XS-650 RESIN

1. Identification

Product identifier used on the label

LINE-X XS-650 RESIN

Recommended use of the chemical and restriction on use

Recommended use*: polyurethane component; industrial chemicals
Suitable for use in industrial sector: Polymers industry; chemical industry

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
LINE-X® LLC
301 James Record Rd, Ste 250
Huntsville, AL 35834, USA
Telephone: +1 877 330-1331
Email: productsafetyNA@linex.com

Emergency telephone number

CHEMTREC: 1-800-424-9300
LINE-X: 1-877-330-1331 (Terry Pe)
LINE-X: 1-256-713-4248 (Regina Salmon)

Other means of identification

Chemical family: resin
Synonyms: Urethane System Resin Component

2. Hazards identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	4 (oral)	Acute Toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1	Skin Sensitization
STOT RE	2	Specific target organ toxicity — repeated exposure
Aquatic Acute	3	Hazardous to the aquatic environment – acute
Aquatic Chronic	3	Hazardous to the aquatic environment – chronic

Label Elements

Pictogram:

Signal Word:
Danger

Hazard Statement:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P264	Wash face, hands and any exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.

Precautionary Statements (Response):

P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER or doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.

Precautionary Statements (Storage):
P405 Store locked up.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical Name
9046-10-0	>= 25.0 - < 55.0%	Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)-
957787-76-7	>= 40.0 - < 60.0%	1,6-Hexanediamine, N,N''-bis(1,2,2-trimethylpropyl)-
2855-13-2	>= 5.0 - < 10.0%	3-aminomethyl-3,5,5-trimethylcyclohexylamine

4. First-Aid Measures

Description of first aid measures

General advice:
First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention. Assist in breathing if necessary. Seek medical attention.

If on skin:
Immediately wash thoroughly with plenty of water, apply sterile dressings. Seek medical attention.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.

If swallowed:
Do NOT induce vomiting. Immediately rinse mouth and then drink 200-300 ml of water. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, carbon dioxide, foam

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
No particular hazards known.

Advice for fire-fighters
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Further accidental release measures:
High risk of slipping due to leakage/spillage of product.

Personal precautions, protective equipment and emergency procedures
Use personal protective clothing. Ensure adequate ventilation. Evacuate unnecessary personnel. Avoid inhalation. Avoid contact with the skin, eyes and clothing.

Environmental precautions
Do not empty into drains. Do not discharge into the subsoil/soil.

Methods and material for containment and cleaning up
Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling
Ensure thorough ventilation of stores and work areas. Protect against moisture. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid breathing dust, vapor, mist, gas. Wear personal protective equipment. Use with local exhaust ventilation. See Section 8. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

Protection against fire and explosion:
No explosion proofing necessary.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds. Segregate from acids. Segregate from oxidants.

Further information on storage conditions: No special precautions necessary. Avoid extreme heat. Store protected against freezing. Keep containers tightly closed in a dry, cool and well-ventilated place.

Storage stability:
Storage temperature: 16 - 27 °C

8. Exposure Controls/Personal Protection

Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves.

Eye protection:
Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

Body protection:
Standard work clothes and shoes.

General safety and hygiene measures:
Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	Liquid	
Odour:	Mild, almost odorless	
Odour threshold:	No applicable information available.	
Colour:	Bronze to gold, clear	
pH value:	7.0	
Freezing point:	> 0.00 °C	
Boiling point:	> 100.00 °C (5 mmHg)	
Sublimation point:	No applicable information available.	
Flash point:	> 100.00 °C	(Unspecified)
Autoignition:	> 300.00 °C	No data available.
Vapour pressure:	Unspecified	
Density:	0.9108 g/cm³	(25 °C)
Bulk density:	7.59 lb/USg (25.00 °C)	
Relative density:	No applicable information available.	
Vapour density:	No applicable information available.	
Partitioning coefficient n-octanol/water (log Pow):	No data available.	
Self-ignition temperature:	No self-igniting	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	85 cps	
Viscosity, kinematic:	No applicable information available.	
Solubility in water:	Soluble	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:
No corrosive effect on metal.

Oxidizing properties:
Not fire-propagating.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
Temperature: < 0 degrees Celsius
Avoid moisture

Incompatible materials
acids, oxidizing agents, isocyanates

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide

Thermal decomposition:
No decomposition if stored and handled as prescribed/indicated.

