

GHS COMPLIANT SAFETY DATA SHEET

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

SECTION 1: IDENTIFICATION

PRODUCT NAME	Sulfonex M-80
MFR.'S CODE ID/SYNONYMS	Sulfonex M-80
CAS NUMBER	Mixture (see Sections 3 or 8)
PRODUCT USE	Resin solution for coatings
RESTRICTIONS ON USE	For industrial use only
MANUFACTURER/SUPPLIER	Estron Chemical, Inc.
ADDRESS	807 North Main Street, Calvert City, KY 42029 USA
GENERAL INFORMATION	(270) 395-4195
EMERGENCY TELEPHONE	CHEMTREC (800) 424-9300



SECTION 2: HAZARDS IDENTIFICATION

Signal Word: *Warning*

GHS Classification

Physical	Health	Environmental
Flammable Liquids – Category 3	Acute Toxicity (Oral, Inhalation) - Category 4 Skin Corrosion/Irritation – Category 2 Eye Irritation - Category 2A Specific Target Organ Toxicity, Single Exposure (Central Nervous System) – Category 3	Hazardous to the Aquatic Environment, Acute Hazard – Category 3

GHS Label

<p>Symbols: Flame  Exclamation Mark </p>	
<p>Hazard Statements H226: Flammable liquid and vapour H302: Harmful if swallowed H315: Causes skin irritation H319: Causes serious eye irritation H332: Harmful if inhaled H336: May cause drowsiness or dizziness H402: Harmful to aquatic life</p>	<p>Precautionary Statements</p> <p><i>Prevention</i> P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking. P233: Keep container tightly closed. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/light/equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash exposed skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection.</p> <p><i>Response</i> P301+312+330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. P302+352: IF ON SKIN: Wash with plenty of soap and water. P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p>

	<p>P304+340+312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P321: Specific treatment (see supplemental first aid instructions on this label)</p> <p>P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.</p> <p>P332+313: If skin irritation occurs: Get medical advice/attention.</p> <p>P337+313: If eye irritation persists get medical advice/attention.</p> <p>P362+P364: Take off contaminated clothing and wash it before reuse.</p> <p>P370+378: In case of fire: Use foam, dry chemical powder, carbon dioxide or water fog to extinguish.</p> <p><i>Storage</i></p> <p>P403+233+235: Store in a well ventilated place. Keep container tightly closed. Keep cool.</p> <p>P405: Store locked up.</p> <p><i>Disposal</i></p> <p>P501: Dispose of contents/container to an authorized hazardous waste handler.</p>
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HAZARDS NOT OTHERWISE CLASSIFIED: None identified.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%	CLASSIFICATION	H CODES
Tosylamide /Formaldehyde Resin	1338-51-8	78 – 82	Acute Toxicity (Oral, Inhalation) - Category 4 Eye Irritation - Category 2B	H302, H332 H320
n-Butyl Acetate	123-86-4	18 - 22	Flammable Liquids – Category 3 Skin Corrosion/Irritation – Category 2 Eye Damage/Irritation – Category 2A Specific Target Organ Toxicity, Single Exposure (Central Nervous System) – Category 3 Hazardous to the Aquatic Environment, Acute Hazard – Category 3	H226 H315 H319 H336 H412
<i>Free Formaldehyde</i>	<i>50-00-0</i>	<i><600ppm *</i>	<i>Acute Toxicity (Oral, Dermal, Inhalation) – Category 3 Skin Corrosion – Category 1B Skin Sensitization 1 Mutagenicity – Category 2 Carcinogenicity – Category 1B</i>	<i>H301, H311, H331 H314 H317 H341 H350</i>

* Formaldehyde information included, but below the threshold value for reporting or inclusion in the product hazards classification.

(See Section 8 for Exposure Limits)

SECTION 4: FIRST-AID MEASURES

SYMPTOMS OF EXPOSURE

ACUTE	Eye irritation. Drowsiness or dizziness. Temporary mild skin irritation. Nausea.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Headache. Nausea. Unconsciousness.
INHALATION	Harmful if inhaled. May cause drowsiness or dizziness. If inhaled, Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or physician if you feel unwell. If breathing is labored or with coughing, give 100% supplemental oxygen. If not breathing begin artificial respiration and get medical aid.
SKIN CONTACT	Causes skin irritation. Remove/Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of soap and water. Wash thoroughly with soap and water. If skin irritation persists, consult a doctor.
EYE CONTACT	Causes serious eye irritation. Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Wash with plenty of water for 15 minutes. If eye irritation persists, get medical advice/attention.

