

Safety Data Sheet

According to 1907/2006/EC (REACH) and

Version: 1.4

Revision: 11/7/2023

Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name: E100-PT1™ Part A

1.2 Article No.: E100-PT1™ Part A

1.3 Details of the supplier of the Safety Data Sheet Manufacturer:

Elite Crete Systems
 1151 Transport Drive
 Valparaiso, IN 46383
 Toll Free: 888.323.4445
 Tel: (219) 465-7671
elitecrete.com

1.4 Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300)
 CHEMTREC INTERNATIONAL: (703-527-3887)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 and GHS:

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H361fd, H411.

The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H361.

Skin Irrit. 2 H-315: Causes skin irritation
 Eye Damage 1; H318: Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2; H411: Toxic to aquatic life with long lasting effects.



GHS07 exclamation mark

Acute Tox. 2; H302: Harmful if swallowed.
 Skin Sensitization 1; H317: May cause an allergic skin reaction. STOT SE 3; H335: May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:

Xn; Harmful. R22-62: Harmful if swallowed. Possible risk of impaired fertility. Xi; Sensitizing. R43: May cause sensitization by skin contact
 Xi; Irritant. R37: Irritating to respiratory system. R22-48: Harmful if swallowed.
 N; Dangerous for the environment. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements

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Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

Labeling according to Regulation (EC) No 1272/2008:

Hazard pictograms:



GHS07

GHS09

Signal Word: Warning**Hazard-determining components of labeling:**

Bisphenol A based Epoxy Resin, Alkyl C-12-C-14 Glycidyl Ether

Hazard statements

H312: Harmful in contact with skin

H317: May cause an allergic skin reaction

H412: Harmful to aquatic life with long lasting effects

Precautionary statements

P264: Wash hands thoroughly after handling

P270: Do not eat, drink or smoke when using this product

P271: Use only in well ventilated area.

P273: Avoid release to the environment

P280: Wear protective gloves/protective clothing/eye protection/face protection

P337+P313: If eye irritation persists: Get medical advice/attention.

P370+P378: In case of fire: Use for extinction: CO2, powder or water spray.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P391: Collect spillage.

P403+P235: Store in a well-ventilated place. Keep cool.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 Other hazards**Results of PBT and vPvB assessment:**

PBT: Not applicable.

vPvB: Not applicable.

Hazard description:

Canadian WHMIS Classification: This product is categorized as a Class D Division 2B Materials causing other toxic effects, as per the Controlled Product Regulations

WHMIS-symbols:**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health	2
Fire	1
Reactivity	0

Health = 2

Fire = 1

Reactivity = 0

2.3 Other hazards**No known**

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Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

3 Composition/information on ingredients

3.2 Mixture.

Description: Mixture of substances listed below with nonhazardous additives.

Hazardous components:

Identification #	Description	WT. %
CAS: 25085-99-8 EINECS: Not Listed Index Number:	Bisphenol A based Epoxy Resin HAZARD CLASSIFICATION: [Xn] Harmful, [Xi] Irritant RISK PHRASES: R21, R34, R43, R52/53	< 85-92%
CAS: 68609-97-2 EINECS: 271-846-8 Index Number:	Alkyl C-12-C-14 Glycidyl Ether Skin Irritant 1, Skin Sens. 1, Muta. 2; Aquatic Chronic 2; R 43; Xi 38; R 38, R43.	< 8-15%

Additional information: Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

4 First aid measures

4.1 Description of first aid measures

After inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

After skin contact:

Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

After eye contact:

If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention.

After swallowing:

If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

4.2 Most important symptoms and effects, both acute and delayed.

Acute: This material may cause irritation to skin and eyes. Product may cause an allergic skin reaction.

Chronic: Prolonged or repeated skin contact may cause allergic skin reaction or dermatitis.

Target Organs: **Acute:** Eye, Skin **Chronic:** Skin

Hazards: Pre-existing skin or eye problems may be aggravated by exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptoms and reduce over-exposure.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Carbon dioxide, foam, dry chemical, halon, water spray, sand, limestone powder.

5.2 Special hazards arising from the substance or mixture:

This product is a flammable liquid above flash point shown.

5.3 Advice for firefighters:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

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Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Personnel should be trained for spill response operations.
- 6.2 Environmental precautions:** All work practices must be aimed at eliminating environmental contamination.
- 6.3 Methods and material for containment and cleaning up:** Evacuate area. Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up spilled material with an absorbent material and pick up and place in an appropriate waste container for disposal. Do not mix with other wastes. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

7 Handling and storage

7.1 Precautions for safe handling

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store between 10 and 50 0C (45 -125 0F) and avoid contact with skin and eyes. Do not store near acids or amines. Ground all transfer equipment. Good general housekeeping procedure should be followed. Do not eat drink or smoke while using the material. Emergency showers should be readily available. Material may partially freeze in cold temperatures which will result in crystals and haziness. If this occurs rewarm and homogenize. Avoid contact with skin eyes. Vapors may irritate eyes and will irritate the skin. Use only with good ventilation and PPE. Keep container closed when not in use.

7.3 Specific end use(s): No information

8 Exposure controls/personal protection

Additional information about design of technical facilities:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory protection: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

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Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

Protection of hands: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

Protective gloves



Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be determined by the manufacturer of the protective gloves. DO NOT exceed the breakthrough time set by the Manufacturer.



Eye protection: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

Tightly sealed goggles

Body Protection:

Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:	
Form:	Liquid
Color:	Clear – Slight amber haze
Odor:	Mild epoxy odor
Odor threshold:	Not Available
pH-value:	Not Available
Change in condition	
Melting point/Melting range:	No data available
Boiling point/Boiling range:	>200°C
Flash point:	>392°F (>200°C)
Flammability (solid, gaseous):	No data available
Auto/Self-ignition temperature:	Not established
Decomposition temperature:	No data available
Self-igniting:	No data available
Danger of explosion:	This product is a flammable liquid above flash point shown above.
Explosion limits	
Lower:	Not established
Upper:	Not established
Vapor pressure at 25 °C:	<0.1 mmHg
Density at 20°C:	9.45 lbs. per gallon, specific gravity 1.13
Relative density:	No data available

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Vapor density:	No data available
Evaporation rate:	No data available
Solubility in / Miscibility with Water:	Not Available
Specific Gravity 20oC: (Water = 1):	Not Available
Viscosity:	
Dynamic:	No data available
Kinematic:	No data available
Solvent content:	
Organic solvents:	No data available
VOC (EC)	No data available
9.2 Other information	No data available

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability: Product is stable

Thermal decomposition / conditions to be avoided: When heated to decomposition this product produces noxious gases such as CO, CO₂, hydrocarbons and soot.

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: Contact with incompatible materials

10.5 Incompatible materials: Oxidizing agents and amines should be avoided as these will cause exothermic polymerization. Avoid extreme heat

10.6 Hazardous decomposition products: Will not occur

11 Toxicological information

11.1 Information on toxicological effects: Toxicity data is available for this product

Acute toxicity:

Acute Dermal	LD 50	>20,000 mg/kg	Rabbit
Acute Oral	LD 50	>5,000 mg/kg	Rat

Primary irritant effect: Contact with this product can be irritating to exposed skin and eyes.

