



Product Name: XS-PC12 (A)

Revision Date 10/01/12

SAFETY DATA SHEET

SECTION 1 Product and Company Identification

Product

Product Name: XS-PC12 (A)

Product Description: Finishing aid

Intended Use: Precast sealer

Company

Manufacturer: SureCrete Design Products, Inc.

15246 Citrus Country Drive

Dade City, FL 33523

USA

Contact: 352-567-7973 (telephone general)

813-469-1408 (telephone 24 hour emergency)

813-469-1419

info@surecretedesign.com (e-mail)

352-521-0973 (facsimile)

SECTION 2 Hazards Identification

Health Hazards: Can cause severe lung damage and may be fatal if swallowed. May cause CNS depression

Physical Hazards: Combustible. Vapors are heavier than air. Vapors may travel along the ground and reach remote source of ignition causing flash back fire danger.

SECTION 3 Composition / Information on Ingredients

This material is regulated as a mixture

Ingredient	CAS #	EC#	% (by weight)
Hazardous			
Xylene	1330-20-7	215-535-7	<55%
Non Hazardous			
Secondary diamines	NA	NA	<50%

SECTION 4 First Aid Measures

Eye Contact: Rinse with running water for 15 minutes. Hold eyelids apart while irrigating. Rest eyes for 30 minutes. If irritation continues, transport to nearest medical facility for treatment.

Skin Contact: Wash affected area thoroughly with soap and water. Wash clothing before reuse.

Inhalation: Move to fresh air. Administer artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical attention

Ingestion: Get medical attention immediately. Do not induce vomiting.



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SECTION 5 Fire Fighting Measures

Extinguishing Media

Appropriate: Foam, CO₂, Dry chemical, water fog

Inappropriate: Solid streams of water

Special Fire Fighting Procedures: Water may be ineffective in fighting fire. If water is used to cool containers, fog nozzles are preferred. Full protective equipment, including self-contained breathing apparatus required.

Unusual Fire and Explosion Hazard: Vapors are heavier than air and may travel along the ground to a remote source of ignition. Overexposure to decomposition products may cause health hazard that is not readily apparent. Obtain medical attention. Never use cutting torches or welding equipment on "empty" containers.

Flammability Properties

Flash Point (Method): 27°C / 81°F

Flammable Limits (Approximate volume % in air): LEL: 1.0 UEL: 6.6

Autoignition Temperature: >462°C / 864°F

SECTION 6 Accidental Release Measures

Personal precautions: Wear protective clothing. Avoid contact with skin. Avoid breathing vapors. Remove all potential sources of ignition. Evacuate personnel to safe areas. Vapors may accumulate to form explosive concentrations. Vapors may collect in low areas.

Environmental precautions: Prevent entry into waterways or confined areas.

Methods for clean-up: Absorb spill onto sand, vermiculite, or any other inert, non-combustible material. Scoop into containers for later appropriate disposal.

SECTION 7 Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. Avoid handling of vapor or mist. Do not permit eating, drinking, smoking near material. Remove all potential sources of ignition.

Storage: Keep containers tightly closed, in dry, cool, well ventilated place. Do not store together with strong oxidizing agents.

SECTION 8 Exposure Control / Personal Protection

Exposure limit values: TLV –ACGIH 100 ppm (TWA), 150 ppm (STEL)
OSHA-PEL 100 ppm (TWA)
MAK-GER 440 mg/m³ (TWA)
REL-NIOSH 100 ppm (TWA), 150 ppm (STEL)

Occupational exposure controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Respiratory protection: Wear suitable NIOSH approved respirator when ventilation is inadequate

Hand protection: Chemically compatible gloves

Eye protection: Safety glasses with side shields

Skin protection: Minimize skin contact with appropriate long-sleeved clothing



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Hygiene measures: Observe good industrial hygienic practices. Frequently launder or discard proactive clothing, equipment.