11. Toxicological Information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Oral

Information on: 1,6-Hexanediamine, N,N''-bis(1,2,2-trimethylpropyl)- (957787-76-7)
Type of value: LD50
Species: rat
Value: ca 550 mg/kg bw

Information on: Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)- (9046-10-0)
Type of value: LD50
Species: rat
Value: 480 mg/kg
Type of value: ATE
Value: 480.000 mg/kg body weight

Information on: 3-aminomethyl-3,5,5-trimethylcyclohexylamine- (2855-13-2)
Type of value: LD50
Species: rat (male)
Value: 1,030 mg/kg (similar to OECD guideline 401)

Inhalation

Information on: 3-aminomethyl-3,5,5-trimethylcyclohexylamine- (2855-13-2)
Type of value: LC50
Species: rat
Value: > 5.01 mg/l (OECD Guideline 403)
Exposure time: 4 h

Dermal

Information on: 1,6-Hexanediamine, N,N''-bis(1,2,2-trimethylpropyl)- (957787-76-7)
Type of value: LD50
Species: rat
Value: > 2000 mg/kg bw

Information on: Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)- (9046-10-0)
Type of value: LD50
Species: rat
Value: 2090 mg/kg
Type of value: ATE
Value: 2090.000 mg/kg body weight

Information on: 3-aminomethyl-3,5,5-trimethylcyclohexylamine- (2855-13-2)
Type of value: LD50
Species: rat
Value: > 2,000 mg/kg (OECD Guideline 402)
The European Union (EU) has classified this substance as 'harmful'.

Eye
Risk of serious damage to eyes. Irritating to eyes.

Assessment other acute effects
Assessment of STOT single:
The available information is not sufficient for evaluation.

Irritation / corrosion
Assessment of irritating effects: Irritating to the respiratory system. Irritating to eyes and skin. Risk of serious damage to eyes. Irritating to eyes.

Sensitization
Assessment of sensitization: Sensitization after skin contact possible.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

Genetic toxicity
Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Carcinogenicity
Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive toxicity
Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity
Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Other Information
The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Harmful to aquatic life with long lasting effects. Do not release this product into water. This substance may be: toxic to fish and toxic to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: 1,6-Hexanediamine, N,N''-bis(1,2,2-trimethylpropyl)- (#: 957787-76-7)
LC50 (96 h)/fish: 35 % of a water accommodated fraction (WAF) of 100 mg/L

Poly[oxy(methyl-1,2-ethanediyl)], alpha-(2-aminomethylethyl)-omega-(2-aminomethylethoxy)- (9046-10-0)
LC50 fish: 10 - 100 mg/l

Information on: 3-aminomethyl-3,5,5-trimethylcyclohexylamine- (2855-13-2)
LC50 (96 h) 110 mg/l, Leuciscus idus (Directive 84/449/EEC, C.1, semistatic)
Nominal values (confirmed by concentration control analytics)

Aquatic invertebrates

Information on: 1,6-Hexanediamine, N,N''-bis(1,2,2-trimethylpropyl)- (CAS #: 957787-76-7)
EC50/48h/daphnia: 0.4% of a water accommodated fraction (WAF) of 100 mg/l
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Information on: 3-aminomethyl-3,5,5-trimethylcyclohexylamine- (2855-13-2)
EC50 (48 h) 23 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
Nominal values (confirmed by concentration control analytics)

EC50 (48 h) 388 mg/l, Chaetogammarus marinus (semistatic)
The details of the toxic effect relate to the nominal concentration.

Aquatic plants

Information on: 1,6-Hexanediamine, N,N''-bis(1,2,2-trimethylpropyl)- (CAS #: 957787-76-7)
EC50/72h/algae: 17 mg/L (Growth rate)

Information on: 3-aminomethyl-3,5,5-trimethylcyclohexylamine- (2855-13-2)
EC50 (72 h) > 50 mg/l (growth rate), Scenedesmus subspicatus (Directive 88/302/EEC, part C, p. 89) Nominal concentration.
EC10 (72 h) 11.2 mg/l (growth rate), Scenedesmus subspicatus (Directive 88/302/EEC, part C, p. 89) Nominal concentration.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
Not available.

Persistence and degradability

Assessment biodegradation and elimination (H2O)
Not available.

Elimination information
Not available.

Bioaccumulative potential

Assessment bioaccumulation potential
Does not significantly accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments
Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
The product has not been tested. Do not discharge product into the environment without control.

13. Disposal Considerations

Waste disposal of substance:
Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Container disposal:
Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

14. Transport Information

Land transport
USDOT

Hazard class:	8
Packing group:	II
ID number:	UN 2735
Hazard label:	8
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains Polyoxypropylenediamine)

Sea transport
IMDG

Hazard class:	8
Packing group:	II
ID number:	UN 2735
Hazard label:	8
Marine pollutant:	NO
EmS:	F-A, S-B
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains Polyoxypropylenediamine)

Air transport
IATA/ICAO

Hazard class:	8
Packing group:	II
ID number:	UN 2735
Hazard label:	8
Passenger/cargo aircraft quantity limitation:	1L (packaging instructions 851)
Cargo aircraft quantity limitation:	30L (packaging instructions 855)
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (contains Polyoxypropylenediamine)

15. Regulatory Information

Federal Regulations
Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Acute; Chronic

NFPA Hazard codes:
Health: 3 Fire: 1 Reactivity: 1 Special:

HMIS III rating
Health: 3 ¤ Flammability: 1 Physical hazard: 1

16. Other Information

SDS Prepared by:
Product Regulations for LINE-X LLC
SDS Prepared on: 01/07/2019

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END OF DATA SHEET