Sensitization: This product is considered a skin sensitizer.

Additional toxicological information:

None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.

Reproductive toxicity information:

No information concerning the effects of this product and its components on the human reproduction system.

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Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No evidence is currently available on this product's effects on aquatic life.

Component Data: CAS# 25085-99-8

Fathead Minnow LC50 3 mg/l 96 h

Toxicity to daphnia magna EC50 1.4 -1.7 mg/l 24 h

Bacteria: IC50 >42.6 mg/l 18 h

Biodegradation: 28 days 12% OECD

Bioaccumulation: Not readily biodegradable

12.2 Persistence and degradability: No data available

12.3 Bio accumulative potential: No data available

12.4 Mobility in soil: No evidence is currently available on this product's effects on plants or animals.

Ecotoxicological effects:

Remark:

Additional ecological information: No data available

General notes: No specific data is available for this product; however, this product is expected to be readily biodegradable

13 Disposal considerations

13.1 Waste treatment methods

Recommendations:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

RCRA WASTE CODE: None Listed

EU WASTE CODE: Not Listed

14 Transport information

14.1 UN-Number

DOT: CAN:

ADN: ADR: IMDG: IATA:

NOT REGULATED

UN 3082

14.2 UN proper shipping name

DOT: CAN:

ADN: ADR: IMDG: IATA:

NOT REGULATED

Environmentally Hazardous Substance liquid,
N.O.S. (Bisphenol A epoxy resin)

14.3 Transport hazard class(es)

DOT: CAN:



ADR: ADN: IMDG: IATA



14.4 Packing group

DOT: CAN:

NOT REGULATED

ADN: ADR: IMDG: IATA

PG III

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Trade Name: E100-PT1™ CRYSTAL CLEAR EPOXY – Part A
14.5 Environmental hazards

Product contains environmentally hazardous substances: reaction Products of Epichlorohydrin and Bisphenol A)

Marine Pollutant:

YES

Special Marking (ADR):



Notes: marine pollutant (IMDG code 2.9.3). For air transport, see special provision A97. (ICAO/IATA). For surface shipments within the USAL Not Regulated.

14.6 Special precautions for user

Danger code (Kemler):

NOT APPLICABLE

EMS Number:

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

NOT APPLICABLE

Transport/Additional information

ADR

Tunnel restriction code

NOT APPLICABLE

UN "Model Regulation":

NOT APPLICABLE

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. United States (USA)

SARA: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.: None

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Toxic Release Inventory): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed

Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H312: Harmful in contact with skin
H317: May cause an allergic skin reaction
H412: Harmful to aquatic life with long lasting effects
R21: Harmful in contact with skin
R34: Causes burns
R43: May cause sensitization by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation.
IATA: International Air Transport Association.
ACGIH: American Conference of Governmental Industrial Hygienists.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
NFPA: National Fire Protection Association (USA).
HMIS: Hazardous Materials Identification System (USA).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.3

Revision: 11/7/2023

Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name: E100-PT1™ Part B

1.2 Article No.: E100-PT1™ Part B

1.3 Details of the supplier of the Safety Data Sheet Manufacturer:

Elite Crete Systems
1151 Transport Drive
Valparaiso, IN 46383
Toll Free: 888.323.4445
Tel: (219) 465-7671
elitecrete.com

1.4 Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300)
CHEMTREC INTERNATIONAL: (703-527-3887)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 and GHS:

Reproductive Toxicity Category 2
Acute Inhalation Toxicity Category 4
Acute Oral Toxicity Category 4
Skin Sensitization Category 1
Skin Corrosion/Irritation Category 2
Acute Aquatic Toxicity Category 1
Chronic Aquatic Toxicity Category 2

Classification according to Directive 1999/45/EC:



C; Corrosive.



R34: Causes burns.



Xn; Harmful.



R22: harmful if swallowed.



Xi; Sensitizing.



R43: May cause sensitization by skin contact.



N; Dangerous for the environment



R50: Very toxic to aquatic organisms.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification System:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008:

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Version: 1.3

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Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

Hazard pictograms:



GHS05 GHS07 GHS08 GHS09

Signal Word: Danger

Hazard-determining components of labeling:

Contains: Benzene- 1,3-Diamethanamine, Trimethylhexamine-1,6-Diamine. May produce and allergic skin reaction.

Hazard statements:

- H361: Suspected of damaging fertility or the unborn child.
- H302 Harmful if swallowed.
- H332: Harmful inhaled.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H400: Vary toxic to aquatic life.
- H401: Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P260: Do not breath dust/fume/gas/mist/vapors/spray
- P264: Wash hands thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P271: Use only in well ventilated area.
- P273: Avoid release to the Environment
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P370+P378: In case of fire: Use for extinction: CO2, powder or water spray.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P391: Collect spillage.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard description:

Canadian WHMIS Classification:

- D2B – Toxic material causing other toxic effects.
- E – Corrosive material

WHMIS-symbols:



NFPA ratings (scale 0 – 4)



Health = 3
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 – 4)

Health	3
Fire	1
Reactivity	0

Health = 3
Fire = 1
Reactivity = 0

2.3 Other hazards

No known

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Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

3 Composition/information on ingredients

3.2 Mixture.

Description: Mixture of substances listed below with nonhazardous additives.

Hazardous components:

Identification #	Description	WT. %
CAS: 98-54-4 EINECS: 202-679-0	Paratertiarybutyphenol HAZARD CLASSIFICATION: [C] Corrosive, [N] Dangerous to the Environment RISK PHRASES: R34, R51/53	28– 35%
CAS: 1477-55-0 EINECS: 216-032-5	Benzene-1,3-dimethanamine HAZARD CLASSIFICATION: [C] Corrosive RISK PHRASES: R34	20– 35%
CAS: 25620-58-0 EINECS: 247-134-8	Trimethylhexamethylenediamine HAZARD CLASSIFICATION: [Xn] Harmful RISK PHRASES: R37, R43	12 – 30%
CAS: 25154-52-3 EINECS: 246-672-0	Nonyl Phenol HAZARD CLASSIFICATION: Repr Cat 3, [Xn] Harmful, [C] Corrosive, [N] Dangerous to the Environment RISK PHRASES: R22, R62, R63, R34, R50/53	1 – 5%
CAS: 9046-10-0	Alpha-(2-Aminomethyl) omega-(2-aminomethylethoxy)-poly(oxy)(methyl-1,2-ethanediyl) HAZARD CLASSIFICATION: (Xn) Harmful RISK PHRASES: R36/38; Xi R43; N51/53; Aquatic Chronic 3, H412; Skin Irrit. 1C, H314, Eye Irrit. 2, H319, Skin Sens 1, H317	10-20%

Additional information: Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

4 First aid measures

4.1 Description of first aid measures

After inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

After skin contact:

Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

After eye contact:

If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation develops.

After swallowing:

If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

4.2 Most important symptoms and effects, both acute and delayed.

Acute: This material is harmful if inhaled and may cause delayed lung injury. This material may cause irritation to the respiratory tract and skin and even burns. Product may cause an allergic skin reaction.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

Target Organs: **Acute:** Eye, Respiratory System, Skin **Chronic:** Skin

Hazards: Pre-existing skin or respiratory system problems may be aggravated by exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptoms and reduce over-exposure.