Environmental exposure controls: Emissions from work process equipment should be checked against requirements of appropriate environmental protection legislation. In some cases alteration to work process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9 Physical and Chemical Properties

General

Physical state: liquid
Color: clear
Odor: characteristic aromatic

Safety Data

pH: not available
Boiling point: 168°C / 335°F
Flash point: 27°C / 81°F
Flammable limits (approximate volume % in air): LEL: 1.0 UEL: 6.6
Autoignition temperature: 462°C / 864°F
Vapor pressure (mm Hg.): 9mm/Hg @ 25°C / 77°F
Water solubility: negligible
Vapor density (air = 1): 4.3
Specific gravity (water = 1): .88
VOC: <400 g/L

SECTION 10 Stability and Reactivity

Stability: Stable under normal conditions

Conditions to avoid: heat, flame, sparks, other sources of ignition; prevent vapor accumulation

Materials to avoid: Strong oxidizing agents. CAUTION: N-Nitrosamines many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites, or atmospheres with high nitrous oxide concentration. Nitrous acids and other nitrosating agents. Organic and mineral acids. Sodium hypochlorite. Reaction with peroxides may result in violent decomposition of peroxide that may possibly cause explosion.

Hazardous decomposition products: Nitric acid. Ammonia. Nitrogen Oxides. Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon Dioxide. Nitrosamine.

SECTION 11 Toxicological Information

Acute Toxicity

Route of Exposure	Conclusion / Remarks
<i>Inhalation</i>	
Toxicity : LC50 > 5000 ppm 3670 ppm (m) rat 8 hours	No deaths
Irritation: data available	Elevated temperatures or mechanical action may form vapors, mist, or fumes that may be irritating to the eyes, nose, throat, or lungs based on available

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	literature
<i>Ingestion</i>	
Toxicity: LD50 > 4700 mg/kg	No deaths
<i>Skin</i>	
Toxicity: LD50 > 4320 mg/kg 4 ml/kg Rat	No deaths
Irritation: data available	Irritating to the skin based on available literature
<i>Eye</i>	
Irritation: data available	Moderately irritating to the eyes based on available literature

Chronic / Other Effects

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or vomiting may cause chemical pneumonitis or pulmonary edema. Very high exposures (confined space or abuse) to light hydrocarbons may result in abnormal heart rhythm. Concurrent high stress levels and / or co-exposure to high levels of hydrocarbons (above occupational exposure limits) and exposure to heart stimulating substances like epinephrine, nasal decongestants, asthma drugs, or cardiovascular drugs may initiate arrhythmias. Studies have revealed carcinogenicity in laboratory animals. The relevancy of these findings to humans is uncertain.

SECTION 12 Ecological Information

Ecotoxicity: Material expected to be toxic to aquatic organisms

Mobility: Material highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids

Persistence and degradability

Biodegradation: expected to be readily biodegradable

Atmospheric oxidation: expected to degrade rapidly in atmosphere

Bioaccumulation potential: very low potential to bioaccumulate

Other: material is VOC

SECTION 13 Disposal Considerations

Methods of disposal: waste must be disposed of in accordance with federal, state, and local environmental control regulations.

Hazardous waste: European waste code 14 06 03. The material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that directive unless Article 1(5) of the Directive applies.



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Section 14 Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Additional information	Marine pollutant
DOT	1307	Xylene, solution	3	III		NA
ADR/RID class	1307	Xylene, solution	3	III		NA
IMDG class	1307	Xylene, solution	3	III		No
IATA class	1307	Xylene , solution	3	III		NA

SECTION 15 Regulatory Information**US FEDERAL****OSHA Hazards:** Combustible liquid**TSCA Inventory Listing:** listed or exempt**SARA 302 Status:** no chemicals to report**SARA 311/312 Classification:** Fire hazard. Immediate (Acute) Health Hazard. Delayed (Chronic) Health Hazard**SARA 313:**

Chemical	CAS #	% by weight
Xylene	1330-20-7	<5%
1,2,4 Trimethylbenzene	95-63-6	<40%
Cumene	98-82-8	<2%

CERCLA Hazardous Substance: none**WHIMS:** Class B, Division 3: Combustible liquid**EU**

