System X Glass+

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Issue date: 11/01/2024 Revision date: 11/01/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : System X Glass+

Product code : SXGP

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Surface protectant/surfactant

1.3. Supplier

Manufacturer
ELEMENT 119 LLC
60 Johnson Ave, Plainville, CT 06062 USA
T 1 860-358-0119
www.element119.com

1.4. Emergency telephone number

Emergency number : 1 703-741-5500 (CHEMTREC CCN 852792)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable Liquids Hazard Category 4
Acute Toxicity-Inhalation Hazard Category 4
Skin Corrosion/Irritation Hazard Category 2
Eye Damage/Irritation Hazard Category 2B
Aspiration Hazard Category 1
Specific Target Organ Toxicity (Single Exposure) Hazard Category 3
Flammable Liquids Hazard Category 4
Acute Toxicity-Inhalation Hazard Category 4
Skin Corrosion/Irritation Hazard Category 2
Eye Damage/Irritation Hazard Category 2B
Aspiration Hazard Category 1
Specific Target Organ Toxicity (Single Exposure) Hazard Category 3
Flammable Liquids Hazard Category 4
Acute Toxicity-Inhalation Hazard Category 4
Skin Corrosion/Irritation Hazard Category 2
Eye Damage/Irritation Hazard Category 2B
Aspiration Hazard Category 1
Specific Target Organ Toxicity (Single Exposure) Hazard Category 3

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Warning

Hazard statements (GHS US) : Combustible liquid.
Harmful if inhaled.
Causes skin irritation.
Causes eye irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.

Precautionary statements (GHS US) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.

Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Immediately call a poison center or doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Do NOT induce vomiting.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use media other than water to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Naphtha, petroleum, hydrotreated heavy	(CAS-No.) 64742-48-9	50 - 90
tert-Butyl acetate	(CAS-No.) 540-88-5	0.1 - 5
Benzene, 1-chloro-4-(trifluoromethyl)-	(CAS-No.) 98-56-6	0.1 - 3
Ambient curable resin mixture	(CAS-No.) Proprietary	10 – 30

***Chemical name, CAS number and/or exact concentration have been withheld as a trade secret**

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before re-using. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2), dry chemical powder, foam.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.

Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep out of the reach of children. Keep cool. Keep container tightly closed and in a well-ventilated place. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

System X Glass+
No additional information available

Ambient curable resin mixture (Proprietary)
No additional information available

Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6)
No additional information available

tert-Butyl acetate (540-88-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	tert-Butyl acetate
ACGIH TWA (ppm)	50 ppm (Butyl acetates, all isomers)
ACGIH STEL (ppm)	150 ppm (Butyl acetates, all isomers)
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	tert-Butyl-acetate
OSHA PEL (TWA) (mg/m³)	950 mg/m³
OSHA PEL (TWA) (ppm)	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
US IDLH (ppm)	1500 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m³)	950 mg/m³
NIOSH REL (TWA) (ppm)	200 ppm

Hydrocarbons, C10-C12, isoalkanes (64742-48-9)
No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves.

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear liquid.

Color : Clear

Odor : Aromatic

Odor threshold : No data available

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : 360 °C

Flash point	:	145 °C (293 °F)
Relative evaporation rate (butyl acetate=1)	:	< 1
Flammability (solid, gas)	:	Flammable liquid and vapor.
Vapor pressure	:	No data available
Relative vapor density at 20 °C (68 °F)	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	2 mm²/s
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition. Direct sunlight.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6)	
LD50 oral rat	13 g/kg
LD50 dermal rabbit	> 2 ml/kg
LC50 inhalation rat	33 mg/l/4h

tert-Butyl acetate (540-88-5)	
LD50 oral rat	4100 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 9482 mg/m³ (Exposure time: 4 h)

Hydrocarbons, C10-C12, isoalkanes (64742-48-9)	
LD50 oral rat	> 6000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	> 8500 mg/m³ (Exposure time: 4 h)

Skin corrosion/irritation	:	Not classified.
Serious eye damage/irritation	:	Causes serious eye irritation.

Respiratory or skin sensitization : Not classified.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6)	
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity

Reproductive toxicity : Not classified
STOT-single exposure : Not classified.

Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6)	
STOT-single exposure	May cause respiratory irritation.

Hydrocarbons, C10-C12, isoalkanes (64742-48-9)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.
Viscosity, kinematic : 2 mm²/s

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6)	
LC50 fish 1	3 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
EC50 Daphnia 1	3.68 mg/l (Exposure time: 48 h - Species: Daphnia magna)

tert-Butyl acetate (540-88-5)	
LC50 fish 1	296 – 362 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

Hydrocarbons, C10-C12, isoalkanes (64742-48-9)	
LC50 fish 1	2200 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

12.2. Persistence and degradability

System Glass+	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

System X Glass+	
Bioaccumulative potential	Not established.

Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6)	
Partition coefficient n-octanol/water	3.7 (at 25 °C)

tert-Butyl acetate (540-88-5)	
Partition coefficient n-octanol/water	1.38

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

UN-No.(DOT) : NOT D.O.T. REGULATED

Proper Shipping Name (DOT) : NOT D.O.T. REGULATED

Class (DOT) : NOT D.O.T. REGULATED

Packing group (DOT) : NOT D.O.T. REGULATED

Hazard labels (DOT) : NOT D.O.T. REGULATED

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. US State regulations

⚠ **WARNING:** This product can expose you to Benzene, 1-chloro-4-(trifluoromethyl)-, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Issue date : 11/01/2024

Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.