SAFETY DATA SHEET

Section 1 – Product And Company Identification

PRODUCT

PRODUCT NAME: PRODUCT DESCRIPTION: PRODUCT USE:

3101U UNICON UNISEAL Preparation/Mixture Clear gloss concrete and masonry surface sealer.

MANUFACTURER INFORMATION

INNOVATIVE MANUFACTURING INC 861 DERWENT WAY DELTA, BC, CANADA, V3M 5R4 (604) 522-2811

EMERGENCY INFORMATION

INNOVATIVE MANUFACTURING CONTACT: 1-800-667-8246 24-HOUR EMERGENCY AND SDS HELP: CANUTEC: 613-966-6666

Section 2 – Hazards Identification

GHS Hazard Classification

Flammable Liquid	Category 2
Acute toxicity(inhalation)	Category 4
Skin irritation	Category 2
Eye irritation	Category 2B
Carcinogen	Category 2
Specific target organ toxicity (Central nervous system)	Category 3
Specific target organ toxicity (Respiratory irritant)	Category 2
Aspiration toxicity	Category 1
Acute aquatic toxicity	Category 3



Signal word	Danger
Hazard Statement:	 H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer . H402 Harmful to aquatic life.
Precautionary Statements:	
Prevention	 P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/attention.

	P312 Call a POISON CENTER or doctor/physician if you feel unwell. P331 Do NOT induce vomiting. P332 + P313 If skin irritation occurs: Get medical advice/attention.
	P370+P378 In case of fire: Use dry chemical powder, water fog, CO2, foam or sand/earth for extinction.
Storage	P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.
Disposal	P501 Dispose of contents/container: Follow the waste disposal requirements of your country, state, or local authorities.
Other hazards	0 % of mixture consists of ingredients of unknown acute toxicity

Section 3 – Composition/Information on Ingredients

COMPONENTS	CAS No.	% BY WEIGHT
Tert Butyl Acetate	540-88-5	75-80
Acrylic Resin	NE*	13-15
Proprietary Solvent Blend	NE*	5-12
*NE: Not established.		

Section 4 – First Aid Measures

Description of First Aid Measures

	General advice	Take proper precautions to ensure your own health and safety before attempting rescue and providing first aids. Consult a physician/doctor if necessary. Show this material safety data sheet to the doctor in attendance.	
	Inhalation	Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist	
	Skin Contact	ventilation with a mechanical device or use mouth-to-mouth resuscitation. Clean any exposed skin with warm soapy water if possible. If not, and a waterless hand cleaner is used, it should be without pumice. Get medical attention if irritation persists or develops. Launder contaminated clothing before reuse.	
	Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.	
	Ingestion	If swallowed, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis. Call poison control center or get immediate medical attention.	
Notes to phy	vsician		
	SymptomsIf inhalation occurs signs and symptoms may include coughing, choking, wheezing, difficul breathing, chest congestion, shortness of breath and/or fever. High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure). The onset of respiratory symptoms may be delay for several hours after exposure.		
	Hazards	Can cause pulmonary edema if aspirated into lungs. Harmful: May cause lung damage if swallowed.	
	Treatment	Treat symptomatically. Treatment of over exposure should be directed at the control of symptoms and the clinical condition of the patient. In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision.	
Section 5 -	- Fire Fighting Measures		
Suitable extinguishing mediaSMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam. LAI Use water spray, water fog or alcohol-resistant foam.		SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.	
Unsuitable extinguishing media Do not use solid water stream as it may scatter and spread fire.		Do not use solid water stream as it may scatter and spread fire.	
Further infor	rmation	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.	

