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eve Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit.

Use of barrier cream on exposed skin is recommended.

Respiratory Protection:

If exposures cannot be controlled below the PEL limit, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA.

When sanding, wirebrushing, abrading, burning or welding the dried film, wear a particulate respirator approved by NIOSH/MSHA for protection against non-volatile materials.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA- Tables- Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
4,4'- METHYLENEDIPHEN YL DIISOCYANATE	0.02 ceiling	0.2 ceiling			1			0.005	0.050			

Chemical Name	ACGIH	ACGIH	ACGIH	ACGIH
	TWA	TWA	STEL	STEL
	(ppm)	(mg/m3)	(ppm)	(mg/m3)
4,4'- METHYLENEDIPHEN YL DIISOCYANATE	0.005	0.051		

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density 9.42 lb/gal
Specific Gravity 1.13
VOC Regulatory 0.00 lb/gal

VOC Part A & B Combined 0.5 lb/gal

Appearance Yellowish Thin Liquid

Odor Threshold N.A.

Odor Description Mild Chemical

pH N.A.

Water Solubility Reacts with Water

Flammability N/A
Flash Point Symbol N.A.
Flash Point 62 °C
Viscosity N.A.
Lower Explosion Level N.A.
Upper Explosion Level N.A.
Vapor Pressure N.A.

Vapor Density Heavier than air

Freezing Point N.A.

Melting Point N.A.

Low Boiling Point 204 °C

High Boiling Point N.A.

Auto Ignition Temp N.A.

Decomposition Pt N.A.

Evaporation Rate Slower than ether

Coefficient Water/Oil N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability:

Material is stable at standard temperature and pressure.

Conditions to Avoid:

None known.

Hazardous Reactions/Polymerization:

Incompatible Materials:

This product will react with any material containing active hydrogens, such as water, alcohol, ammonia, amines, alkalis and acids, the reaction with water is slow under 50°C, but is accelerated at higher temperature and in the presence of alkalis, tertiary amines, and metal compounds.

Hazardous Decomposition Products:

Carbon dioxide, carbon monoxide, oxides of metals in section III, oxides of phosphorus and phosphoric acid fumes.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation:

Redness and itching or burning sensation may indicate skin exposure.

Causes skin irritation

Serious Eye Damage/Irritation:

Redness and itching or burning sensation may indicate eye exposure.

Causes serious eye irritation

Respiratory/Skin Sensitization:

May cause nervous system depression.

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Carcinogenicity:

Suspected of causing cancer.

Germ Cell Mutagenicity:

No data available

Reproductive Toxicity:

No data available

Specific Target Organ Toxicity - Single Exposure:

May cause respiratory irritation

Specific Target Organ Toxicity - Repeated Exposure:

Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Aspiration Hazard:

May be fatal if swallowed and enters airways

Acute Toxicity:

Extreme overexposure may result in unconsciousness and possibly death.

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

0000101-68-8 4,4'-METHYLENEDIPHENYL DIISOCYANATE

LC50 (rat): 369-490 mg/m3 (aerosol) (4-hour exposure) (1)

LC50 (rat): 178 mg/m3 (17.4 ppm) (duration of exposure not reported) (2)

LD50 (oral, rat): greater than 10,000 mg/kg (1,2)

LD50 (dermal, rabbit): greater than 10,000 mg/kg (1)

LD50 (oral, mouse): 2,200 mg/kg (3)

0009016-87-9 POLYMETHYLENE POLYPHENYL ISOCYANATE

LC50 (rat): 490 mg/m3 (aerosol) 4-hour exposure (22)

LD50 (oral, rat): greater than 10000 mg/kg (PMPPI) (2)

LD50 (dermal, rabbit): greater than 5 mL/kg (6200 mg/kg) (PMPPI) (2)

Potential Health Effects - Miscellaneous

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. This substance may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, lungs, reproductive system, skin. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

No data available.

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Not regulated.

IMDG Information:

Not regulated.

IATA Information:

Not regulated.

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000101-68-8	4,4'- METHYLENEDIPHENYL DIISOCYANATE	18% - 34%	CERCLA,HAPS,SARA312,SARA313,VHAPS,VOC,TSCA
0009016-87-9	POLYMETHYLENE POLYPHENYL ISOCYANATE	25% - 46%	SARA312,SARA313,VOC,TSCA
0026447-40-5	MDI (MONOMER)	6% - 10%	SARA312,TSCA
0064742-88-7	MEDIUM MINERAL SPIRITS	16% - 30%	SARA312,VOC,TSCA

SECTION 16) OTHER INFORMATION

OTHER INFORMATION:

Note: As per GHS, category 1 is the greatest level of hazard within each class.

GLOSSARY:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA

DISCLAIMER

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- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.



SAFETY DATA SHEET

Nukote Polyprime II, B-Side May 07, 2015

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Product/Recommended Uses: For Further Information, Refer to the Product Technical Data Sheet.

SECTION 2) HAZARDS IDENTIFICATION

Classification:

Specific Target Organ Toxicity - Repeated Exposure - Category 1

Aspiration Hazard - Category 1

Skin Irritation - Category 3

Eye Irritation - Category 2A

Flammable Liquids Category 4

Acute toxicity Oral Category 4

Pictograms:





Signal Word:

Danger

Hazardous Statements - Physical:

H227 - Combustible Liquid

Hazardous Statements - Health:

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H319 - Causes serious eye irritation

H316 - Causes mild skin irritation

H372 - Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention:

P264 - Wash thoroughly after handling.

