



# 144 LL HARDENER 1 GAL UNIT

Polyaspartic Polyurethane (Low Luster)

### FOR USE WITH RESIN COMPONENT OF THE 144 LL ONLY

**IMPORTANT NOTE:** A Technical Data Sheet and Safety Data Sheet are available from Tri-Chem for this product. Applicators should read and understand both documents as well as the instructions on the Resin label of this product prior to mixing and applying this product

**WARNING: CONTAINS ISOCYANATES.**  
**WARNING! HARMFUL IF INHALED. CAUSES IRRITATION.**  
**OVEREXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. EFFECTS MAY BE PERMANENT. VAPOR AND SPRAY MIST HARMFUL.**

**CONTAINS Hexamethylene Diisocyanate (HDI). INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST.** Do not breathe vapor or spray mist. A NIOSH/MSHA approved positive pressure air supplied respirator is recommended, or a NIOSH/MSHA approved respirator effective for isocyanate vapors and mists is required. Wear until all vapors or mists are gone. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Keep away from heat, sparks and flame. Use only with adequate ventilation. **FIRST AID:** If breathing problems occur during use, leave the area immediately for fresh air. If problem persists or reoccurs later seek medical attention immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and call a physician; for skin, wash thoroughly with soap and water. Keep container closed when not in use. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. **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 the contents may be harmful or fatal. The contents of this package must be blended with other components before the product can be used. Any mixture of components will have hazards of all components.

H713-000	CAS Number
Homopolymer of hexamethylene diisocyanate	28182-81-2
Hydrophilic Aliphatic Polyisocyanate based on hexamethylene diisocyanate	666723-27-9
Hexamethylene-1,6-Diisocyanate	822-06-0
Isopropanol	67-63-0

**HMS:** HEALTH: 2 **FLAMMABILITY:** 1 **REACTIVITY:** 1 (0 – Minimal, 4 – Severe Hazard)  
DOT Technical Name: Other regulated substances, liquid, N.O.S. (contains hexamethylene-1,6-diisocyanate)  
DOT Hazard Class: 9 Hazard Subclass: N.A. DOT I.D. Number: UN3082 Packing Group: III  
IMDG Technical Name: Other regulated substances, liquid, N.O.S. (contains hexamethylene-1,6-diisocyanate)  
Hazard Class: 9 Hazard Subclass: N.A. I.D. Number: UN3082 Packing Group: III  
**REPORTABLE QUANTITY:** 45359kg (99999lb) Acute Oral Toxicity, Category 2 Skin Corrosion, Category 1C Serious Eye Damage, Category 2A Aspiration Hazard, Category 1

**SIGNAL WORD: Danger**  
Hazard-determining components of labeling: Homopolymer of Hexamethylene Diisocyanate  
**Hazard Statements**  
H317 May cause an allergic skin reaction H304 May be fatal if swallowed and enters airways  
H412 Harmful to aquatic life with long lasting effects H335 May cause respiratory irritation  
H314 Causes severe skin burns and eye damage



### KEEP OUT OF THE REACH OF CHILDREN

**Precautionary Statements**  
P273 Avoid Release to the Environment P280 Wear protective gloves/ protective clothing/eye protection/face protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing. P310 Immediately Call a POISON CENTER or doctor/physician.

**EYES:** DO NOT wear contact lenses while using this product! Immediately flush eyes with plenty of water for at least 20 minutes. Use lukewarm water if possible. Use fingers to ensure eyelids are separated and that the eye is being irrigated. Get Medical attention if irritation persists.

**NOTE TO PHYSICIANS:** Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce corneal epithelial edema impairing vision.

**SKIN:** Immediately remove contaminated clothing and shoes. Wash off with soap and water. Use lukewarm water if possible. Wash contaminated clothing before reuse. Discard any contaminated items that are not easily cleaned (leather belts and watch bands, leather boots, etc). For severe exposures, immediately get under safety shower and begin rinsing. Get medical attention if irritation develops and persists.

**NOTE TO PHYSICIANS:** This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. **INHALATION:** Move to an area free from further exposure. Get medical attention immediately. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.

**NOTE TO PHYSICIANS:** Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any isocyanate.

**INGESTION:** Do NOT induce vomiting. Wash mouth out with water. Do not give anything by mouth to an unconscious person. Get medical attention.

**NOTE TO PHYSICIANS:** Treatment is symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound.

**Handling:** Do not breathe vapors, mists or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory equipment if material is heated, sprayed or used in a confined space or if the exposure limit is exceeded. Warning properties (eye, nose and throat irritation or general odor) are not adequate to prevent overexposure from inhalation. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling. Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**Storage:** Store between 44.6°F and 77°F. This product can be stored up to 5 months @ 77°F after customer has received it. Decomposition products can be highly toxic and irritating. Store in a tightly closed container to prevent moisture contamination. Do not reuse if contamination is suspected. Do not store near food stuffs.

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Do not dispose of with household waste. Do not dispose of in landfill. Do not allow contact with sewers or waterways. Comply with all Federal, State and Local regulations.

Shelf life = 1 year

Tri-Chem | 431 Stephenson Hwy. | Troy, MI 48083 | 800.456.6255 | tri-chem.com



# 144 LL RESIN CLEAR 1 GAL UNIT

Polyaspartic Polyurethane (Low Luster)

### FOR USE WITH HARDENER COMPONENT OF 144 LL ONLY

**DESCRIPTION:** 144 LL is a ZERO VOC high performance 61% solids 2-component, waterborne aliphatic polyaspartic polyurethane. This unique non-yellowing coating produces a GLOSS finish that remains non-chalking and has superior UV resistance. 144 LL offers performance characteristics typical of high quality, 2-component, solvent-based, aliphatic urethane coatings but provides excellent durability and UV stability without strong odors. This unit of Resin is one portion of a two component coating system.

**PACKAGING:** The 1 gallon unit consists of one F-Style can of Hardener and one 1 gallon can of Resin. When combined the unit contains a total of 1 gallon of mixed product.

**COVERAGE:** This product should be applied at 5-6 mils WFT. When applying horizontally reducing with 15% clean water is recommended to achieve proper mil thickness.

**SURFACE PREPARATION:** The substrate must be clean, dry and sound with new concrete cured for at least 28 days at 70°F. Remove dust, laitance, grease, curing compounds, waxes, foreign particles, disintegrated or soft base materials, and any previously applied potentially incompatible coatings. Create a surface profile on concrete by either steel shot blasting or diamond grinding and apply Tri-Chem flooring system followed by 144 LL as the finish coating. Application directly to prepared concrete is acceptable, but priming is recommended for best results.

**MIXING:** Separately stir Hardener and Resin components thoroughly. Add the premixed Hardener to the Resin and mix using a spiral mixing blade for 2 minutes on low speed (300 RPM). There will be a thickening of the two components as they are being mixed. Material can then be thinned up to 15% by volume (19 cc. per mixed gallon) with clean water by adding and continuing to mix on low speed. You may then immediately apply the coating as no induction time is required.

Avoid mixing and application of 144 LL if the substrate and/or air temperature is below 60°F or above 88°F or if the humidity is higher than 70% R.H. Elevated temperatures and/or humidity levels will accelerate cure time and lower working time. The temperature of the floor, the product components, the air as well as the humidity in the area of installation all play a role in cure time (i.e., warmer and/or higher humidity = faster; cooler and/or lower humidity = slower). Eliminate any air flow directly onto the floor to minimize the chance of bubbling.

#### APPLICATION:

- This product can be applied from a roller tray or by pouring in a narrow bead directly onto the concrete surface and then applying with a 5/16" microfiber roller.
- The 144 LL is applied at the rate of 5-6 mils WFT. The 144 LL must be rolled as evenly as possible and should be finished with a light, single direction finish roll. Avoid excessive agitation of the liquids with the roller. This will lessen chances of imperfections in the final film.

**POT LIFE:** At 78°F and 50% R.H., this product has a useful working time of approximately 25 minutes. Using any product beyond this time may yield variable results and therefore any mixed product beyond the pot life should be discarded.

**TECHNICAL DATA AND SAFETY DATA SHEET AVAILABILITY:** A Technical Data Sheet and Safety Data Sheet are available from Tri-Chem for this product. Applicators should read and understand both documents prior to mixing and applying this product.

### KEEP OUT OF THE REACH OF CHILDREN

R710-000	CAS Number
Polycrylate Resin	TRADE SECRET
Polyether polyol	25725-16-4
Ammonia	7664-41-7
Reactive Diluent	716336-43-5
Triethanolamine	102-71-6
Propylene Glycol n-Butyl Ether	5131-66-8

**HMS:** HEALTH: 1 **FLAMMABILITY:** 1 **REACTIVITY:** 0 (0 – Minimal, 4 – Severe Hazard)  
DOT Proper Shipping Name: Resin compound- Non-regulated  
DOT Technical Name: N.A. DOT Hazard Class: N.A. Hazard Subclass: N.A. DOT I.D. Number: N.A.  
Acute Toxicity, Category 4 Skin Sensitization, Category 1B



**SIGNAL WORD: Warning**

Hazard-determining components of labeling: Polyether Polyol

**Hazard Statements** H317 May cause an allergic skin reaction H302 Harmful if swallowed

**Precautionary Statements:** P273 Avoid Release to the Environment P280 Wear protective gloves/ protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing. P310 Immediately Call a POISON CENTER or doctor/physician.

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to physician in attendance.

**EYES:** DO NOT wear contact lenses while using this product. In case of contact, flush eyes with plenty of lukewarm water. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention if irritation develops.

**SKIN:** In case of skin contact, wash affected areas with soap and water. Get medical attention if irritation develops. Thoroughly clean shoes before reuse. Wash clothing before reuse.

**INHALATION:** If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

**INGESTION:** If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention. Never give anything by mouth to an unconscious person.

**Handling:** Handle in accordance with good industrial hygiene and safety practices. Wash hands and arms thoroughly after handling and before eating, smoking, or using the toilet.

**Storage:** Store product between the temperatures of 44.6°F and 77°F for up to 6 months after date received in the original container. Store separate from food stuffs. Keep container closed when not in use. Protect from freezing and excessive heat.

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Do not dispose of with household waste. Do not dispose of in landfill. Do not allow contact with sewers or waterways. Comply with all Federal, State and Local regulations.

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