

SAFETY DATA SHEET

Issue Date 06-May-2015

Revision Date 30-May-2015

Version 1

1. IDENTIFICATION

Product identifier

Product Name UTN 60 Clear High Gloss Aliphatic Urethane 250 VOC - A

Other means of identification

Product Code UTN 60

UN/ID no. 1263

Synonyms

Recommended use of the chemical and restrictions on use

Recommended Use Concrete Coating.

Uses advised against No Data

Details of the supplier of the safety data sheet

Distributor Address

Foundation Armor LLC. 472 Amherst Street #14, Nashua, NH 03063

Emergency telephone number

Company Phone Number (866) 306-0246

24 Hour Emergency Phone Number (800) 424-9300 (United States & Canada)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 5
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 2
Flammable liquids Category 2, Hazardous to the Aquatic Environment - Long Term (Chronic) Hazard Category 2	

Label elements

Emergency Overview

Danger!

Hazard statements

Highly flammable
Suspected of Causing Cancer
Toxic to Aquatic Life with Long Lasting Effects
Causes Serious Eye Irritation
May Cause Respiratory Irritation
May Cause Drowsiness or Dizziness
May be Harmful if Swallowed
May be Harmful if Swallowed and Enters Airways
Causes Skin Irritation



Appearance Transparent Liquid	Physical state liquid	Odor Solvent
--------------------------------------	------------------------------	---------------------

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ ventilating / lighting/ .? / equipment
- Use only non-sparking tools
- Take action to prevent static discharges
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

- IF exposed or concerned: Get medical advice/attention
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
- If skin irritation occurs: Get medical advice or attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contacts, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
- IF SWALLOWED: Immediately call a POISON CONTROL CENTER/doctor
- Do NOT induce vomiting.
- Take off contaminated clothing and wash before reuse
- In case of fire use, "alcohol resistant" foam, dry chemical, halon or carbon dioxide to extinguish.
- Collect spillage

Precautionary Statements - Storage

Store in well-ventilated place. Keep Cool. Keep container tightly closed. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Hazards not otherwise classified (HNOC)

Repeated exposure may cause skin dryness or cracking

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Polyester Polyol	26745-09-5	30 - 60	*
p-chloro-a,a,a-trifluorotoluene	98-56-6	10 - 30	*

n-Butyl acetate	123-86-4	10 - 30	*
Dimethyl carbonate	616-38-6	7 - 13	*
Methyl n-amyl ketone	110-43-0	5 - 10	*
Ethyl 3-ethoxypropanoate	763-96-9	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Move out of the dangerous area. Consult a physician. Provide this Safety Data Sheet to the doctor in attendance.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms Eye, Skin, and Respiratory Irritation. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. For additional information, see Safety Data Sheet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry Chemical, Alcohol Resistant Foam, Halon or Carbon Dioxide.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

In a fire or if heated a pressure increase may occur and the container may burst.

Hazardous combustion products Carbon dioxide (CO₂). Carbon monoxide.

Explosion data

Sensitivity to Mechanical Impact Not available.

Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not allow product to enter any drains or waterways.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.

Methods for cleaning up Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal. Use clean non-sparking tools to collect absorbed material. Dispose according to local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take measures to prevent the buildup of electrostatic charge. Use non-sparking tools. Wash hands and skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Incompatible materials Keep away from strong oxidizing agents, strong alkalis, and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Dimethyl Carbonate - CAS 616-38-6: None Established. Petroleum Naphtha, Light Aromatic, CAS# 64742-95-6: OSHA 100 ppm TWA.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
p-chloro-a,a,a-trifluorotoluene 98-56-6	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 2.5 mg/m ³	-
n-Butyl acetate 123-86-4	STEL: 200 ppm TWA: 150 ppm	TWA: 150 ppm TWA: 710 mg/m ³ (vacated) TWA: 150 ppm (vacated) TWA: 710 mg/m ³ (vacated) STEL: 200 ppm (vacated) STEL: 950 mg/m ³	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³
Methyl n-amyl ketone 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³