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.3

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Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Carbon dioxide, foam, dry chemical, halon, water spray, sand, limestone powder.

5.2 Special hazards arising from the substance or mixture:

This product is flammable above flash point indicated above.

5.3 Advice for firefighters:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Personnel should be trained for spill response operations.

6.2 Environmental precautions: All work practices must be aimed at eliminating environmental contamination.

6.3 Methods and material for containment and cleaning up: Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with a non-combustible absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

7 Handling and storage

7.1 Precautions for safe handling

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Storage:**Requirements to be met by storerooms and receptacles:**

Store between 5° and 300C and avoid contact with skin and eyes. Do not store near acids. Ground all transfer equipment. Hold bulk storage under a nitrogen blanket. This product should not come in contact with copper or copper-bearing alloys. Containers of this product must be properly labeled. Nitrogen purging of containers is ideal and good practice.

7.3 Specific end use(s): No information

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8 Exposure controls/personal protection

Additional information about design of technical facilities:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory protection: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

Protection of hands: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.



Protective gloves

Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Eye protection: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.



Safety goggles

Body Protection:

Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:

Liquid

Color:

Clear pale straw color

Odor:

Mild epoxy odor

Odor threshold:

Not Available

pH-value:

Not Available

Change in condition

Melting point/Melting range:

No data available

Boiling point/Boiling range:

>392°F (200°C)

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.3

Revision: 11/7/2023

Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

Flash point:	>392°F (>200°C)
Flammability (solid, gaseous):	No data available
Auto/Self-ignition temperature:	Not established
Decomposition temperature:	No data available
Self-igniting:	No data available
Danger of explosion:	This product is a flammable liquid above flash point shown above.
Explosion limits	
Lower:	Not established
Upper:	Not established
Vapor pressure at 20 °C:	<0.1 mmHg @ 25°C
Density at 20°C:	No data available
Relative density:	8.10 pounds per gallon @ 25°C (SP 0.972)
Vapor density:	No data available
Evaporation rate:	No data available
Solubility in / Miscibility with Water:	Not Available
Specific Gravity 20oC: (Water = 1):	Not Available
Viscosity:	
Dynamic:	No data available
Kinematic:	No data available
Solvent content:	
Organic solvents:	No data available
VOC (EC)	No data available
9.2 Other information	No data available

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability: Product is stable

Thermal decomposition / conditions to be avoided: When heated to decomposition this product produces noxious gases such as CO, CO₂, NO_x, amines, ammonia and others.

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: Contact with incompatible materials

10.5 Incompatible materials: Oxidizing agents and amines should be avoided as these will cause exothermic polymerization. Avoid extreme heat

10.6 Hazardous decomposition products: Will not occur

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.3

Revision: 11/7/2023

Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

11 Toxicological information

11.1 Information on toxicological effects: Toxicity data is available for this product

Acute toxicity:

Acute Dermal	LD 50	>2,000 mg/kg	Rabbit
Acute Oral	LD 50	1,750 mg/kg	Rat

Primary irritant effect: Contact with this product can be irritating to exposed skin, eyes and respiratory system.

Sensitization: This product is considered a skin sensitizer.

Additional toxicological information:

None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies. CAS# 64742-53-6 is classified in the EU as a possible cancer-causing material.

Reproductive toxicity information: No information concerning the effects of this product and its components on the human reproduction system.

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No data available

12.2 Persistence and degradability: No data available

12.3 Bio accumulative potential: No data available

12.4 Mobility in soil: No evidence is currently available on this product's effects on plants or animals.

Ecotoxicological effects:

Remark:

Additional ecological information: No data available

General notes:

Component Information:

nonyl phenol CAS# 25154-52-3

Acute Fish Toxicity 96 hr LC50 0.13 mg/l fathead minnow (Pimephales promelas)

48 hr EC50 0.19 mg/l Daphnia Magna

Harmful to aquatic organisms. May cause long term damage to environment

13 Disposal considerations

13.1 Waste treatment methods

Recommendations:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

RCRA WASTE CODE: D002

EU WASTE CODE: To Be Established

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.3

Revision: 11/7/2023

Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

14 Transport information

14.1 UN-Number

DOT: CAN: ADN: IMDG: IATA:
ADR

UN 2735
UN2735

14.2 UN proper shipping name

DOT: CAN: ADN: IMDG: IATA:

Amines, Liquid, Corrosive, N.O.S. (Contains Benzene-1,3-Dimethanamine, Trimethylhexane-1,6-Diamine)
2735 Amines, Liquid, Corrosive, N.O.S. (Contains Benzene-1,3-Dimethanamine, Trimethylhexane-1,6-Diamine)

ADR

14.3 Transport hazard class(es)

DOT: CAN: ADN: IMDG: IATA:

CLASS:

8 Corrosive substances

LABELS:



ADR:

CLASS:

8 (C7) Corrosive substances

LABELS:



14.4 Packing group

DOT: CAN: ADR: ADN: IMDG: IATA: PG II

14.5 Environmental hazards:

Marine pollutant:

YES

Special marking (ADR)



14.6 Special precautions for user

Danger code (Kemler):

Warning Corrosive substances

EMS Number:

80
F-A, S-B

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

No data available

Transport/Additional information

ADR

Limited Quantities (LQ)

Excepted Quantities (EQ)

5L

Code E1

Maximum net quantity per inner packaging 30 ml

Maximum net quantity per outer packaging 1000ml

Transport category

Tunnel restriction code

3

E

UN "Model Regulation":

UN2735 Amines, Liquid, Corrosive, N.O.S. (Contains Benzene-1,3-Dimethanamine, Trimethylhexane-1,6-Diamine), 8, II

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.3

Revision: 11/7/2023

Trade Name: E100-PT1™ – Crystal Clear Epoxy – Part B

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

United States (USA)

SARA: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.: None

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Toxic Release Inventory): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed

Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Hazard statements:

- H361: Suspected of damaging fertility or the unborn child.
- H302 Harmful if swallowed.
- H332: Harmful inhaled.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H400: Very toxic to aquatic life.
- H401: Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P260: Do not breathe dust/fume/gas/mist/vapors/spray
- P264: Wash hands thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P271: Use only in well ventilated area.
- P273: Avoid release to the Environment
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P370+P378: In case of fire: Use for extinction: CO2, powder or water spray.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P391: Collect spillage.
- P403+P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Abbreviations and acronyms:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation.
- IATA: International Air Transport Association.
- ACGIH: American Conference of Governmental Industrial Hygienists.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ELINCS: European List of Notified Chemical Substances.
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- NFPA: National Fire Protection Association (USA).
- HMIS: Hazardous Materials Identification System (USA).
- LC50: Lethal concentration, 50 percent.
- LD50: Lethal dose, 50 percent.

TD.462 – TECHNICAL DATA: E100-PT1™ Clear Epoxy

Revised: 11/7/2023 Version: 1.8

Product Class: A thin or high build clear epoxy coating and mortar binder for commercial and industrial applications.