Material is dangerous as defined by the EU Dangerous Substances / Preparations Directives

Risk phrases: R10: flammable
 R38: irritating to skin
 R20/21: harmful by inhalation and contact with skin

Safety advice: S02: keep out of reach of children
 S25: Avoid contact with skin

Dangerous as defined by EU CLP 2008:*Physical/chemical properties:*

Flammable liquids: flam. liquid 3:

H226: flammable liquid and vapor

Health hazards:

Skin corrosion / irritation: skin irrit. 2:

H315: causes skin irritation

Acute toxicity – inhalation: acute tox. Cat. 4:

H332: harmful if inhaled

Acute toxicity – dermal: acute tox. Cat. 4:

H312: harmful in contact with skin



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Precautionary statements

P210: keep away from heat, sparks, open flame, hot surfaces / no smoking

P243: take precautionary measures against static discharge.

P261: avoid breathing dust, fumes, gas, mist, vapor, spray

P280: wear protective gloves, clothing, eye and face protection

P303+P361+P353: if on skin / hair: remove / take off immediately all contaminated clothing; rinse with water

INTERNATIONAL REGULATIONS

AICS: listed

MITI: listed

DSL / NDSL: listed

EINECS: listed

PICCS: listed

Korean, China Inventory List: listed

STATE REGULATIONS

California Prop.65: This product contains trace elements known to the State of California to cause cancer, birth defects, or reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove the defined risks do not exist.

SECTION 16 Other Information

Hazard Ratings

	<i>health</i>	<i>flammability</i>	<i>reactivity</i>
HMIS	2	2	0
NFPA	1	2	0

Full text of R-phrases referred to in section 2:

R10: flammable

R11: highly flammable

R38: irritating to skin

R20: harmful by inhalation

R20/21: harmful by inhalation and in contact with skin

Full text of hazard statements referred to in section 2:

H225: highly flammable liquid and vapor

H226: flammable liquid and vapor

H332: harmful if inhaled

H312: harmful in contact with skin

H315: causes skin irritation

Recommended restriction: for use by trained professionals, having read the complete MSDS



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Key Legend:

ACGIH – American Conference of Governmental Industrial Hygienists
HMIS - National Paint and Coating Hazardous Materials Identification System
NFPA – National Fire Protection Agency
OSHA – Occupational Safety and Health Administration
WHIMS – Workplace Hazardous Materials Information System
AICS – Australian Inventory of Chemical Substances
MITI – Japanese Ministry of Trade and Industry Inventory Listing
DSL – Canadian Domestic Substance List
NDSL - Canadian Non-domestic Substance List
EINECS – European Inventory of Existing Commercial Chemical Substances Listing
PICCS – Philippines Inventory List
NTP – National Toxicology Program
IARC – International Agency for Research on Cancer
R – Risk Phrases
S – Safety Phrases

Date of printing 09/26/2011

According to Regulation (EC) No. 1907/2006 (REACH), Annex II, Commission Directive 2001/59/EC and REGULATION (EC) No. 1272/2008 (CLP)

To the best of our knowledge the information contained here is accurate. However, neither the above named manufacturer nor any of its distributors assumes any liability whatsoever for the accuracy or the completeness of the information contained herein. Final determination of the 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.



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SECTION 1 Product and Company Identification

Product

Product Name: XS-PC12 (B)
Product Description: Finishing aid
Intended Use: Precast sealer

Company

Manufacturer: SureCrete Design Products, Inc.
15246 Citrus Country Drive
Dade City, FL 33523
USA
Contact: 352-567-7973 (telephone general)
813-469-1408 (telephone 24 hour emergency)
813-469-1419
info@surecretedesign.com (e-mail)
352-521-0973 (facsimile)

SECTION 2 Hazards Identification

Warning!

Health : Toxic gases / fumes may be given off during burning or thermal decomposition. May cause lung damage.

Physical: Closed container may be ruptured under extreme heat our when contents have been contaminated with water.