INGESTION Harmful if swallowed. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do not induce vomiting unless directed by medical personnel. If ingested, seek medical attention.

SPECIFIC TREATMENT No other specific treatments are known or have been identified.

SECTION 5: FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION Flammable Liquid Class IC

FLAMMABLE LIMITS LEL: 1.7 %, by volume of solvent.
UEL: 7.6 %, by volume of solvent.

HAZARDOUS COMBUSTION PRODUCTS Carbon Dioxide, Carbon Monoxide, Oxides of Nitrogen and Sulfur, Formaldehyde.

EXTINGUISHING MEDIA Dry Chemical, Foam, CO₂, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS Solvent vapors may travel in the workplace. This material may release formaldehyde under burning conditions. Reaction with peroxide, nitrogen dioxide, and permformic acid can cause an explosion (formaldehyde gas). Since even residual amounts can ignite explosively, ensure all ignition sources are removed from the area. Solid stream of water may spread fire.

SPECIAL FIRE FIGHTING PROCEDURES Wear self-contained breathing apparatus and protective suit when fighting fire. Solid streams of water may spread the fire.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full (Bunker) protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Prevent contact with skin, eyes and clothing. Ensure adequate ventilation.

PROTECTIVE EQUIPMENT See Personal Protective Equipment in Section 8.

EMERGENCY PROCEDURES Avoid unnecessary exposure to bystanders, prevent contact with open flames or high heat sources. Isolate the area and eliminate all ignition sources. Ground and bond all containers and handling equipment. Pump with explosion-proof equipment.

ENVIRONMENTAL PRECAUTIONS Obey relevant local, state, provincial and federal laws and regulations. Do not allow the product to enter public drainage systems or open water courses.

METHODS AND MATERIALS FOR CLEANING UP Absorb the product onto vermiculite, floor absorbent or other absorbent materials, such as dry-lime, sand, or soda ash. Sweep or scoop into a suitable container for disposal. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING Prevent contact with the eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors. Use with adequate ventilation. Ground and bond all containers and handling equipment. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges. Emptied containers may still be hazardous. Do not cut, drill, grind, weld or perform similar actions on or near empty containers.

CONDITIONS FOR SAFE STORAGE Store in cool, dry, well-ventilated areas. Keep containers closed. Do not store near extreme heat, open flame or sources of ignition. The product shelf life is three years from date of manufacture in an unopened container stored at 20 °C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS	CAS #	%	ACGIH TLV	OSHA PEL
Tosylamide /Formaldehyde Resin	1338-51-8	78 – 82	<i>None established</i>	<i>None established</i>
n-Butyl Acetate	123-86-4	18 - 22	150 ppm	200 ppm
Free Formaldehyde	50-00-0	<600ppm *	0.3 ppm	2.0 ppm

* Formaldehyde information included, but below the threshold value for reporting or inclusion in the product hazards classification.

APPROPRIATE ENGINEERING CONTROLS Showers, eyewash stations and explosion-proof ventilation systems.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE	Chemical splash goggles or face shield.
SKIN	Wear resistant gloves (consult you safety equipment supplier) and impervious protective clothing as appropriate to prevent skin contact.
RESPIRATORY	An appropriate NIOSH approved respirator where exposure limits are exceeded.
HYGIENE MEASURES	Handle in accordance with good industrial hygiene and safety practices. When using, do not eat, drink or smoke. Wash face and hands before breaks and at the end of work. Wash contaminated clothing before re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid	ODOR	Strong, esteric
ODOR THRESHOLD	No test data available	pH	No test data available
MELTING POINT	No test data available	BOILING POINT/RANGE	124 °C @ 760 mmHg
FLASH POINT	TCC, 77°F (26°C)	EVAPORATION RATE	1 (n-Butyl Acetate)
FLAMMABILITY	Flammable Liquid Class IC		
FLAMMABLE LIMITS	LOWER 1.7 %, <i>by volume of solvent</i>	UPPER 7.6 %, <i>by volume of solvent</i>	
VAPOR PRESSURE	8.4 mmHg @ 20 °C	VAPOR DENSITY	4 (Air = 1)
RELATIVE DENSITY	No test data available	SOLUBILITY IN H ₂ O	<i>Solvent</i> – 0.68% @ 20 °C <i>Polymers</i> - Nil
PARTITION COEFFICIENT (n-octanol/water)	Log P _{ow} = 1.82	AUTOIGNITION TEMPERATURE	407 °C (762 °F)
DECOMPOSITION TEMPERATURE	> 250 °C (Polymer)	VISCOSITY	No test data available
% VOLATILE	18 – 22 %	SOFTENING POINT	No test data available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	This product does not pose a significant reactivity hazard when stored appropriately (see Section 7).
STABILITY	Stable when maintained under recommended storage conditions.
CONDITIONS TO AVOID	All ignition sources, heat and open flames.
INCOMPATIBLE PRODUCTS	Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon Dioxide, Carbon Monoxide, Formaldehyde, Oxides of Nitrogen and Sulfur.
POSSIBILITY OF HAZARDOUS REACTIONS	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

SYMPTOMS OF EXPOSURE

ACUTE	Drowsiness or dizziness. Skin or eye irritation. Nausea.
DELAYED	Stinging, tearing, redness and swelling of the eyes. Redness or burning of the skin. Headache. Nausea. Unconsciousness.

ACUTE TOXICITY

INHALATION	Harmful if inhaled. May cause drowsiness or dizziness.
SKIN	Causes skin irritation.
EYES	Causes serious eye irritation.
INGESTION	Harmful if swallowed.

INHALATION TOXICITY	LC ₅₀ Rat	Butyl Acetate	390 mg/l, 4 h.
		Resin	Not established
		Formaldehyde	203 mg/m ³ , 2 hours

DERMAL TOXICITY	LD ₅₀ Rabbit	Butyl Acetate Resin Formaldehyde	>17600 mg/kg Not established 270 mg/kg	
SKIN IRRITATION	Draize, Rabbit, 24 hours	Butyl Acetate	500 mg/m ³	Moderate
EYE IRRITATION	Human Draize, Rabbit, 24 hours	Butyl Acetate Butyl Acetate	300 ppm 100 mg	Moderate Moderate
ORAL TOXICITY	LD ₅₀ Rat	Butyl Acetate Resin Formaldehyde	>10000 mg/kg Not established 100 mg/kg	
SENSITIZATION	Draize, Rabbit		No data available	
CHRONIC EFFECTS				
CARCINOGENICITY	Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65, but may contain formaldehyde, which is classified A2 (Suspected for human) by ACGIH, and 2A (Probable for human) by IARC. Formaldehyde is listed by the I.A.R.C. as probably carcinogenic to humans on the basis of animal evidence, but adequate human data is unavailable. It is listed by the N.T.P. as reasonably anticipated to be carcinogenic. And it is classified as a suspected human carcinogen by ACGIH. See Section XV for specific regulatory information regarding formaldehyde.			
MUTAGENIC EFFECTS	May contain formaldehyde which is mutagenic for mammalian somatic cells and mutagenic for bacteria and/or yeast			
REPRODUCTIVE TOXICITY	Formaldehyde is known to cause reproductive harm to animals, but adequate human data is unavailable.			
TARGET ORGAN EFFECTS	Narcotic Effects (Inhalation)			

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	Harmful to aquatic life.			
TOXICITY TO FISH	LC ₅₀ Pimephales promelas, 96 h	Butyl Acetate Resin Formaldehyde	18 mg/l Not established 41.00 mg/l	
TOXICITY TO DAPHNIA	EC ₅₀ Daphnia magna	Butyl Acetate Resin Formaldehyde	44 mg/l, 48 h Not established 14.7 mg/l, 24 h	
TOXICITY TO ALGAE	EC ₅₀ Desmodesmus subsp., 72 h	Butyl Acetate Resin Formaldehyde	675 mg/l Not established No data available	
PERSISTANCE AND DEGRADABILITY	Butyl Acetate: Aerobic test, 28 days, 83% biodegradation. <i>Readily biodegradable, according to appropriate OECD test</i> Formaldehyde readily biodegradable, no other data available			
BIOACCUMULATIVE POTENTIAL	Butyl Acetate: Bioconcentration Factor, BCF = 15			
MOBILITY IN SOIL	No data available			
OTHER ADVERSE EFFECTS	None known			

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Dispose of in accordance with local, state and federal regulations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers may retain some product residues. Vapor from product residues may create a flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been thoroughly cleaned. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3.

US EPA WASTE NUMBER & DESCRIPTION No information available

SECTION 14: TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

U.S. DOT

Proper Shipping Name: Resin Solution, *flammable*
Classification: 3
UN#: 1866
Packing Group: III
Hazard Label: Flammable Liquid

ICAO / IATA

Proper Shipping Name: Resin Solution, *flammable*
Classification: 3
UN#: 1866
Packing Group: III
Hazard Label: Flammable Liquid

IMDG

Proper Shipping Name: Resin Solution, *flammable*
Classification: 3
UN#: 1866
Packing Group: III
EmS#: F-E, S-E
Hazard Label: Flammable Liquid

ADR/RID

Proper Shipping Name: Resin Solution, *flammable*
Classification: 3
UN#: 1866
Packing Group: III
Hazard Label: Flammable Liquid

SECTION 15: REGULATORY INFORMATION

The components in this product are either listed or exempt from listing due to polymer exemption criteria for the following chemical listing inventories as indicated by an "X":

AIIC	Australian Inventory of Industrial Chemicals	X
DSL	Canadian Domestic Substances List	X
ECL	Korean Existing Chemicals List	
ENCS	Japanese Existing and New Chemical Substances	
IECSC	Inventory of Existing Chemical Substances in China	X
INSQ	National Inventory of Chemical Substances in Mexico	
NDSL	Canadian Non-Domestic Substances List	
NZIoC	New Zealand Inventory of Chemicals	X
PICCS	Philippines Inventory of Chemicals and Chemical Substances	X
TCSI	Taiwan Chemical Substances List	X
TSCA	US Toxic Substances Control Act	X
VNECI	Vietnam National Existing Chemical Inventory	X

INTERNATIONAL REGULATIONS

EU REGULATION

(EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization, *Substances of Very High Concern*: This product does not contain any SVHC listed substances.

REACH

Not all components of this product are REACH registered. Import limitations may apply.

C.D. 96/82/EC

Council Directive 96/82/EC, Annex I not mentioned by name. With regard to possibly appropriate decomposition products see Chapter 10.

AREC

This product is listed on the Korean Act on Registration and Evaluation of Chemicals.

FEDERAL REGULATIONS

SARA 313 This product contains a chemical (formaldehyde) which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA Section 311/312 (40 CFR 370) Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Pressure Hazard	No
Reactivity Hazard	No

CERCLA This product, as supplied, contains substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this product.

n-Butyl Acetate (123-86-4): 5000 lb final RQ.
Formaldehyde (50-00-0): 100 lb final RQ

CLEAN WATER ACT This product may contain substances (formaldehyde) regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CLEAN AIR ACT This product may contain substances (formaldehyde) regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

OTHER FEDERAL This product is regulated under the Hazard Communication Standard for Formaldehyde as reported in the United States Code of Federal Regulations, 29 CFR 1910.1048.

U.S. STATE REGULATIONS

RIGHT TO KNOW The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in Sections 2 and 15 of this Safety Data Sheet.

CALIFORNIA PROP 65 **CALIFORNIA PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):**
WARNING! This product contains a chemical(s) known to the State of California to cause cancer.

<u>Component</u>	<u>CAS #</u>	<u>Amount</u>
Free Formaldehyde	50-00-0	< 600ppm

SECTION 16: OTHER INFORMATION

DISCLAIMER This product is intended for industrial use only and should be used in accordance with the manufacturer's recommendations. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DATE OF REVISION November 15, 2023, *replaces the February 27, 2023 version.*

REASON FOR REVISION Added AREC information to Section 15.

SDS PREPARED BY Glen Pearson

SDS APPROVED BY Robert Auerbach