Description: E100-PT1™ Clear Epoxy is 100% solids, low viscosity, water-clear, non-shrink, two-component epoxy designed for a wide variety of applications. E100-PT1™ Clear Epoxy will not blush or water spot and has excellent physical and chemical resistant properties. E100-PT1™ Clear Epoxy is available in standard and fast set formulas.

Typical Uses:

- Sealing and protecting interior concrete floors
- Primer for epoxy mortars
- Clear protective top coat for epoxy applications
- As a clear protective coating for interior flooring, polymer modified concrete overlays, and industrial floors
- As a thin textured "orange peel" finish for industrial floors
- Crack repair, joint repair, or surface repair mixes
- **REFLECTOR™ Enhancer Flooring Systems:** As base coat where a vapor barrier epoxy is not required, as the pigment/color coat and as a clear top coat.
- **HERMETIC™ Neat Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Flake Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Color Quartz Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Stout Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Paramount Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment, slurry binder and as a clear top coat.
- **HERMETIC™ Paramount Heavy Duty:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment, trowel mix binder and as a clear top coat.

Key Features:

- High-gloss, non-blush film
- Near zero odor
- 100% solids (0% VOC)
- Non-shrink coating
- Self-leveling and air releasing
- Low viscosity
- Antimicrobial
- Easily pigmented in the field
- Fast cure rate
- Excellent strength properties
- Excellent impact resistance
- Easy to place
- Unsurpassed adhesion properties
- USDA, CFIA, and FDA compliant
- 2 to 1 ratio by volume

Product Properties: Material and curing conditions at 73° F / 23° C unless noted, 50% R.H.

	<u>Standard Cure</u>	<u>Fast Set</u>
• Color: Clear	• Tack free: 7 to 8 hours	3 to 4 hours
• Viscosity @ 73° F / 23° C	• Foot traffic: 24 hours	12 hours
o Part A: 500 cps	• All traffic: 72 hours	24 hours
o Part B: 120 cps		
o Mixed: 300 cps		
• Pot Life: 15 minutes (standard set) 10 minutes (fast set)		

Physical Properties

@73° F / 23° C, 7-day ambient cure at 50% R.H.

Compressive strength	ASTM D695	12,000 psi
Tensile strength	ASTM D638	2,100 psi
Elongation at break	ASTM D638	6.1%
Flexural strength	ASTM D790	6,500 psi
Abrasion resistance		
CS-17 wheel, 1 kg load	ASTM D4060	30 mg loss
Water absorption (2-hour boil)	ASTM D570	0.09%
Shore D hardness	ASTM D2240	82 (7 days)
Coefficient of friction	ASTM D2047	> 0.6
Heat distortion temperature	ASTM D648	120° F / 49° C
Volatile organic content		0 g/L
Slant shear	ASTM C882	100% concrete failure
Pull-off adhesion	ASTM D7234	450 psi / 3.1 Mpa / concrete failure
Reaction to fire	EN 13501-1:2018	B _{FL} – s1

Water (fresh and salt)
1%-50% Sodium Hydroxide
1%-10% Sulfuric Acid
1%-10% HCL

Chemical Resistance:
Splash & Spill Applications

Butanol
Xylene
111 Trichloroethane
Skydrol Fluids

Limitations:

- Not for use on exterior concrete
- Requires a vapor barrier epoxy in some instances to protect from vapor emission or moisture concerns.
- Subject to UV degradation when exposed to direct sunlight for long period of time (See E100-VR1™ for substitute).
- Not recommended for surfaces subject to continuous water immersion.

Available Packaging:

- 1.5 gal, 3 gal, 15 gal, and 150 gal kits

Cautions, Clean Up, and First Aid:

- Although E100-PT1™ has little or no odor and carries zero VOC, it should only be used with adequate ventilation. Avoid contact with eyes and skin. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. Ensure fresh air entry during application. If you experience watering eyes, headaches, or dizziness or if air monitoring demonstrates vapor levels are above applicable limits, wear a properly fitted respirator (NIOSH/MSHA TC 23C approved) during and after application. Follow respirator manufacturer's directions for use. E100-PT1™ is an irritant which can develop redness of skin and allergic reaction. Always use protective clothing, gloves and eye wear.
- Refer to SDS.441 for additional information before use.

Additional Notes:

- See document: *TD.200 – Resinous Flooring Guidelines* for information pertaining to rising damp, vapor transmission, and applicable recommended testing methods prior to use.
- Preconditioning 100% solid epoxy resins - When exposed to prolonged periods of cold temperature, epoxy resins typically thicken, may crystallize and become harder to flow or spread. To improve the product flow-ability maintain temperature at about 70° F / 21° C before mixing. Crystallized epoxy can be reconstituted at 90° F / 32° C for 12 hours and remixed.

Suggested Storage:

- Store in a temperature and weather-controlled area between 65° F / 18° C and 85° F / 29° C.
- Do not allow to freeze.
- Shelf Life: 1 year from date of manufacture.



SAFETY DATA SHEET 421: READY TO USE

Conforms to 1910.1200

Issued: Aug. 30, 2016

Supersedes: May 27, 2015

CLS TOPSHIELD

1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CLS TopShield - Stain Resistant Top Shield **Product Number:** 421
Recommended Use: Densifier for concrete
Ready to Use
Product intended for commercial and industrial use only.
Uses Advised Against: Other than per labelled instructions

Manufacturer Address:

Amano Pioneer Eclipse Corporation
P.O. Box 909
1 Eclipse Road
Sparta, NC 28675
Telephone: 1-336-372-8080
Email: sds@pioneereclipse.com
Internet: www.pioneereclipse.com

FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure or Accident. Call CHEMTREC Day or Night.
Within USA and Canada 1-800-424-9300. Outside USA and Canada 1-703-527-3887 (collect calls accepted)

2: HAZARDS IDENTIFICATION

Classification: Skin Irritation - Category 2
Eye Irritation - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3 (Inhalation)

Signal Word: WARNING

Pictogram:



Hazard Statements:

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation

Precautionary Statements:

Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye protection.
Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
If skin irritation occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards: None known

Supplemental Information: None



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Supersedes: May 27, 2015

CLS TOPSHIELD

3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Weight % *
Silica-amorphous (colloidal)	7631-86-9	5 - 8
Proprietary Ingredient **	Not Specified	1 - 5
Proprietary Ingredient **	Not Specified	1 - 5

* Exact concentration of the ingredients has been withheld as a trade secret.

** Specific ingredient identity not provided by component manufacturer due to proprietary status. The manufacturer has provided ingredient classification.

4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye Contact: Flush eyes with plenty of water, for at least 15 minutes. If easy to do, remove contact lenses if worn. If irritation persists, seek medical attention.

Skin Contact: Wash with soap and plenty of water. If irritation persists, seek medical attention.

Inhalation: If breathing is difficult, remove subject to fresh air. If symptoms persist, seek medical attention.

Ingestion: Do not induce vomiting. Rinse mouth out with water. Seek medical advice.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye Contact: Causes eye irritation.

Skin Contact: Causes skin irritation.

Inhalation: Spray mist may cause irritation to nose, throat and lungs.