SECTION 3 Composition / Information on Ingredients

This material is regulated as a mixture

Ingredient	CAS #	EC#	% (by weight)
Hazardous			
Homopolymer of Hexamethylene Diisocyanate	28182-81-2	NE	<75%
Hexamethylene-1,6-Diisocyanate	822-06-0	NA	<1%
Xylene	1330-20-7	215-535-7	<25%
n-Butyl Acetate	123-86-4	NA	<30%
Ethyl Benzene	100-41-4	NA	<1%

SECTION 4 First Aid Measures

Eye Contact: Rinse with running water for 15 minutes. Hold eyelids apart while irrigating. Rest eyes for 30 minutes. If irritation continues, transport to nearest medical facility for treatment.



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Skin Contact: Immediately remove contaminated clothing. Wash affected area thoroughly with soap and water. Wash clothing before reuse. If irritation continues, transport to nearest medical facility for treatment.

Inhalation: Move to fresh air. Administer artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Get medical attention immediately. Do not induce vomiting. Get medical attention.

SECTION 5 Fire Fighting Measures

Extinguishing Media

Foam, CO₂, Dry chemical, water spray for large fires.

Special Fire Fighting Procedures: Full protective equipment, including self-contained breathing apparatus required. Water may be ineffective in fighting fire. Avoid contact with product. Highly toxic gases may be generated.

Unusual Fire and Explosion Hazard: Closed container may forcibly rupture under extreme heat or when contents are contaminated with water. Use cold water spray to minimize risk of rupture. Large fires can be extinguished with large volumes of water applied from a safe distance, since reaction between water and diisocyanate can be vigorous.

Flammability Properties

Flash Point (Method): 33°C / 127°F

Flammable Limits (Approximate volume % in air): LEL: .8 UEL: 7.6

Autoignition Temperature: >400°C / 752°F

SECTION 6 Accidental Release Measures

Personal precautions: Wear protective equipment. Avoid contact with skin. Avoid breathing vapors. Remove all potential sources of ignition. Evacuate personnel to safe areas. Vapors may accumulate to form explosive concentrations.

Environmental precautions: Control source of leak. Prevent entry into waterways or confined areas.

Methods for clean-up: Absorb spill onto sand, vermiculite, or any other inert, non-combustible material. Scoop into open head metal containers for later appropriate disposal. Saturate absorbent material with neutralizing solution (80% water + 20% non-ionic surfactant). Apply loose lid, allow to vent for 72 hours, letting CO₂ escape.

SECTION 7 Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. Do not breathe vapor or mist. Use adequate ventilation. Do not permit eating, drinking, smoking near material.

Storage: Store at temperatures between -34°C (34°F) and 50°C (122°F) Keep containers tightly closed, in dry, cool, well ventilated place.

SECTION 8 Exposure Control / Personal Protection

Exposure limit values: Bayer Exposure Limit
TWA: 0.5 mg/m³



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STEL: 1.00 mg/m³ (15 min.)

Occupational exposure controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Respiratory protection: Wear suitable NIOSH approved respirator when ventilation is inadequate. May require supplied air, either positive pressure or continuous flow type.

Hand protection: Chemically compatible gloves

Eye protection: Safety glasses with side shields, goggles, or full face shield.

Skin protection: Minimize skin contact with appropriate long-sleeved clothing

Hygiene measures: Observe good industrial hygienic practices. Frequently launder or discard proactive clothing, equipment.

Medical Surveillance: All individuals that are to work with product must undergo medical pre-placement screening. No individual may have a history of pulmonary problems: adult asthma, hay fever. Any worker that is diagnosed with sensitization to isocyanate must be excluded from any exposure.

Environmental exposure controls: Emissions from work process equipment should be checked against requirements of appropriate environmental protection legislation. In some cases alteration to work process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9 Physical and Chemical Properties

General

Physical state: liquid

Color: clear / pale yellow

Odor: solvent, yet fruity

Safety Data

pH: not applicable

Boiling point: 125°C / 257°F

Flash point: 33°C / 92°F

Flammable limits (approximate volume % in air): LEL: 0.8 UEL: 7.6

Autoignition temperature: 400°C / 752°F

Vapor pressure: 7 – 9 mmHg @ 20°C / 68°F (for solvent)

Water solubility: insoluble / reacts slowly with water to liberate CO₂ gas

Bulk density: 9.68 lbs/gal.

