SIPLAST, INC.

Safety Data Sheet
Terapro PUR 2200

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Terapro PUR 2200

1.3 Recommended use of the chemical and restrictions on use

Curative for coating materials or adhesives for industrial or professional use.

1.4 Supplier's details

Name	Siplast, Inc.
Address	14911 Quorum Dr. Suite 600 Dallas TX 75254
Telephone	800-922-8800

1.5 Emergency phone number

800-424-9300 (CHEMTREC)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Sensitization, respiratory, Cat. 1
- Eye damage/irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 3
- Sensitization, skin, Cat. 1
- Carcinogenicity, Cat. 2
- Acute aquatic toxicity, Cat. 3
- Chronic aquatic toxicity, Cat. 3

2.2 GHS label elements, including precautionary statements

Pictograms

Signal word **Danger**

Hazard statement(s)

H351	Suspected of causing cancer
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P101	If medical advice is needed, have a product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use
P273	Avoid release to the environment.
P280	Wear eye protection/face protection/protective gloves/protective clothing.
P264	Wash thoroughly after handling.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P284	[In case of inadequate ventilation] wear respiratory protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P321	Specific treatment (see section 4 on this SDS).
P362+P364	Take off contaminated clothing. And wash it before reuse.
P501	Dispose of contents/ container to an approved waste disposal plant.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P405	Store locked up.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	Wt.%	CAS
POLYURETHANE PREPOLYMER	59-100	0053880-05-0
4-METHYL-1,3-DIOXOLAN-2-ONE	5-10	0000108-32-7
ISOPHORONE DIISOCYANATE	5-9	0004098-71-9

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor. Eliminate all ignition sources if safe to do so.
In case of skin contact	Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. 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. IF exposed or concerned: Get medical advice/attention.
In case of 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.
If swallowed	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

5.1 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.

5.2 Specific hazards arising from the chemical

Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can occur.
Excessive pressure or temperature may cause explosive rupture of containers.
Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

Propylene carbonate: Carbon oxides

5.3 Special protective actions for fire-fighters

Wear NIOSH approved self-contained breathing apparatus in positive pressure mode with full-face piece. Boots, gloves (neoprene), goggles, and full protective clothing are also required.
Care should always be exercised in dust/mist areas.

Further information

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved). ELIMINATE all ignition sources (no smoking, flares, sparks or flames in the immediate area). Do not touch or walk through spilled material. Isolate hazard areas and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the 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.

6.2 Environmental precautions

Stop spilling/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.

6.3 Methods and materials for containment and cleaning up

Cover container, but do not seal, and remove from work area. Prepare a decontamination solution of 2.0% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be substituted for the ammonium hydroxide). Follow the precautions on the supplier's safety data sheets.

Treat the spill area with the decontamination solution, using about 10 parts of the solution for each part of the spill, and allow it to react for at least 15 minutes. Carbon dioxide will evolve, leaving insoluble polyureas. Residues from spill cleanup, even when treated as described may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. Slowly stir the isocyanate waste into the decontamination solution described above. Let stand for 48 hours, allowing the evolved carbon dioxide to vent away, residues may still be subject to RCRA storage and disposal requirements. Dispose of in compliance with all relevant local, state, and federal laws and regulations regarding treatment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wash hands after use.

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

Do not breathe vapor or mist.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

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.

7.2 Conditions for safe storage, including any incompatibilities

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 containers 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.

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

8.1 Control parameters

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face 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 your 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 number of dangerous substances 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 an apron, arm covers, or full body suit. Wash contaminated clothing before re-wearing.

Respiratory protection
If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied pressure supplied air respiratory with a full-face piece or an air supplied hood. For emergencies, use a positive pressure self-contained breathing apparatus. Air purifying (cartridge type) respirators are not approved for protection against isocyanates.

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
ISOPHORONE DIISOCYANATE								0.005	0.045	0.02	0.180	

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Appearance	Viscous Liquid
Color	White
Odor	Mild Chemical
Odor threshold	N.A.
Melting point/freezing point	N.A.
Boiling point or initial boiling point and boiling range	300 °F/148.9 °C
Flammability	N/A
Lower and upper explosion limit/flammability limit	N.A.
Flash point	200 °F/ 93.3 °C
Auto-ignition temperature	N.A.
Decomposition temperature	N.A.
pH	N.A.