Special hazards arising from the substance or mixture	Release flammable vapors below normal ambient temperatures. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Flammable vapors may be heavier than air and travel long distances along the ground before igniting and flashing back to vapor source. Move containers from fire area if it can be done without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles, if this is impossible, withdraw from area and let fire burn.
Hazardous thermal decomposition products	Carbon dioxide, carbon monoxide, Other unidentified organic compounds.
Protective actions fire-fighters	Wear standard protective equipment and self contained breathing apparatus (SCBA). Structural firefighter's protective clothing will only provide limited protection.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures For non-emergency No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch personnel or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in For emergency responders section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel" Environmental precautions Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage. Methods and materials for containment and cleaning up

Flammable. Remove all sources of ignition. Ventilate the area. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Dike large spills and place materials in salvage containers. Water spray may reduce vapor, but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Precautions for safe handling

Use only outdoors or in a well-ventilated area. Extinguish all sources of ignition. Carefully vent any internal pressure before removing closure. Containers must be properly grounded before beginning transfer. Handle empty containers with care, vapor/residue may be flammable. All equipment must conform to applicable electrical code. This material may attack some plastics, rubbers, and coatings. Consult supplier(s) of these materials for specific recommendations. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Check atmosphere for explosiveness and oxygen deficiencies. Wear recommended personal protective equipment. Observe precautions pertaining to confined space entry. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks, open flame and hot surfaces. No smoking. Take precautionary measures against static discharge. Store closed drums with bung in up position. Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agent. Containers must be properly grounded before beginning transfer. Store in a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Keep cool. Keep container tightly closed. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks.

Section 8 – Exposure Controls / Personal Protection

Control Parameters

Components	ACGIH	OSHA	NIOSH
components	TLV	PEL	REL
Tert Butyl Acetate 540-88-5	200 ppm	200 ppm 950 mg/m³	1500 ppm
Solvent Blend	TWA 19 ppm	-	-

Exposure controls

VENTILATION AND ENGINEERING MEASURES	Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures.	
RESPIRATORY PROTECTION:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.	
SKIN PROTECTION	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.	
EYE PROTECTION:	Safety Glasses, Chemical goggles, or face shield	
PROTECTIVE CLOTHING:	Wear suitable protective clothing to prevent skin contact.	
OTHER EQUIPMENT:	Make safety shower, eyewash stations, and hand washing equipment available in the work area.	
WORK/HYGIENE PRACTICES:	Avoid breathing vapor. Avoid contact with eyes. Wash hands and face after handling.	

Section 9 – Physical and Chemical Properties

	PRODUCT CRITERIA
APPEARANCE - COLOR	Clear liquid
PHYSICAL STATE	Liquid
ODOR	Camphor-like odor
ODOR THRESHOLD	No data available
PH	No data available
MELTING POINT/FREEZING POINT	No data available
INITIAL BOILING POINT AND BOILING RANGE	Greater than 97.8°C(315°F)
FLASH POINT	4°C (39°F) Pensky-Martens Closed Cup ASTM D-93
EVAPORATION RATE	2.8 (n-butyl acetate = 1)
FLAMMABILITY (solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	6.88%/1.26%
VAPOR PRESSURE	42 mmHg @ 20°C(68°F)
VAPOR DENSITY (AIR=1)	No data available
RELATIVE DENSITY (@25°C)	0.897
SOLUBILITY(IES)	Insoluble in water
OXIDIZING PROPERTIES	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	589°C(1092°F)
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available
VOC CONTENT	349 g/L

Section 10 – Stability and Reactivity

Reactivity:	Not normally reactive.	
Chemical Stability:	This product is stable.	
Possibility of Hazardous Reactions:	Under normal conditions of storage and use, hazardous reactions will no occur.	
Conditions to Avoid:	Avoid all possible sources of ignition(spark or flame), avoid contact with incompatible materials. Prevent vapor accumulation.	

Incompatibility (Materials to Avoid):

Some plastics, acids, alkalis, nitrates, strong oxidizing agents.

Hazardous Decomposition Products: None known, refer to hazardous combustion products in Section 5.