Specific gravity (water = 1): 1.06

VOC: 41% by weight (A and B combined)

SECTION 10 Stability and Reactivity

Stability: Stable under normal conditions

Conditions to avoid: none known

Materials to avoid: water, amines, strong bases, alcohols, copper alloys

Hazardous decomposition products: by fire and high heat - CO₂, CO, oxides of nitrogen, dense black smoke, hydrogen cyanide, isocyanate, isocyanic acid, other undetermined compounds.

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SECTION 11 Toxicological Information

Acute Toxicity

Route of Exposure	Conclusion / Remarks
<i>Inhalation</i>	
Toxicity : LC50: 390 – 453 mg/m ³ , aerosol (rat) RD50: 20.8 mg/m ³ , 3 hours	No deaths
Irritation: data available	irritating to the eyes, nose, throat, or lungs based on available literature
<i>Ingestion</i>	
Toxicity: LD50 > 5,000 mg/kg (rat)	No deaths
<i>Skin</i>	
Toxicity: LD50 > 5000 mg/kg (rabbit)	No deaths
Irritation: data available	Irritating to the skin based on available literature
<i>Eye</i>	
Irritation: data available	Moderately irritating to the eyes based on available literature

SECTION 12 Ecological Information

Ecotoxicity: Material expected to be toxic to aquatic organisms

Acute and prolonged toxicity to fish	LC0: >100 mg/L	Zebra fish	Brachydanio rerio	96 hours
Acute toxicity to aquatic invertebrates	EC0: >100 mg/L	Water flea	Daphnia magna	48 hours
Toxicity to aquatic plants	EC50: >1000 mg/L	Green algae	Scenedesmus subspicatus	72 hours
Toxicity to microorganisms	EC50: >1000 mg/L	Sludge bugs	microorganisms	3 hours

Persistence and degradability: not readily biodegradable

SECTION 13 Disposal Considerations

Methods of disposal: waste must be disposed of in accordance with federal, state, and local environmental control regulations.

Hazardous waste: European waste code 14 06 03. The material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that directive unless Article 1(5) of the Directive applies.

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<i>Regulatory Information</i>	<i>UN number</i>	<i>Proper shipping name</i>	<i>Class</i>	<i>Packing group</i>	<i>Additional information</i>	<i>Marine pollutant</i>
DOT	1866	Resin solution	3	III		NA
ADR/RID class	1866	Resin solution	3	III		NA
IMDG class	1866	Resin solution	3	III	EMS-No: F-E, S-D	No
IATA class	1866	Resin solution	3	III		NA

SECTION 15 Regulatory Information

US FEDERAL

OSHA Hazards: hazardous

TSCA Inventory Listing: listed or exempt

SARA 302 Status: no chemicals to report

SARA 311/312 Classification: Immediate (Acute) Health Hazard. Delayed (Chronic) Health Hazard. Reactivity Hazard.

SARA 313: no chemicals to report

CERCLA Hazardous Substance: reportable quantities greater than packaging limits

INTERNATIONAL REGULATIONS

DSL: listed

STATE REGULATIONS

California Prop.65: This product does not contain elements known to the State of California to cause cancer, birth defects, or reproductive harm.

SECTION 16 Other Information

Hazard Ratings

	<i>health</i>	<i>flammability</i>	<i>reactivity</i>
HMIS	2	3	1
NFPA	3	3	1

Recommended restriction: for use by trained professionals, having read the complete MSDS

Key Legend:

ACGIH – American Conference of Governmental Industrial Hygienists

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PICCS – Philippines Inventory List
NTP – National Toxicology Program
IARC – International Agency for Research on Cancer
R – Risk Phrases
S – Safety Phrases

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