

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification	
Product Name	ECONEX® ESP-395/395S
Manufacturer/ Supplier	ECONEX CO., LTD. 585-1 CHILGOE-DONG, PYUNGTAEK-CITY KYUNGGI-DO, KOREA TEL:+82-31-665-7900 FAX:+82-31-665-7902
Chemical Name	Aqueous Solution of modified polymethacrylate ether(Trade secret)
Synonym	Aqueous solution of polymethacrylate
Material Uses	Industrial applications: Superplasticizer; Dispersant; Concrete admixture

Section 2. Hazards Identification		
Category	Not available	
Symbol	Not applicable	
Signal word	Warning	
Hazard statement	Not applicable	
Precautionary statement	Prevention	Not applicable
	Response	Not applicable
	Storage	Not applicable
	Disposal	Not applicable

Section 3. Composition and Information on Ingredients			
Name	Copolymer (% by Weight)	Water (% by Weight)	Classification
Aqueous Solution of modified polymethacrylate ether	50	50	Not applicable
CAS #	Trade secret	7732-18-5	

Section 4. First Aid Measures	
Eye Contact	Check for and remove any contact lenses. Flush with running water for several minutes. Do not use an eye ointment. Seek medical attention
Skin Contact	Wash contaminated skin with soap and water. Cold water may be used. Get medical attention if irritation occurs.
Inhalation	No hazard in normal industrial use. If exposed to excessive levels of mist, remove to fresh air and get medical attention if cough or other symptoms develop.
Ingestion	Do not induce vomiting. Immediately give two glasses of water, a little at a time. Never give anything by mouth to an unconscious person. Call a physician. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs.

Section 5. Fire and Explosion Data	
Flammability of the Product	Not applicable
Autoignition Temperature	Not available
Flash point	Not applicable
Flammable Limits	Not available

Products of Combustion	Not available
Explosion Hazards in Presence of Various Substances	Non-explosive
Fire Fighting Media and Instructions	Use extinguishing media suitable for surrounding materials
Special Remarks on Fire Hazards	Not available
Special Remarks on Explosion Hazards	Not available

Section 6. Accidental Release Measures

Small Spill	Prevent product from entering drinking water, waterways or streams. Collect leaking and spilled liquid in sealable containers as far as possible.
Large Spill	Evacuate areas of nonessential personnel. Pump off product. Prevent spilled product or contaminated wash water from entering drinking water supplies or streams.

Section 7. Handling and Storage

Storage	Keep container closed when not in use. Do not store in direct sunlight and rain. Keep the liquid temperature from 0°C to 40°C
Handling	In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Wash thoroughly after handling.

Section 8. Exposure Controls, Personal Protection

Engineering Controls	Facilities storing or utilizing this substance should be equipped with an eye wash facility and a safety shower.
Personal Protection	Respiratory protection: Needless in normal industrial use Hand protection: Wear chemical resistant gloves. Eye protection: Wear safety glasses with side shields or goggles and a face shield. Skin and body protection: Wear chemical resistant suit and rubber boot.
TLV/PEL	No occupational exposure limits proposal established by OSHA(2002), ACGIH(2002) and NIOSH.

Section 9. Physical and Chemical Properties

Appearance	Light yellow or brown viscous liquid
Molecular Weight	Not applicable
pH	ca. 3.5~7.5
Boiling/Condensation Point	ca. 100°C
Melting/Freezing Point	< 0°C
Specific Gravity	1.06 ~ 1.16 (25°C)
Vapor Pressure	Not applicable
Vapor Density	Not available
Odor	Aromatic (Slight)
Autoignition	Not available
Viscosity	100~ 750 cPs(25°C)
Explosion	Not applicable
Solubility	Fully miscible
Flash Point	Not applicable

Section 10. Stability and Reactivity

Stability and reactivity	The product is stable
Conditions of Instability	Not available
Incompatibility with Various Substances	Not available
Corrosivity	Not available
Special Remarks on Reactivity	Not available

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50):2000mg/kg [Rat]
Special remarks on Toxicity to Animals	Not available
Chronic Effects on Humans	CARCINOGENIC EFFECTS Classified None by NTP MUTAGENIC EFFECTS Not available DEVELOPMENTAL TOXICITY Not available REPRODUCTIVE TOXICITY Not available
Special remarks on Toxicity to Humans	Not available

Section 12. Ecological Information

Ecotoxicity	EC50/48 h >100mg/l
BOD5 and COD	
Biodegradation	Poorly biodegradable
Special Remarks on the Products of Biodegradation	Not available

Section 13. Disposal Considerations

Waste Information	Dispose of according to all federal, state and local applicable regulations
Waste Stream	Not available

Section 14. Transport Information

Not classified as hazardous under transport regulations.

Section 15. Regulatory Information

KOREA STATUS	Filed
US STATUS	TSCA Inventory : Listed SARA TITLE III313 : Not listed
EINECS	Copolymer all monomers are listed

Section 16. Other Information

Other Special Considerations Not available

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