Section 11 – Toxicological Information

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Rat)	>4500 mg/kg		540-88-5
	LC50 (Inhalation/Rat male)	2230 mg/m ³ , 4 hours		Tert Butyl Acetate
	LD50 (Dermal/Rabbit)	>2000 mg/kg		Tert Bulyi Acelale
	LD50 (Oral/Rat)	3492 mg/kg		
	LC50 (Inhalation/Rat male)	6193 mg/m ³ , 4 hours		Solvent Blend
	LD50 (Dermal/Rabbit)	3160 mg/kg		
Skin Corrosion/Irritation	Not Classified			
Serious Eye Damage / Eye Irritation	May cause mild, short-lastin	g discomfort to eyes		
Respiratory or Skin Sensitization	Not expected to be a skin or respiratory sensitization			
Germ Cell Mutagenicity	Not expected to be a germ cell mutagen			
	Cause cancer in laboratory animals, but the relevance to			
Carcinogenicity	humans is uncertain, based on assessment of the		Cat 2	
0,	components			
Reproductive Toxicity	Not Classified			
	May cause respiratory irritat	ion, May cause drowsiness	Cat 3	
STOT - Single Exposure	or dizziness.	or dizziness.		
STOT - Repeated Exposure	Not Classified			
Aspiration Hazard	spiration Hazard May be fatal if swallowed and enters airways. Based o		Cati	
	physico-chemical properties	2	Cat 1	
Ames Test	No information is available			

Section 12 – Ecological Information

ECOTOXICITY

Expected to harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface water.

ECOTOXICITY DATA

Ecotoxicity		Chemical Name		
	540-88-5 Tert Butyl Acetate			
	EC50 / 96 h or 72 h	16 mg/L/72 hours (Green algae)		
Toxicity to algae	NOEC / 96 h or 72 h	2.3mg/L (Green algae)		
	M factor	-		
	EC50 / 48 h	-		
Toxicity to fish	NOEC / 21 days	-		
	M factor	-		
	LC 50 / 96 h	-		
Toxicity to Daphnia	NOEC / 21 days	-		
	M factor	-		
		Solvent Blend		
	EC50 / 96 h or 72 h	2.9 mg/L/72 hours (Green algae)		
Toxicity to algae	NOEC / 96 h or 72 h	1.0 mg/L (Green algae)		
	M factor	-		
	LC50 / 48 h	9.2 mg/L, 96 hours (Oncorhynchus mykiss)		
Toxicity to fish	NOEC / 21 days	-		
	M factor	-		
	EC 50 / 96 h	3.2 mg/L		
Toxicity to Daphnia	NOEC / 21 days	-		
	M factor	-		

Persistence and degradability

Not readily biodegradable.

Bioaccumulative potential	Product/Ingredient Name	Log Pow	BCF	Potential
	Tert Butyl Acetate	-	5.61	Low
Mobility in soil	This product has low solubility	This product has low solubility and floats, and expected to migrate from water to the land.		
PBT and vPvB assessment	No information is available			
Other adverse effects	No information is available			

Section 13 – Disposal Considerations

Waste from residues/unused products:	Follow the waste disposal requirements of your country, state, or local authorities.
Contaminated packaging:	Contaminated packaging material should be disposed of as stated above for residues and unused product.
RCRA	If this product, as supplied, becomes a waste in the US, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. it is the responsibility of the waster generator to determine the proper waste identification and disposal method.

Section 14 – Transportation Information

Regulatory Information	UN number	UN proper shipping name	Transport Hazard Class(es)	Packing Group
	UN 1139	COATING SOLUTION	3	I
DOT				
	UN 1139	COATING SOLUTION	3	II
TDG				
	UN 1139	COATING SOLUTION	3	II
IMDG				
	UN 1139	COATING SOLUTION	3	II
ICAO/IATA				

Special precautions for user

Appropriate advice on safety must accompany the package.

Environmental hazards

Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. See Ecological Information Section 12.

Section 15 – Regulatory Information

All components used in this product are on the TSCA Inventory and the Canadian DSL.

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CANADA:

WHMIS-2015: This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

Section 16 – Other Information

HMIS Rating:	1	NFPA Rating:	
Health	1	Health	1
Flammability	3	Flammability	3
Physical Hazard	0	Instability	0
Personal Protection	x	Special	-

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Prepared By:	Joey Wang

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