Ingestion: May cause irritation to digestive tract.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

5: FIRE-FIGHTING MEASURES

Suitable Extinguishing media: Water spray, CO₂, dry chemical, alcohol-type or universal type foams

Specific Hazards: Alkaline liquid. Do not spray a solid stream of water or foam directly in hot liquid. This may cause frothing.

Protective Equipment and Precautions: Fire fighters should wear NIOSH approved breathing apparatus. Materials can splatter above 100° C / 212° F

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Put on personal protective equipment (see Section 8). Keep spectators away. Floors may be slippery: use care to avoid falling.

Environment Precautions: Keep spills and cleaning run-off out of sewers and open bodies of water.

CONTAINMENT AND CLEAN-UP

Small Spills: Absorb spill with inert material (e.g. sand, earth) and dispose of as waste material in accordance with local, state and federal regulations.

Large Spills: Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal.

Waste Disposal: Landfill or incinerate the contaminated solids and diking material in accordance with local, state and federal regulations. Non-salvageable liquid should be drummed and disposed of in accordance with local, state and federal regulations.

7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use in well-ventilated areas. Avoid breathing vapors or mists. Remove and wash contaminated clothing and footwear before re-use.

Conditions for Safe Storage: Storage temperature (Max. 60°C/140°F - Min. 1°C/34°F)

Other Information: Keep from freezing. Keep container sealed when not in use. Keep out of reach of children.



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8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Ingredient	CAS Number	ACGIH		OSHA	
		TWA	STEL	TWA	STEL
Silica-amorphous (colloidal)	7631-86-9	10 mg/m ³	N/E	10 mg/m ³	N/E

Engineering Controls: Use only with adequate ventilation. Use local ventilation and other engineering controls to maintain airborne contaminants below established and recommended exposure limits. If this product contains ingredients with exposure limits, monitoring may be required to determine the effectiveness of ventilation and other control measures.

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety eyewear is recommended, to avoid chemical splashes and mists.

Skin Protection: Chemical resistant gloves are recommended.

Respiratory Protection: Respiratory protection should be worn when there is a potential of inadequate ventilation. If exposure limits are exceeded or symptoms are experienced, use an approved respirator.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	milky, white liquid
Odor:	No fragrance added
Odor Threshold:	no data available
pH:	11.0
Freezing Point:	no data available
Boiling Point:	no data available
Flash Point:	>200°F / >93°C
Evaporation Rate:	less than water
Flammability (solid/gas):	not applicable to liquids
Flammability limits:	no data available
Vapor Pressure:	no data available
Vapor Density:	no data available
Relative Density:	9.2 lb/gal @ 68°F / 1.11 kg/l @ 20 °C
Solubility:	miscible in water
Partition Coefficient:	no data available
Auto Ignition temperature:	no data available
Decomposition Temperature:	no data available
Viscosity:	< 10 centipoise @ 68°F (20°C)
VOC:	< 50 g/L

10: STABILITY AND REACTIVITY

Reactivity:	Not reactive under normal conditions.
Stability:	Stable under normal conditions.
Hazardous reactions:	None expected.
Conditions to avoid:	None known.
Incompatible materials:	Do not mix with other chemicals unless stated on the product label.
Hazardous decomposition products:	None known.

11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Not determined on product.

LOCAL EFFECTS

Skin contact:	Can cause skin irritation.
Eye contact:	Can cause eye irritation.
Sensitization:	None expected
Chronic effects:	None expected

SPECIFIC EFFECTS

Carcinogenicity:	None known
Reproductive effects:	None known
Teratogenicity:	None known
Mutagenicity:	None known



SAFETY DATA SHEET 421: READY TO USE

Conforms to 1910.1200
Issued: Aug. 30, 2016
Supersedes: May 27, 2015

CLS TOPSHIELD

COMPONENT INFORMATION

Component	LD50 Oral- Rat (mg/kg)	LD50 Dermal - Rabbit (mg/kg)	LC ₅₀ Inhalation- Rat (mg/l)
Silica-amorphous (colloidal)	> 5000	not available	not available
Proprietary Ingredient	7640	not available	not available

Carcinogenicity: Components are not known to be classified as carcinogens. (IARC, NTP, OSHA).

12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecological testing has not been completed on the mixture.
Persistence and Degradability: Data not available.
Bioaccumulative Potential: Data not available.
Mobility in Soil: Data not available.
Other Adverse Effects: Data not available.

13: DISPOSAL CONSIDERATIONS

Disposal of this material should be in accordance with local, regional and national regulations.

14: TRANSPORT INFORMATION

This product is not classified as hazardous for transportation.

UN Number: None
UN Proper Shipping Name: None
Hazard Class: None
Packing Group: None
Marine Pollutant: None
Transport in Bulk: N/A
Other Information: None

15: REGULATORY INFORMATION

U.S. REGULATIONS/REPORTING: Components not subject to reporting (SARA 302/304, 313, CERCLA)
STATE RIGHT-TO-KNOW STATUS: Components are not subject to State RTK listing (MA, NJ, PA, RI)
CALIFORNIA PROPOSITION 65: Components are not present on CA Prop 65 listing.
CANADA REGULATIONS/REPORTING: This product has been classified in accordance with the hazard criteria of the Hazardous Product Regulation (HPR) and the SDS contains the information required by the HPR.

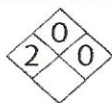
16: OTHER INFORMATION

Abbreviations Used:

N/A - Not applicable
N/E - Not Established
N/L - Not Listed

Revision Information:

Aug. 30, 2016 - Logo change, email address, minor edits



Health: 2
Flammability: 0
Reactivity: 0



SAFETY DATA SHEET

421: READY TO USE

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Issued: Aug. 30, 2016

Supersedes: May 27, 2015

CLS TOPSHIELD

Neither this data sheet nor any statement contained herein grants or extends any license, expressed or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The information in this data sheet has been assembled by the manufacturer based on its own studies and the work of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) or the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnish of such information.

This SDS has been provided to you in accordance with the OSHA Hazard Communication Standard (29CFR1910.1200).

****IMPORTANT SAFETY INFORMATION**DO NOT DISCARD**PLEASE ROUTE TO COMPANY SAFETY OFFICER****



SAFETY DATA SHEET 516: CONCENTRATE

Conforms to 1910.1200
Issued: April 18, 2016
Supersedes: May 15, 2015

FLASH 55 HIGH PERFORMANCE STRIPPER

1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Flash 55 High Performance Stripper **Product Number:** 516
Recommended Use: Fast acting stripper
Concentrate- dilute prior to use.
Product intended for commercial and industrial use only.
Uses Advised Against: Other than per labelled instructions

Manufacturer Address:

Amano Pioneer Eclipse Corporation
P.O. Box 909
1 Eclipse Road
Sparta, NC 28675
Telephone: 1-336-372-8080
Email: sds@pioneereclipse.com
Internet: www.pioneereclipse.com

FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure or Accident. Call CHEMTREC Day or Night.
Within USA and Canada 1-800-424-9300. Outside USA and Canada 1-703-527-3887 (collect calls accepted)

2: HAZARDS IDENTIFICATION

Classification: Skin Corrosion- Category 1B
Eye Damage - Category 1
Acute Toxicity - Inhalation - Category 4

Signal Word: DANGER

Pictogram:



Hazard Statements:

Causes severe skin burns and eye damage.
Causes serious eye damage.
Harmful if inhaled.

