Conforms to ANSI Z400.5-2004 Standard (United States).

Material Safety Data Sheet

Unicare Semi-gloss Protective Sealer

1 . Product and company identification

Product name : Unicare Semi-gloss Protective Sealer

Material uses : Seals and protects pavers, slabs & other concrete surfaces

Supplier/Manufacturer : Techniseal
300, avenue Liberté
Candiac, QC, Canada, J5R 6X1
Tel: (514) 523-2110
Toll free: 1-800-465-7325
Fax: (450) 633-3035

Validation date : 08/30/2008

Responsible name : Atrion Regulatory Services, Inc.

In case of emergency : CANUTEC (613) 996-6666

2 . Hazards identification

Physical state : Liquid.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : WARNING!

COMBUSTIBLE. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : Irritating to respiratory system.

Ingestion : May be harmful if swallowed.

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Potential chronic health effects

Chronic effects : Contains material that can cause target organ damage.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : Contains material which causes damage to the following organs: blood, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, nose/sinuses.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Ingestion : No specific data.

Skin : Adverse symptoms may include the following:
irritation
redness

2 . Hazards identification

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3 . Composition/information on ingredients

United States

Name	CAS number	%
Acetone	67-64-1	10 - 30
Solvent naphtha (petroleum), light arom.	64742-95-6	5 - 10
1,2,4-Trimethylbenzene	95-63-6	1 - 5
Benzyl butyl phtalate	85-68-7	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

Eye contact : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Flammability of the product : Flammable liquid. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable : Use dry chemical, CO_2, water spray (fog) or foam.

Not suitable : Do not use water jet.

Special exposure hazards : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
carbonyl halides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : 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 or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal 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).

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

United States	
Product name	**Exposure limits**
Acetone	**ACGIH TLV (United States, 1/2008).** STEL: 1782 mg/m³ 15 minute(s). STEL: 750 ppm 15 minute(s). TWA: 1188 mg/m³ 8 hour(s). TWA: 500 ppm 8 hour(s). **NIOSH REL (United States, 12/2001).** TWA: 590 mg/m³ 10 hour(s). TWA: 250 ppm 10 hour(s). **OSHA PEL (United States, 11/2006).** TWA: 2400 mg/m³ 8 hour(s). TWA: 1000 ppm 8 hour(s).
Solvent naphtha (petroleum), light arom.	**Manufacturer (United States).** TWA: 40 ppm 8 hour(s). Form: All forms.
1,2,4-Trimethylbenzene	**ACGIH TLV (United States, 1/2008).** TWA: 123 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s). **NIOSH REL (United States, 12/2001).** TWA: 125 mg/m³ 10 hour(s). TWA: 25 ppm 10 hour(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 25 ppm 8 hour(s). TWA: 125 mg/m³ 8 hour(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Safety glasses.

Skin : Lab coat.

Respiratory : Use a properly fitted, air-purifying or supplied air 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.

Hands : Natural rubber (latex).

Personal protective equipment (Pictograms) :

HMIS Code/Personal protective equipment : B

8 . Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Liquid.

Flash point : Closed cup: >37.8°C (>100°F) [Pensky-Martens.]

Color : Clear.

10 . Stability and reactivity

Stability : The product is stable.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Materials to avoid : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Conditions of reactivity : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
Acetone	Rat	5800 mg/kg	LD50 Oral	-
Solvent naphtha (petroleum), light arom.	Rat	8400 mg/kg	LD50 Oral	-
1,2,4-Trimethylbenzene	Rat	5 g/kg	LD50 Oral	-
Benzyl butyl phtalate	Rat	6700 mg/kg	LD50 Dermal	-
	Rabbit	>10 g/kg	LD50 Dermal	-
	Rat	2330 mg/kg	LD50 Oral	-

Inhalation : Irritating to respiratory system.

Ingestion : May be harmful if swallowed.

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Acetone	A4	-	-	-	-	-
Benzyl butyl phtalate	-	3	-	-	-	-

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

12 . Ecological information

Aquatic ecotoxicity

Product/ingredient name	Species	Exposure	Result
Acetone	Daphnia	48 hours	Acute EC50 23.5 to 23.9 g/L
	Fish	96 hours	Acute LC50 5.54 to 6.33 ml/L
	Crustaceans	48 hours	Acute LC50 7550000 ug/L
	Daphnia	48 hours	Chronic NOEC 16.2 g/L
1,2,4-Trimethylbenzene	Crustaceans	48 hours	Acute LC50 17000 ug/L
	Fish	96 hours	Acute LC50 7720 to 8280 ug/L
Benzyl butyl phtalate	Daphnia	48 hours	Acute EC50 >960 ug/L
	Fish	96 hours	Acute LC50 510 to 550 ug/L
	Fish	96 hours	Acute LC50 510 to 560 ug/L
	Daphnia	48 hours	Chronic NOEC 620 ug/L
	Fish	96 hours	Chronic NOEC 440 ug/L
	Crustaceans	48 hours	Chronic NOEC 320 ug/L

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

AERG : 128

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1993	FLAMMABLE LIQUID, N.O.S. (Acetone, 1,2,4-Trimethylbenzene)	3	II		-
IMDG Class	UN1993	FLAMMABLE LIQUID, N.O.S. (Acetone, 1,2,4-Trimethylbenzene)	3	II		-
IATA-DGR Class	UN1993	FLAMMABLE LIQUID, N.O.S. (Acetone, 1,2,4-Trimethylbenzene)	3	II		-

PG* : Packing group

15 . Regulatory information

United States

HCS Classification : Combustible liquid
Irritating material
Target organ effects

U.S. Federal regulations : TSCA 4(a) final test rules: Acetone
TSCA 8(a) PAIR: Para-chlorobenzotrifluoride
United States inventory (TSCA 8b): All components are listed or exempted.
TSCA 8(d) H and S data reporting: Para-chlorobenzotrifluoride: 2006
TSCA 12(b) one-time export: Acetone

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Acetone; 1,2,4-Trimethylbenzene; Benzyl butyl phtalate
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Acetone: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; 1,2,4-Trimethylbenzene: Fire hazard, Delayed (chronic) health hazard; Benzyl butyl phtalate: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: Benzyl butyl phtalate

Clean Water Act (CWA) 311: Xylene

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements :	1,2,4-Trimethylbenzene	95-63-6	5 - 10
Supplier notification :	1,2,4-Trimethylbenzene	95-63-6	5 - 10

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations : **Connecticut Carcinogen Reporting**: None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: Acetone; 1,2,4-Trimethylbenzene;Benzyl butyl phtalate
Michigan Critical Material: None of the components are listed.
Minnesota Hazardous Substances: None of the components are listed.
New Jersey Hazardous Substances: The following components are listed: Acetone; 1,2,4-Trimethylbenzene; Benzyl butyl phtalate;Xylene
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: The following components are listed: Acetone; Benzyl butyl phtalate;Xylene
New York Toxic Chemical Release Reporting: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed: Acetone; 1,2,4-Trimethylbenzene; Benzyl butyl phtalate;Xylene
Rhode Island Hazardous Substances: None of the components are listed.

15 . Regulatory information

California Prop. 65

WARNING: This product contains a chemical or chemicals known to the state of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Benzyl butyl phtalate	No.	Yes.	No.	No.

International regulations

International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements : COMBUSTIBLE. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Hazardous Material Information System (U.S.A.) :

Health	*	2
Fire hazard		2
Physical Hazard		0
Personal protection		B

HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal
See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :

References : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG.

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.