Kinematic viscosity	N.A.
Solubility	Reacts with Water
Partition coefficient n-octanol/water (log value)	N.A.
Vapor pressure	N.A.
Evaporation rate	Slower than ether
Density and/or relative density	8.655 lb/gal
Relative vapor density	Heavier than air

Further safety characteristics (supplemental)
(VOC): to 0 g/l Calculated
Notes: VOC listed on the SDS is for this component only. Mixed VOC for the combined product may have a different value.

(VOC) Part A & B Combined: 0.125 lb/gal

SECTION 10: Stability and reactivity

10.2 Chemical stability
Material is stable at standard temperature and pressure.

10.3 Possibility of hazardous reactions
Will not occur under normal conditions but under high temperatures in the presence of alkalis, tertiary amines, and metal compounds will accelerate polymerization. Possible evolution of carbon dioxide gas may rupture closed containers.

10.4 Conditions to avoid
Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause liberation of carbon dioxide and buildup of pressure.

10.5 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. Some reactions can be violent. Material can react with strong oxidizing agents.

10.6 Hazardous decomposition products
Carbon dioxide, carbon monoxide, nitrogen oxides, trace amounts of hydrogen cyanide and unidentified organic compounds may be formed during combustion.

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation
Isocyanates react with skin protein and moisture and can cause irritation. Prolonged contact can cause reddening, swelling, rash, scaling, blistering, and, in some cases, skin sensitization. Individuals who have developed a skin sensitization can develop these symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor.
Causes mild skin irritation

Serious eye damage/irritation
Liquid, aerosols or vapors are severely irritating and can cause pain, tearing, reddening and swelling. Prolonged vapor contact may cause conjunctivitis. Any level of contact should not be left untreated.

Causes serious eye irritation

Respiratory or skin sensitization
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction

Germ cell mutagenicity
No data available

Carcinogenicity
Suspected of causing cancer.

Reproductive toxicity
No data available

Specific target organ toxicity (STOT) - single exposure
No data available

Specific target organ toxicity (STOT) - repeated exposure
No data available

Aspiration hazard
No data available

SECTION 12: Ecological information

Toxicity
Harmful to aquatic life
Harmful to aquatic life with long lasting effects

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

Disposal methods

Product disposal
Under RCRA, it is the responsibility of the user of the product to determine at 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

DOT (US)
Not Regulated

IMDG
Not Regulated

IATA
Not Regulated

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

CAS	Chemical Name	% By Weight	Regulation List
0000108-32-7	4-METHYL-1,3-DIOXOLAN -2-ONE	5% - 10%	SARA312, TSCA
0004098-71-9	ISOPHORONE DIISOCYANATE	5% - 9%	SARA312, SARA313, VOC, TSCA
0053880-05-0	POLYURETHANE PREPOLYMER	59% - 100%	SARA312, TSCA

SECTION 16: Other information

* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

16.1 Further information/disclaimer

This SDS to the best of our knowledge conforms to the requirements of 2012 OSHA Hazard Communication Standard 29 CFR 1910.1200, and summarizes the health and safety hazard information and general guidance on how to safety handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Responsibility for the product sold is subject to our standard terms and conditions, a copy if which is available upon request. This company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTY, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS, OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. Liability by this company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with the proper shipping, handling and storage procedures,

and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users.

16.2 Preparation information

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.

SIPLAST, INC.

Safety Data Sheet
Terapro PUR 2200 Part B

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Terapro PUR 2200 Part B

1.3 Recommended use of the chemical and restrictions on use

Curing agent/resin for coating materials or adhesives for industrial or professional use

1.4 Supplier's details

Name	Siplast, Inc.
Address	14911 Quorum Dr. Suite 600 Dallas TX 75254
Telephone	800-922-8800

1.5 Emergency phone number

800-424-9300 (CHEMTREC)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2
- Harmful to aquatic life, Cat. 3

2.2 GHS label elements, including precautionary statements

Pictograms

Signal word	**Warning**
Hazard statement(s)	
H319	Causes serious eye irritation
H402	Harmful to aquatic life
H315	Causes skin irritation

Precautionary statement(s)

P264	Wash face, hands, hands, forearms and face, clothing thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear eye protection, protective clothing, protective gloves.
P302+P352	If on skin: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see Consult a doctor/medical service if you feel unwell on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
P301+P312	IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.
P301+P330+P331	IF SWALLOWED: Rinse mouth. 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.
P314	Get medical advice/attention if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P363	Wash contaminated clothing before reuse.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

CAS	Chemical Name	Wt.%
68479-98-1	Diethylmethylbenzenediamine	20 - 40
9046-10-0	Alpha-(2-aminomethylethyl)omega-(2-aminomethylethoxy)-poly(oxy(methyl-1,2 -ethanediyl))	20 - 40
9003-11-6	Polyether Polyol	20 - 40

Trade secret statement (OSHA 1910.1200(i))

Criteria for listing components in this SDS are as follows: Carcinogens are listed at 0.1% or greater; hazardous components according to regulation 2012 OSHA Hazard Communication Standard: 29 CFR 1910.1200 are listed at 1.0% or greater; non-hazardous components are not listed. This is not intended to be the complete compositional disclosure. If a "Trade Secret" "(TS)" is claimed in accordance to paragraph (i) of 1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Remove victim to fresh air and provide oxygen if breathing is difficult. Seek medical attention if cough or other symptoms develop.

In case of skin contact	Remove contaminated clothing and immediately wash affected skin area with plenty of soap and water. Seek medical attention. Either discard or wash contaminated clothing and shoes before reuse.
In case of eye contact	Immediately flush with plenty of water for two minutes. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Have eyes examined and tested by medical personnel.
If swallowed	Make sure victim is conscious and alert. If so, give 2-3 glasses of water to dilute. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Do not leave victim unattended as spontaneous vomiting my occur. Lay victim on side with head lower than waist to prevent aspiration of swallowed product. If victim is conscious and vomiting occurs, give water to further dilute the chemical.

4.2 Most important symptoms/effects, acute and delayed
INHALATION: Repeated and/or prolonged exposure to low concentrations of vapors may cause a "Sore Throat".
ACUTE TOXICITY: Sensitization, irritation and dermatitis.
CHRONIC EFFECTS: This product contains no listed carcinogens according to IARC, ACGIH, NTP, and/or OSHA in concentrations of 0.1 percent or greater (unless identified under section 15 of this MSDS). Repeated or prolonged contact causes sensitization, asthma, and eczema. Prolonged contact may result in chemical burns and permanent damage.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
If breathing is irregular or stopped, administer artificial respiration and call 911.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Dry Chemical, Foam, or Carbon Dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop spill or leak and to disperse vapors.

5.2 Specific hazards arising from the chemical
Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

5.3 Special protective actions for fire-fighters
Firefighting personnel are required to use respiratory and eye protection. Full fire protective equipment (Bunker Gear) and self-contained breathing apparatus (SCBA) is recommended to be used for all indoor fires and any significant outdoor fires. SCBA may not be required for small outdoor fires that may easily be extinguished with a portable fire extinguisher.

Further information
FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, (AS/NZS 1715 and AS/NZS 1716 approved or equivalent) and full protective gear. Toxic vapors may evolve. Fight fires from a safe distance or protected areas. Use of large volumes of water may produce run-off that could be toxic to wildlife and/or pose a hazardous waste disposal issue. Water may not be effective for large fires.

SECTION 6: Accidental release measures

6.2 Environmental precautions

WATER SPILL: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of material into sources of water. Absorb spill with an emergency spill kit, diatomaceous earth, saw dust or equivalent inert material.
Shovel up and dispose of at an appropriate waste disposal facility following applicable laws and regulations.

6.3 Methods and materials for containment and cleaning up

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as diatomaceous earth, sawdust, vermiculite, or any appropriate readily available material and sweep or shovel absorbed material into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wash the contaminated area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.
Wear the appropriate personal protective equipment designated in Section 8, remove the leaking container to a containment area and place into an appropriate container to prevent any further spill.
LARGE SPILL: Construct temporary dikes of dirt or sand to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as diatomaceous earth, sawdust, vermiculite, or any appropriate readily available material and sweep or shovel adsorbed material into closed containers for disposal. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Wear the appropriate personal protective equipment designated in Section 8, close or cap leaking valves and/or block or plug hole in leaking container. Remove the leaking containers to a containment area and place into an appropriate container to prevent any further spill. Contain material as described above and call the local fire, police, or appropriate emergency response provider for immediate emergency assistance.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Avoid breathing in vapors, mists, and aerosols. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form.