Precautionary Statements:

Do not breathe mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/eye protection/face protection.
Wash contaminated clothing before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Immediately call a POISON CENTER/doctor if you feel unwell.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other Hazards: None known

Supplemental Information: None known



SAFETY DATA SHEET

516: CONCENTRATE

Conforms to 1910.1200

Issued: April 18, 2016

Supersedes: May 15, 2015

FLASH 55 HIGH PERFORMANCE STRIPPER

3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Weight % *
ethylene glycol monobutyl ether	111-76-2	30 - 50
monoethanolamine	141-43-5	10 - 20

* Exact concentration of the ingredients has been withheld as a trade secret.

4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eye with plenty of water for at least 15 minutes. (If easy to do, remove contact lenses, if worn). Seek medical attention.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.
- Inhalation:** If breathing is difficult. Remove subject to fresh air. Seek medical attention immediately.
- Ingestion:** Call a physician or poison control center. Do not induce vomiting. Seek medical advice immediately.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Eye Contact:** Causes eye burns.
- Skin Contact:** Causes skin burns.
- Inhalation:** Harmful if inhaled. May cause irritation and corrosive effects to nose, throat and respiratory tract.
- Ingestion:** May cause burns and irritation to mouth, throat and stomach.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

5: FIRE-FIGHTING MEASURES

- Suitable Extinguishing media:** Water spray, CO₂, dry chemical, alcohol-type or universal type foams
- Specific Hazards:** Corrosive liquid. (See Sections 8 and 10.) Do not spray a solid stream of water or foam directly in hot liquid. This may cause frothing.
- Protective Equipment and Precautions:** Fire fighters should wear NIOSH approved breathing apparatus. Materials can splatter above 100° C / 212° F

6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Put on personal protective equipment (see Section 8). Keep spectators away. Floors may be slippery; use care to avoid falling.
- Environment Precautions:** Keep spills and cleaning run-off out of sewers and open bodies of water.

CONTAINMENT AND CLEAN-UP

- Small Spills:** Absorb spill with inert material (e.g. sand, earth) and dispose of as waste material in accordance with local, state and federal regulations.
- Large Spills:** Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal.
- Waste Disposal:** Landfill or incinerate the contaminated solids and diking material in accordance with local, state and federal regulations. Non-salvageable liquid should be drummed and disposed of in accordance with local, state and federal regulations.

7: HANDLING AND STORAGE

- Precautions for Safe Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only in well-ventilated areas. Avoid breathing vapors or mists. Remove and wash contaminated clothing and footwear before re-use.
- Conditions for Safe Storage:** Storage temperature (Max. 60°C/140°F - Min. 1°C/34°F)
- Other Information:** Keep from freezing. Keep container sealed when not in use. Keep out of reach of children.



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8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Ingredient	CAS Number	ACGIH		OSHA	
		TWA	STEL	TWA	STEL
ethylene glycol monobutyl ether	111-76-2	20 ppm (BEI)	N/L	50 ppm (skin)	N/L
monoethanolamine	141-43-5	3 ppm	6 ppm	3 ppm	N/L

Engineering Controls: Use only with adequate ventilation. Use local ventilation and other engineering controls to maintain airborne contaminants below established and recommended exposure limits. If this product contains ingredients with exposure limits, monitoring may be required to determine the effectiveness of ventilation and other control measures.

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety eyewear is recommended, to avoid chemical splashes and mists.

Skin Protection: Chemical resistant gloves are recommended.

Respiratory Protection: Respiratory protection should be worn when there is a potential of inadequate ventilation. If exposure limits are exceeded or symptoms are experienced, use an approved respirator.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	clear blue, liquid
Odor:	floral fragrance
Odor Threshold:	data not available
pH:	11.5
Freezing Point:	data not available
Boiling Point:	data not available
Flash Point:	> 200°F / > 93°C (ASTM D56)
Evaporation Rate:	less than water
Flammability (solid, gas):	not applicable to liquids
Flammability limits:	data not available
Vapor Pressure:	data not available
Vapor Density:	data not available
Relative Density:	7.98 lb/gal @ 68°F / 0.96 kg/l @ 20°C
Solubility:	miscible in water
Partition Coefficient:	data not available
Auto Ignition temperature:	data not available
Decomposition Temperature:	data not available
Viscosity:	< 10 cps @ 68°F
VOC:	54.5% (as supplied), 10.5% (1:4), 5.8% (1:8)

10: STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.

Stability: Stable under normal conditions.

Hazardous reactions: Adding water directly to the product may generate heat and cause product to splash. To avoid adverse reaction, always add product to water, do not add water to product.

Conditions to avoid: Improper order of dilution. Do not mix with other chemicals unless stated on the product label.

Incompatible materials: Strong acids and oxidizing agents

Hazardous decomposition products: carbon monoxide, carbon dioxide and nitrogen oxides

11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Not determined on product.

LOCAL EFFECTS

Skin contact: Can cause severe skin burns.
Eye contact: Can cause serious eye damage.
Sensitization: None expected

SPECIFIC EFFECTS

Carcinogenicity: None known
Reproductive effects: None known
Teratogenicity: None known



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Chronic effects: None expected

Mutagenicity: None known

COMPONENT INFORMATION

Component	LD50 Oral-Rat (mg/kg)	LD50 Dermal - Rabbit (mg/kg)	LC ₅₀ Inhalation-Rat (mg/l)
ethylene glycol monobutyl ether	470	220	2.21 (4hr)
monoethanolamine	1720	1025	N/A

Carcinogenicity:

Component	IARC	NTP	OSHA
ethylene glycol monobutyl ether	IARC 3	N/L	N/L

12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecological testing has not been completed on the mixture.
Persistence and Degradability: Data not available.
Bioaccumulative Potential: Data not available.
Mobility in Soil: Data not available.
Other Adverse Effects: Data not available.

13: DISPOSAL CONSIDERATIONS

Waste residues or unused products:

This product, as sold, if discarded or disposed, is not a hazardous waste according to 40 CFR 261. It is the responsibility of the end user to determine, at the time of disposal, if the waste solution meets the criteria for hazardous waste. Disposal of this material should be in accordance with local, regional and national regulations.

Packaging: Do not reuse empty containers.

RCRA Hazard Class (as sold): Not Regulated

14: TRANSPORT INFORMATION

UN Number: UN1760
UN Proper Shipping Name: Corrosive liquid, n.o.s. (ethanolamine)
Hazard Class: 8
Packing Group: II
Marine Pollutant: None
Transport in Bulk: N/A
Other Information: Package Volumes < 1L are shipped under Limited Quantity Exemption.

15: REGULATORY INFORMATION

U.S. REGULATIONS/REPORTING:

Ingredient	CAS Number	SARA 302/304	SARA 313	CERCLA
ethylene glycol monobutyl ether	111-76-2	N/L	1.00%	N/L

STATE RIGHT-TO-KNOW STATUS:

Ingredient	CAS Number	MA - RTK	NJ - RTK	PA - RTK	RI - RTK
ethylene glycol monobutyl ether	111-76-2	present	present	present	present
monoethanolamine	141-43-5	present	present	present	present

CALIFORNIA PROPOSITION 65: Components are not present on CA Prop 65 listing.