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

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary Statements - Response:

- P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 Do NOT induce vomiting.
- 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.
- P370 + P378 In case of fire: Check Section-5 (Fire Fighting Measures)
- P332 + P313 If skin irritation occurs: Get medical advice/attention.
- P314 Get Medical advice/attention if you feel unwell.

Precautionary Statements - Storage:

- P405 Store locked up.
- P403 Store in a well-ventilated place.

Precautionary Statements - Disposal:

P501 - Dispose of contents/ container to an approved waste disposal plant.

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% by Weight
0025322-69-4	POLYOXYPROPYLENE GLYCOL	26% - 47%
0064742-88-7	MEDIUM MINERAL SPIRITS	26% - 47%

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell or concerned.

Eliminate all ignition sources if safe to do so.

Skin Contact:

IF exposed or concerned: Get medical advice/attention.

Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard.

Eye Contact:

Avoid direct contact. Wear chemical protective gloves, if necessary.

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

IF exposed or concerned: Get medical advice/attention.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Dry chemical, foam, carbon dioxide is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media:

Water may be ineffective but can be used to cool containers exposed to heat or flame.

Specific Hazards in Case of Fire:

Keep container tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard.

Fire-fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions:

Wear NIOSH approved self-contained breathing apparatus in positive pressure mode with full-face piece. Boots, gloves (neoprene), googles, and full protective clothing are also required.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up:

Ventilate and remove with inert absorbent.

Waste may be hazardous as defined under the resource conservation and recovery act (RCRA) 40 CRF 261. Waste from these products must be tested for ignitability. Waste from ultra-bond 20 wash primer must be tested for chromium and zinc estractability.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - extinguish all flames, pilot lights, and heaters - turn off stoves, electric tools and appliances, and any other sources of ignition.

These products must be mixed with other components before use. Before opening the packages, read and follow warning labels on all components.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

Ground and bond containers and receiving equipment. Avoid static electricity by grounding.

DOL Storage Category: 1B

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit.

Use of barrier cream on exposed skin is recommended.

Respiratory Protection:

If exposures cannot be controlled below the PEL limit, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA.

When sanding, wirebrushing, abrading, burning or welding the dried film, wear a particulate respirator approved by NIOSH/MSHA for protection against non-volatile materials.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA- Tables- Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
No applicable chemical	-	-	-	-	-	-	-	-	-	-	-	-

Chemical Name	ACGIH	ACGIH	ACGIH	ACGIH
	TWA	TWA	STEL	STEL
	(ppm)	(mg/m3)	(ppm)	(mg/m3)
No applicable chemical	-	-	-	-

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	8.06 lb/gal
Specific Gravity	0.97
VOC Regulatory	0.00 lb/gal

VOC Part A & B Combined 0.5 lb/gal

Appearance Blue Thin Liquid
Odor Threshold N.A.

Odor Description Aromatic
pH N.A.

Water Solubility N.A. N/A Flammability Flash Point Symbol N.A. Flash Point 62 °C Viscosity N.A. N.A. Lower Explosion Level Upper Explosion Level N.A. Vapor Pressure N.A.

Vapor Density Heavier than air

Freezing Point N.A.

Melting Point N.A.

Low Boiling Point 149 °C

High Boiling Point N.A.

Auto Ignition Temp N.A.

Decomposition Pt N.A.

Evaporation Rate Slower than ether

Coefficient Water/Oil N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability:

Material is stable at standard temperature and pressure.

Conditions to Avoid:

None known.

Hazardous Reactions/Polymerization:

Will not occur.

Incompatible Materials:

This product will react with any material containing active hydrogens, such as water, alcohol, ammonia, amines, alkalis and acids, the reaction with water is slow under 50°C, but is accelerated at higher temperature and in the presence of alkalis, tertiary amines, and metal compounds.

Hazardous Decomposition Products:

Carbon dioxide, carbon monoxide, oxides of metals in section III, oxides of phosphorus and phosphoric acid fumes.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation:

Redness and itching or burning sensation may indicate skin exposure.

Causes mild skin irritation

Serious Eye Damage/Irritation:

Redness and itching or burning sensation may indicate eye exposure.

Causes serious eye irritation

Carcinogenicity:

No data available

Respiratory/Skin Sensitization:

May cause nervous system depression.

Germ Cell Mutagenicity:

No data available

Reproductive Toxicity:

No data available

Specific Target Organ Toxicity - Single Exposure:

No data available

Specific Target Organ Toxicity - Repeated Exposure:

Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Aspiration Hazard:

May be fatal if swallowed and enters airways

Acute Toxicity:

Extreme overexposure may result in unconsciousness and possibly death.

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Potential Health Effects - Miscellaneous

0064742-88-7 MEDIUM MINERAL SPIRITS

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. This substance may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, lungs, reproductive system, skin. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

No data available.

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Not regulated.

IMDG Information:

Not regulated.

IATA Information:

Not regulated.

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0025322-69-4	POLYOXYPROPYLENE GLYCOL	26% - 47%	SARA312,TSCA
0064742-88-7	MEDIUM MINERAL SPIRITS	26% - 47%	SARA312,VOC,TSCA

SECTION 16) OTHER INFORMATION

OTHER INFORMATION:

Note: As per GHS, category 1 is the greatest level of hazard within each class.

GLOSSARY:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA

- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

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