7.2 Conditions for safe storage, including any incompatibilities

Store product in original containers. Store in a cool, dry, well ventilated area. Store and warehouse product in an appropriate area or facility. Segregate like materials together to avoid negative chemical reactions. Protect materials from excessive exposure to heat. Observe proper storage conditions and temperatures. Store between (50°F) Minimum to (75°F) Maximum.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Proper industrial hygiene practices are required for workers and should be achieved through engineering controls including ventilation with a high turnover rate whenever feasible. When such controls are not available or not feasible to achieve full protection, respirators for workers (and others in the area) and other personal protective equipment is mandated. Exhaust air may need to be scrubbed (cleaned) or filtered to reduce environmental contamination and odors.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety goggles or safety glasses with side shields when handling and mixing this material.

Skin protection

Wear impervious compatible chemical resistant protective clothing such as neoprene or butyl rubber gloves, aprons, boots or Tyvek coveralls, as appropriate to prevent contact with skin.

Respiratory protection
For respirator selection and training, seek professional advice. Whenever workplace conditions require a use of a respirator, follow a respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements. Wear an OSHA/NIOSH approved respirator selected on its suitability to provide adequate worker protection for the chemicals used and given working conditions including the level of airborne contamination and presence of sufficient oxygen.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	No data available
Color	Amber
Odor	Ammonia smell
Odor threshold	No data available
Melting point/freezing point	No data available
Boiling point or initial boiling point and boiling range	> 250°C
Flammability	Does not support combustion
Lower and upper explosion limit/flammability limit	No data available
Flash point	> (230°F) Pensky-Martens
Auto-ignition temperature	> 230°C
Decomposition temperature	No data available
pH	10-11
Kinematic viscosity	200 to 400 Centipoise
Solubility	Slight
Partition coefficient n-octanol/water (log value)	No data available
Vapor pressure	< 1 mbar
Evaporation rate	No data available
Density and/or relative density	1.014 g/cm3 at 25°C (74°F)
Relative vapor density	No data available

Further safety characteristics (supplemental)
(VOC): to 0 g/l Calculated
Notes: VOC listed on the SDS is for this component only. Mixed VOC for the combined product may have a different value.

SECTION 10: Stability and reactivity

10.1 Reactivity
Yes

10.2 Chemical stability
This material (product) is stable under normal ambient conditions of temperature and pressure. Follow recommendations for proper storage and use.

10.5 Incompatible materials
Nitric Acid, Ammonia, Nitrogen oxides, Nitrogen oxide can react with water vapors to form corrosive nitric acid, Carbon monoxide, Carbon dioxide, Aldehydes.

10.6 Hazardous decomposition products
Nitric Acid, Ammonia, Nitrogen oxides, Nitrogen oxide can react with water vapors to form corrosive nitric acid, Carbon monoxide, Carbon dioxide, Aldehydes.

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation
Possible sensitizer to the skin. Corrosive to skin.

Serious eye damage/irritation
Moderately Irritating

Germ cell mutagenicity
Product is a blend of material that has been shown to be Ames Negative (non-mutagenic)

Summary of evaluation of the CMR properties
This product does not contain substances considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

Additional information
The chemical, physical, and toxicological properties have not been thoroughly investigated or tested to the best of our knowledge.

SECTION 12: Ecological information

ENVIRONMENTAL DATA: No environmental data has been established or is available for this product.

GENERAL COMMENTS: Avoid contaminating waterways.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
See instructions to mix together with the proper components of multi-component materials and allow to harden. Dispose solids at an appropriate waste disposal facility according to current applicable laws and regulations.

SECTION 14: Transport information

DOT (DEPARTMENT OF TRANSPORTATIO N)
Not regulated
VESSEL (IMO/IMDG)
Not regulated

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA STATUS: All ingredients in this mixture are listed with the TSCA Chemical Substance Inventory.

DOMESTIC SUBSTANCE LIST (INVENTORY): The components in this product are listed or exempt from the Canadian Domestic Substance List (DSL).

HMIS Rating

Terapro PUR 2200 Part B	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	G

SECTION 16: Other information

16.1 Further information/disclaimer

This SDS to the best of our knowledge conforms to the requirements of 2012 OSHA Hazard Communication Standard 29 CFR 1910.1200, and summarizes the health and safety hazard information and general guidance on how to safety handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Responsibility for the product sold is subject to our standard terms and conditions, a copy if which is available upon request. This company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTY, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS, OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. Liability by this company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with the proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users.