CANADA REGULATIONS/REPORTING: This product has been classified in accordance with the hazard criteria of the Hazardous Product Regulation (HPR) and the SDS contains the information required by the HPR.



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16: OTHER INFORMATION

Abbreviations Used:

N/A - Not applicable

N/E - Not Established

N/L - Not Listed

IARC 3 - Unclassifiable as to carcinogenicity in humans.

Revision Information:

April 18, 2016 - Logo change, email address, minor edits. Revisions to section 3, 8 & 13

Health:	3
Flammability:	0
Reactivity:	0

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This SDS has been provided to you in accordance with the OSHA Hazard Communication Standard (29CFR1910.1200).

****IMPORTANT SAFETY INFORMATION**DO NOT DISCARD**PLEASE ROUTE TO COMPANY SAFETY OFFICER****



SAFETY DATA SHEET 421: READY TO USE

Conforms to 1910.1200

Issued: Aug. 30, 2016

Supersedes: May 27, 2015

CLS TOPSHIELD

1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CLS TopShield - Stain Resistant Top Shield **Product Number:** 421
Recommended Use: Densifier for concrete
Ready to Use
Product intended for commercial and industrial use only.
Uses Advised Against: Other than per labelled instructions

Manufacturer Address:

Amano Pioneer Eclipse Corporation
P.O. Box 909
1 Eclipse Road
Sparta, NC 28675
Telephone: 1-336-372-8080
Email: sds@pioneereclipse.com
Internet: www.pioneereclipse.com

FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure or Accident. Call CHEMTREC Day or Night.
Within USA and Canada 1-800-424-9300. Outside USA and Canada 1-703-527-3887 (collect calls accepted)

2: HAZARDS IDENTIFICATION

Classification: Skin Irritation - Category 2
Eye Irritation - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3 (Inhalation)

Signal Word: WARNING

Pictogram:



Hazard Statements:

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation

Precautionary Statements:

Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye protection.
Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
If skin irritation occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards: None known

Supplemental Information: None



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CLS TOPSHIELD

3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Weight % *
Silica-amorphous (colloidal)	7631-86-9	5 - 8
Proprietary Ingredient **	Not Specified	1 - 5
Proprietary Ingredient **	Not Specified	1 - 5

* Exact concentration of the ingredients has been withheld as a trade secret.

** Specific ingredient identity not provided by component manufacturer due to proprietary status. The manufacturer has provided ingredient classification.

4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye Contact: Flush eyes with plenty of water, for at least 15 minutes. If easy to do, remove contact lenses if worn. If irritation persists, seek medical attention.

Skin Contact: Wash with soap and plenty of water. If irritation persists, seek medical attention.

Inhalation: If breathing is difficult, remove subject to fresh air. If symptoms persist, seek medical attention.

Ingestion: Do not induce vomiting. Rinse mouth out with water. Seek medical advice.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye Contact: Causes eye irritation.

Skin Contact: Causes skin irritation.

Inhalation: Spray mist may cause irritation to nose, throat and lungs.

Ingestion: May cause irritation to digestive tract.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

5: FIRE-FIGHTING MEASURES

Suitable Extinguishing media: Water spray, CO₂, dry chemical, alcohol-type or universal type foams

Specific Hazards: Alkaline liquid. Do not spray a solid stream of water or foam directly in hot liquid. This may cause frothing.

Protective Equipment and Precautions: Fire fighters should wear NIOSH approved breathing apparatus. Materials can splatter above 100° C / 212° F

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Put on personal protective equipment (see Section 8). Keep spectators away. Floors may be slippery: use care to avoid falling.

Environment Precautions: Keep spills and cleaning run-off out of sewers and open bodies of water.

CONTAINMENT AND CLEAN-UP

Small Spills: Absorb spill with inert material (e.g. sand, earth) and dispose of as waste material in accordance with local, state and federal regulations.

Large Spills: Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal.

Waste Disposal: Landfill or incinerate the contaminated solids and diking material in accordance with local, state and federal regulations. Non-salvageable liquid should be drummed and disposed of in accordance with local, state and federal regulations.

7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use in well-ventilated areas. Avoid breathing vapors or mists. Remove and wash contaminated clothing and footwear before re-use.

Conditions for Safe Storage: Storage temperature (Max. 60°C/140°F - Min. 1°C/34°F)

Other Information: Keep from freezing. Keep container sealed when not in use. Keep out of reach of children.



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CLS TOPSHIELD

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Ingredient	CAS Number	ACGIH		OSHA	
		TWA	STEL	TWA	STEL
Silica-amorphous (colloidal)	7631-86-9	10 mg/m ³	N/E	10 mg/m ³	N/E

Engineering Controls: Use only with adequate ventilation. Use local ventilation and other engineering controls to maintain airborne contaminants below established and recommended exposure limits. If this product contains ingredients with exposure limits, monitoring may be required to determine the effectiveness of ventilation and other control measures.

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety eyewear is recommended, to avoid chemical splashes and mists.

Skin Protection: Chemical resistant gloves are recommended.

Respiratory Protection: Respiratory protection should be worn when there is a potential of inadequate ventilation. If exposure limits are exceeded or symptoms are experienced, use an approved respirator.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	milky, white liquid
Odor:	No fragrance added
Odor Threshold:	no data available
pH:	11.0
Freezing Point:	no data available
Boiling Point:	no data available
Flash Point:	>200°F / >93°C
Evaporation Rate:	less than water
Flammability (solid/gas):	not applicable to liquids
Flammability limits:	no data available
Vapor Pressure:	no data available
Vapor Density:	no data available
Relative Density:	9.2 lb/gal @ 68°F/ 1.11 kg/l @ 20 °C
Solubility:	miscible in water
Partition Coefficient:	no data available
Auto Ignition temperature:	no data available
Decomposition Temperature:	no data available
Viscosity:	< 10 centipoise @ 68°F (20°C)
VOC:	< 50 g/L

10: STABILITY AND REACTIVITY

Reactivity:	Not reactive under normal conditions.
Stability:	Stable under normal conditions.
Hazardous reactions:	None expected.
Conditions to avoid:	None known.
Incompatible materials:	Do not mix with other chemicals unless stated on the product label.
Hazardous decomposition products:	None known.

11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Not determined on product.

LOCAL EFFECTS

Skin contact:	Can cause skin irritation.
Eye contact:	Can cause eye irritation.
Sensitization:	None expected
Chronic effects:	None expected

SPECIFIC EFFECTS

Carcinogenicity:	None known
Reproductive effects:	None known
Teratogenicity:	None known
Mutagenicity:	None known



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CLS TOPSHIELD

COMPONENT INFORMATION

Component	LD50 Oral- Rat (mg/kg)	LD50 Dermal - Rabbit (mg/kg)	LC ₅₀ Inhalation- Rat (mg/l)
Silica-amorphous (colloidal)	> 5000	not available	not available
Proprietary Ingredient	7640	not available	not available

Carcinogenicity: Components are not known to be classified as carcinogens. (IARC, NTP, OSHA).