Appropriate engineering controls

Engineering Controls General/Local Ventilation Recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear chemical resistant gloves at minimum. Wash skin immediately upon contact. Wash hands at mealtime and end of shift.
Respiratory protection	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after breaks and at the end of the work day.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Solvent
Appearance	Transparent Liquid	Odor threshold	No data available
Color	Transparent Liquid - May have slight color due to performance additives.		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not Relevant	
Melting point / freezing point	Not Available	
Boiling point / boiling range	194°F (90°C)	
Flash point	18.3 °C (65 °F)	CC (closed cup)
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	7.0%	
Lower flammability limit:	1.0%	
Vapor pressure	Not Available	
Vapor density	Not Available	
Relative density	.994 @ 70 Degrees F	
Water solubility	Insoluble in water	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	
Dynamic viscosity	Not Available	
Explosive properties	Not Available	
Oxidizing properties	Not Available	

Other Information

Softening point	Not Relevant
Molecular weight	Not Available
VOC Content (%)	< 250 g/L
Density	Not Available
Bulk density	Not Available

10. STABILITY AND REACTIVITY

Reactivity

Not Available

Chemical stability

Stable.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Keep away from strong oxidizing agents, strong alkalis, and strong acids.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions, carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Direct contact and vapor inhalation.
Eye contact	Direct contact.
Skin contact	Direct contact.
Ingestion	Direct contact.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
p-chloro-a,a,a-trifluorotoluene 98-56-6	= 13 g/kg (Rat)	> 2 mL/kg (Rabbit)	= 33 mg/L (Rat) 4 h
n-Butyl acetate 123-86-4	-	> 17600 mg/kg (Rabbit)	= 390 ppm (Rat) 4 h
Dimethyl carbonate 616-38-6	= 13000 mg/kg (Rat)	> 5 g/kg (Rabbit)	= 140 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms May cause drowsiness or dizziness if inhaled. May cause respiratory irritation. Causes serious eye irritation. Causes skin irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes severe burns. Irritating to skin.
Serious eye damage/eye irritation	Irritating to eyes. Risk of serious damage to eyes.
Irritation	Irritating to eyes, respiratory system and skin.
Sensitization	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	Transparent Liquid.
Reproductive toxicity	Not Available.
STOT - single exposure	Not Available.
STOT - repeated exposure	Not Available.
Aspiration hazard	Not Available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Material is expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
p-chloro-a,a,a-trifluorotoluene 98-56-6	-	11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static	3.68: 48 h Daphnia magna mg/L EC50
n-Butyl acetate 123-86-4	674.7: 72 h Desmodemus subspicatus mg/L EC50	17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Lepomis macrochirus mg/L LC50 static 62: 96 h Leuciscus idus mg/L LC50 static	72.8: 24 h Daphnia magna mg/L EC50
Methyl n-amyl ketone 110-43-0	-	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	-

Persistence and degradability

No data available.

Bioaccumulation

No data available.

Chemical Name	Partition coefficient
p-chloro-a,a,a-trifluorotoluene 98-56-6	3.7
n-Butyl acetate 123-86-4	1.81
Methyl n-amyl ketone 110-43-0	1.98

Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Under RCRA 40 CFR 261 this material is a hazardous waste. Dispose of in accordance with all federal, state, and local regulations. If uncertain of local requirements, contact the proper environmental authorities for information on waste disposal in your area. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status
n-Butyl acetate 123-86-4	Toxic

14. TRANSPORT INFORMATION

DOT

UN1263, PAINT, 3, III
 UN/ID no. 1263
 Hazard Class 3
 Marine pollutant Material is expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

IATA

UN1263, PAINT, 3, III

IMDG

UN1263, PAINT, 3, III

15. REGULATORY INFORMATION

International Inventories

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

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
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of 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	Yes
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
n-Butyl acetate 123-86-4	5000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
n-Butyl acetate 123-86-4	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains chemicals known to the state of California to cause birth defects or other reproductive harm

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection X

Issue Date 06-May-2015

Revision Date 30-May-2015

Revision Note

No data available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet