

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ERSYSTEMS 2100MS

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Sealant

1.3. Supplier

ITW Polymers and Sealants NA
12055 Cutten Road
Houston, TX 77066
T 972-438-9111

1.4. Emergency telephone number

Emergency number : CHEMTREC (US Transportation): (800) 424-9300 International: +1 (703) 527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids, Category 4 H227
Skin sensitization, Category 1 H317
Reproductive toxicity, Category 1B H360
Specific target organ toxicity - Repeated exposure, Category 2 H373

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H227 - Combustible liquid
H317 - May cause an allergic skin reaction.
H360 - May damage fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe mist/vapors/spray.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, chemical goggles, & face protection
P302+P352 - If on skin: Wash with plenty of water.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%*
Toluene	(CAS-No.) 108-88-3	1 – 5
Bis(2-ethylhexyl) phthalate	(CAS-No.) 117-81-7	0.1 – 1
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	(CAS-No.) 41556-26-7	0.1 – 1
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	(CAS-No.) 82919-37-7	0.1 – 1
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine	(CAS-No.) 1760-24-3	0.1 – 1
Dibutyltin oxide	(CAS-No.) 818-08-6	0.1 – 1

* In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial respiration.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention immediately.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

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

- Symptoms/effects : May cause an allergic skin reaction. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.
- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : May cause an allergic skin reaction.
- Symptoms/effects after eye contact : May cause eye irritation.
- Symptoms/effects after ingestion : May cause gastrointestinal irritation.
- Chronic symptoms : May cause an allergic skin reaction. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Fire hazard : Combustible liquid.
- Explosion hazard : No data available.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
- Other information : Under fire conditions closed containers may rupture or explode.

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment/cleaning up : SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Ventilate the area by natural means or by explosion proof means (i.e. fans). Know and prepare for spill response before using or handling this product. Eliminate all ignition sources (flames, hot surfaces, portable heaters and sources of electrical, static, or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools and appropriate PPE. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : For professional or industrial use only. Follow label instructions. Keep out of reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. Flammable vapors may cause flash fire or ignite explosively. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Containers may be hazardous when empty. Never use welding or cutting torch on or near container. Do not cut, drill, grind, or expose containers to heat, sparks, static electricity or other source of ignition. Explosion may occur causing injury or death.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Empty containers retain product residue and can be hazardous.

Storage conditions : Store in a dry, cool and well-ventilated place. Keep the container tightly closed.

Heat and ignition sources : Avoid ignition sources.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Toluene (108-88-3)		
ACGIH	ACGIH OEL TWA [ppm]	20 ppm

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Toluene (108-88-3)		
ACGIH	Remark (ACGIH)	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH	Regulatory reference	ACGIH 2021
OSHA	OSHA PEL TWA [2]	200 ppm
OSHA	OSHA PEL C [ppm]	300 ppm (500 ppm Peak [10 minutes])
OSHA	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	500 ppm 10 mins.
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
IDLH	IDLH [ppm]	500 ppm
NIOSH	NIOSH REL TWA	375 mg/m ³
NIOSH	NIOSH REL TWA [ppm]	100 ppm
NIOSH	NIOSH REL STEL	560 mg/m ³
NIOSH	NIOSH REL STEL [ppm]	150 ppm
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)		
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OELs not established
Bis(2-ethylhexyl) phthalate (117-81-7)		
ACGIH	ACGIH OEL TWA	5 mg/m ³
OSHA	OSHA PEL TWA [1]	5 mg/m ³ (listed under Di-sec-octyl phthalate) vacated
OSHA	OSHA PEL STEL [1]	10 mg/m ³ (Di-sec-octyl phthalate) vacated
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester (82919-37-7)		
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OELs not established
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)		
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OELs not established
Dibutyltin oxide (818-08-6)		
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OELs not established

8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):



Personal protective equipment:

Gloves. Protective goggles. Wear chemically impervious apron over labcoat and full coverage clothing. In case of inadequate ventilation, wear respiratory protection.

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Nitrile, rubber, or Neoprene. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection:

Lab coat with chemically impervious apron.

Respiratory protection:

An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Smooth viscous paste
Color	: White
Odor	: Mild
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 68.3 °C (155 °F)
Relative evaporation rate (n-butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 12.8 lb/gal ± 0.2 lb
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

High temperatures, incompatible materials.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

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

Toluene (108-88-3)

LD50 oral rat 2600 mg/kg

LD50 dermal rabbit 12000 mg/kg

LC50 Inhalation - Rat 12.5 mg/l/4h

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)

LD50 oral rat 2615 mg/kg

Bis(2-ethylhexyl) phthalate (117-81-7)

LD50 oral rat 30 g/kg

LD50 dermal rabbit 25 g/kg

LC50 Inhalation - Rat Inhalation LC50 Rat >23.67 mg/L 1 h

Dibutyltin oxide (818-08-6)

LD50 oral rat 44.9 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects : May cause an allergic skin reaction. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May cause gastrointestinal irritation.

Chronic symptoms : May cause an allergic skin reaction. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

- Hazardous to the aquatic environment, short-term (acute) : Not classified
- Hazardous to the aquatic environment, long-term (chronic) : Not classified
- Ecology - general : No information available.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
- Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

This mixture meets the requirements for 49 CFR 173.150(f)(1)(2) exemptions and the outer packages of this material would not require transportation labeling.

Transport by sea (IMDG)

Not regulated for transport

Air transport (IATA)

Not regulated for transport

SECTION 15: Regulatory information

15.1. US Federal regulations

ERSystems 2100MS

All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb. 2019, as amended Feb. 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA.


SARA Section 311/312 Hazard Classes

Physical hazard - Flammable (gases, aerosols, liquids, or solids)
Health hazard - Respiratory or skin sensitization
Health hazard - Reproductive toxicity
Health hazard - Specific target organ toxicity (single or repeated exposure)

15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Bis(2-ethylhexyl) phthalate, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Toluene (108-88-3)		X				7000 µg/day
Bis(2-ethylhexyl) phthalate (117-81-7)	X	X	X		310 µg/day	
Titanium dioxide (13463-67-7)	X				Not available	
Methyl alcohol (67-56-1)		X				47000 µg/day (inhalation); 23,000 µg/day (oral)
Benzene (71-43-2)	X	X	X		6.4 µg/day (oral); 13 µg/day (inhalation)	24 µg/day (oral); 49 µg/day (inhalation)
Formaldehyde (50-00-0)	X				40 µg/day	
Cumene (98-82-8)	X					
Ethylbenzene (100-41-4)	X				54 µg/day (inhalation); 41 µg/day (oral)	
Silica: Crystalline, quartz (14808-60-7)	X					
n-Hexane (110-54-3)			X			28000 µg/day oral

Component	State or local regulations
Toluene (108-88-3)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Bis(2-ethylhexyl) phthalate (117-81-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
Titanium dioxide (13463-67-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Methyl alcohol (67-56-1)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Massachusetts - Right To Know List
Benzene (71-43-2)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Formaldehyde (50-00-0)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Cumene (98-82-8)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
Ethylbenzene (100-41-4)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Silica, amorphous (7631-86-9)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List
Silica: Crystalline, quartz (14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Aluminum oxide (1344-28-1)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

ERSystems 2100MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	State or local regulations
Limestone (1317-65-3)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
n-Hexane (110-54-3)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Zirconium oxide (1314-23-4)	U.S. - Massachusetts - Right To Know List
Paraffin waxes and Hydrocarbon waxes (8002-74-2)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Methyl silicate (681-84-5)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

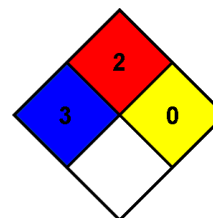
SECTION 16: Other information

Other information : Author: EMA.

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS Hazard Rating

Health : 3*
* - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 2

Physical : 0

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.