12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecological testing has not been completed on the mixture.
Persistence and Degradability: Data not available.
Bioaccumulative Potential: Data not available.
Mobility in Soil: Data not available.
Other Adverse Effects: Data not available.

13: DISPOSAL CONSIDERATIONS

Disposal of this material should be in accordance with local, regional and national regulations.

14: TRANSPORT INFORMATION

This product is not classified as hazardous for transportation.

UN Number: None
UN Proper Shipping Name: None
Hazard Class: None
Packing Group: None
Marine Pollutant: None
Transport in Bulk: N/A
Other Information: None

15: REGULATORY INFORMATION

U.S. REGULATIONS/REPORTING: Components not subject to reporting (SARA 302/304, 313, CERCLA)
STATE RIGHT-TO-KNOW STATUS: Components are not subject to State RTK listing (MA, NJ, PA, RI)
CALIFORNIA PROPOSITION 65: Components are not present on CA Prop 65 listing.
CANADA REGULATIONS/REPORTING: This product has been classified in accordance with the hazard criteria of the Hazardous Product Regulation (HPR) and the SDS contains the information required by the HPR.

16: OTHER INFORMATION

Abbreviations Used:

N/A - Not applicable
N/E - Not Established
N/L - Not Listed

Revision Information:

Aug. 30, 2016 - Logo change, email address, minor edits

Health:	2
Flammability:	0
Reactivity:	0



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CLS TOPSHIELD

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This SDS has been provided to you in accordance with the OSHA Hazard Communication Standard (29CFR1910.1200).

****IMPORTANT SAFETY INFORMATION**DO NOT DISCARD**PLEASE ROUTE TO COMPANY SAFETY OFFICER****

Section I.			
Product Identification : Laundry Detergent			
Section II. Hazardous Ingredients/Identity Information			
Hazardous Components (Specific Chemical Identity, Common Names)	OSHA OPEL	ACGIH TLV	Other Limits Recommended % (optional)
N/A			
Section III. Physical/Chemical Characteristics			
Boiling point	N/A	Specific Gravity (H2O =1 =)	1.00
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	1	Evaporation Rate (butyl Acetate = 1)	N/A
Solubility in water	Complete	pH Diluted for use:	8.0-9.0
Appearances and Odor – Blue/Green ; Characteristic odor			
Section IV. Fire and Explosion Hazard Data			
Flash Point (Method Used)	NONE	Flammable Limits	LEL UEL
Extinguishing Media Foam , Dry Chemical , Water spray,			
Special Fire Fighting Procedures			
Unusual Fire Explosion Hazards NONE			
Section V. Reactivity Data			
Stability	Unstable	X	Conditions to Avoid
	Stable		
Incompatibility (Material to Avoid)			
Hazardous Decomposition or Byproducts Oxides of carbon & Nitrogen			
Hazardous Polymerization	May Occur	X	Conditions to Avoid
	Will not Occur		
Section VI. Health Hazard Data			
Route of Entry : SKIN / Ingestion		Inhalation?	Skin? Ingestion?
Health Hazards (Acute and Chronic)			
Eyes : Irritation			
Ingestion : Abdominal Discomfort			
Carcinogenicity:	NTP? N/A	IARC Monographs? N/A	OSHA Regulated? N/A
Signs and Symptoms of Exposure Irritation			
Medical Conditions			

Generally Aggravated by Exposure **N/A**

Emergency and First Aid Procedures

EYE- Wash with warm water for 15 minutes. Get medical attention

Ingestion – Drink Large quantities of water. Get medical attention

Section VII. Precautions for Safe Handling and Use

Steps to Be taken in Case Material is Released or Spilled **Contain the spill using absorbent materials or sweeping compounds**

Waste Disposal Method **Per Local And State Regulations**

Precautions to Be Taken in Handling and Storing - **Do not store near heat radiators and avoid Excessive heat or below freezing point.**

Other Precautions

Section VIII. Control Measures

Respiratory Protection (Specify Type)

Ventilation

Local Exhaust **None**

Mechanical(General) **None**

Special **None**

Other **None**

Protective Gloves **None**

Eye Protection **None**

Other Protective Clothing or Equipment **None**

Work/Hygenic Practices **Follow normal hygienic practices**

Material Safety Data sheet
 OSHA's Hazard Communication Standard
 29 CFR 1910.1200

General Organics
 2309 S. Keeler Ave
 Chicago, IL
 Tel: 773-277-0001 Fax: 773-277-0051

Section I.				
Product Identification : Fabric Softener				
Section II. Hazardous Ingredients/Identity Information				
Hazardous Components (Specific Chemical Identity: Common Names)	OSHA OPEL	ACGIH TLV	Other Limits Recommended	% (optional)
Ethanol 64-17-5				1-5%
Section III. Physical/Chemical Characteristics				
Boiling point	N/A	Specific Gravity (H2O =1 =)	1.00	
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A	
Vapor Density (AIR = 1)	1	Evaporation Rate (butyl Acetate = 1)	N/A	
Solubility in water	Complete	pH Diluted for use:	N/A	
Appearances and Odor – Blue/Green/Orange/Yellow/Pink/Purple ; Characteristic odor				
Section IV. Fire and Explosion Hazard Data				
Flash Point (Method Used)	NONE	Flammable Limits	LEL	UEL
Extinguishing Media Foam , Dry Chemical , Water spray,				
Special Fire Fighting Procedures				
Unusual Fire Explosion Hazards NONE				
Section V. Reactivity Data				
Stability	Unstable	X	Conditions to Avoid	
	Stable			
Incompatibility (Material to Avoid)				
Hazardous Decomposition or Byproducts Oxides of carbon & Nitrogen				
Hazardous Polymerization	May Occur	X	Conditions to Avoid	
	Will not Occur			
Section VI. Health Hazard Data				
Route of Entry :	SKIN / Ingestion	Inhalation?	Skin?	Ingestion?
Health Hazards (Acute and Chronic)				
Eyes : Irritation				
Ingestion : Abdominal Discomfort				
Carcinogenicity:	NTP? N/A	IARC Monographs? N/A	OSHA Regulated? N/A	
Signs and Symptoms of Exposure Irritation				
Medical Conditions				

Generally Aggravated by Exposure		N/A	
Emergency and First Aid Procedures		EYE- Wash with warm water for 15 minutes. Get medical attention	
		Ingestion – Drink Large quantities of water. Get medical attention	
Section VII. Precautions for Safe Handling and Use			
Steps to Be taken in Case Material is Released or Spilled		Contain the spill using absorbent materials or sweeping	
compounds			
Waste Disposal Method		Per Local And State Regulations	
Precautions to Be Taken in Handling and Storing		Do not store near heat radiators and avoid	
		Excessive heat or below freezing point.	
Other Precautions			
Section VIII. Control Measures			
Respiratory Protection (Specify Type)			
Ventilation	Local Exhaust - None		Special None
	Mechanical(General) None		Other None
Protective Gloves None		Eye Protection None	
Other Protective Clothing or Equipment None			
Work/Hygienic Practices Follow normal hygienic practices			