

SAFETY DATA SHEET

Date Prepared : 09/13/2017

MSDS No : SM2100

Date Revised : 09/13/2017

Revision No : 9

ERSystems 2100 MS Adhesive Sealant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ERSystems 2100 MS Adhesive Sealant

MANUFACTURER

ITW Polymers Sealants North America
111 South Nursery Road
Irving, TX 75060

Product Stewardship: (972) 438-9111

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424-9300

COMMENTS: ERSystems is a registered trademark of Illinois Tool Works, Inc.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Reproductive Toxicity, Category 2
Target Organ Toxicity (Repeated exposure), Category 2
Aspiration Hazard, Category 1

Physical:

Flammable Liquids, Category 4

GHS LABEL



Health
hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H227: Combustible liquid.
H304: May be fatal if swallowed and enters airways.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENT(S)

Prevention:

[201]: 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 dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P308+P313: IF exposed or concerned: Get medical advice/ attention.
P314: Get medical advice/attention if you feel unwell.

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P331: Do NOT induce vomiting.

P370+P378: In case of fire: Use appropriate media to extinguish.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container according to local, regional, national, and international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear liquid with a mild solvent odor

IMMEDIATE CONCERNS: CAUTION! Combustible liquid and vapor. Causes eye and skin irritation.

POTENTIAL HEALTH EFFECTS

EYES: Moderately irritating to the eyes.

SKIN: May cause mild skin irritation. Repeated or prolonged skin contact may result in allergic dermatitis.

INGESTION: Not likely route of entry. Harmful if swallowed, may cause nausea. Consult a physician.

INHALATION: May cause mild irritation to the respiratory tract. May aggravate existing respiratory conditions.

ROUTES OF ENTRY: Eye and Skin Contact, Inhalation and Ingestion

IRRITANCY: Irritant to eyes, skin and respiratory tract.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Toluene	< 3	108-88-3

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

INGESTION: Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

INHALATION: Under normal conditions of use, inhalation of product is unlikely. If fumes are inhaled and become irritant, remove person from the area to fresh air. Seek immediate medical attention if exposure has occurred.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Contact causes skin irritation.

INGESTION: Not likely route of entry. May cause vomiting if ingested.

INHALATION: Respiratory tract irritation.

ACUTE EFFECTS: Irritant to the eyes, skin and respiratory tract.

CHRONIC EFFECTS: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

NOTES TO PHYSICIAN: Treat symptomatically.

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5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Class IIIA

GENERAL HAZARD: Combustible Liquid.

EXTINGUISHING MEDIA: Use methods appropriate for the surrounding fire. Water spray, dry chemical, carbon dioxide, AFFF or alcohol resistant foams are all appropriate.

OTHER CONSIDERATIONS: This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.

EXPLOSION HAZARDS: Solid water stream may spread fire. When exposed to extreme heat, closed containers may rupture. Cool containers with flooding quantities of water until after the fire is completely extinguished.

FIRE FIGHTING PROCEDURES: This product may release flammable vapors that are slightly heavier than air.

FIRE FIGHTING EQUIPMENT: As in any fire, wear Self-Contained Breathing Apparatus (SCBA) MSHA/NIOSH approved or equivalent and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

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. 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 appropriate 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 mechanical 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.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid run-off into storm drains, ditches and waterways.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: For professional or industrial use only. Follow label instructions. Keep out of the 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. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Vapors may be heavier than air and will collect in low areas. Containers may be hazardous when empty.

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid

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with eyes and prolonged skin exposure. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

STORAGE: Keep container closed when not in use. Store in a dry well ventilated area and out of the sun. Material will start to cure in the presence of humid air or moisture. Do not store in the same area with alcohols, amines, strong bases and surface active materials.

SHELF LIFE: 12 months from date of manufacture when stored below 80 F (26.7 C)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
EXPOSURE LIMITS				
Chemical Name	Type		ppm	mg/m ³
Toluene	OSHA PEL	TWA	200 ppm	NL
		STEL	300 ppm ^[1]	NL ^[1]
	ACGIH TLV	TWA	20 ppm	NL
		STEL	NL ^[2]	NL ^[2]
Footnotes: 1. C = Ceiling 2. NL = Not Listed				

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use only in a well ventilated area. To determine exposure levels, monitoring should be performed as outlined by OSHA Standard 29 CFR 1910.1052.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields, goggles or full-face shield as required by 29 CFR 1910.133 - OSHA Eye and Face Protection Standard. A suitable emergency eye wash station and safety shower should be located near the work station.

SKIN: Wear chemical resistant, impervious gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

WORK HYGIENIC PRACTICES: Use good hygiene practices when handling this material. Wash hands thoroughly after use.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

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ODOR: Mild Solvent

COLOR: Various

pH: 7.02

PERCENT VOLATILE: 2.6

Notes: by weight

FLASHPOINT AND METHOD: (155°F) Setaflash CC Tester-ASTM D 3828

FLAMMABLE LIMITS: N/A to N/A

AUTOIGNITION TEMPERATURE: Not Determined

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

BOILING POINT: Not Determined

FREEZING POINT: Not Determined

MELTING POINT: Not Determined

POUR POINT: Not Determined

SOLUBILITY IN WATER: Nonsoluble

PARTITION COEFFICIENT: N-OCTANOL/WATER: Not Determined

EVAPORATION RATE: Not Determined

DENSITY: 12.88 lbs/gal

PARTICLE SIZE: Not Determined

SPECIFIC GRAVITY: 1.545

VISCOSITY: Not Determined

MOLECULAR WEIGHT: Not Determined

(VOC): 39.5 EPA Method 24 VOC

OXIDIZING PROPERTIES: Not Determined

WEIGHT PER VOLUME: Not Determined

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid heat, flames, sparks, and other sources of ignition. Keep away from strong oxidizing conditions and agents.

POSSIBILITY OF HAZARDOUS REACTIONS: None

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and hydrocarbon fumes if heated to decomposition.

INCOMPATIBLE MATERIALS: Strong oxidizing agents and amines.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

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Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Toluene	2600 to 7500 mg/kg	12124 mg/kg	8000 ppm (4-hr dose)

CARCINOGENICITY

Chemical Name	IARC Status
Toluene	3

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product contains components that may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

ECOTOXICOLOGICAL INFORMATION: Contains components that are potentially toxic to freshwater and saltwater ecosystems.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Consult with your state and local hazardous waste requirements or guidelines to ensure compliance. Arrange disposal in accordance with EPA, state and local requirements.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated for Transport

UN/NA NUMBER: NA

PACKING GROUP: NA

AIR (ICAO/IATA)

SHIPPING NAME: Consumer Commodity ID8000

UN/NA NUMBER: ID8000

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

LABEL: LTD QTY with the Y marking; Orientation Arrows, Class 9

NOTE: For containers that meet the limited quantity definition (eg. sausages and cartridges)

VESSEL (IMO/IMDG)

SHIPPING NAME: Consumer Commodity ID8000

UN/NA NUMBER: ID8000

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

LIMITED QUANTITY: Y

NOTE: For containers that meet the limited quantity definition (eg. sausages and cartridges)

15. REGULATORY INFORMATION

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UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Toluene	< 3	108-88-3

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Toluene	< 3	1,000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Toluene	108-88-3

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Toluene	< 3	108-88-3

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Toluene	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical

CALIFORNIA PROPOSITION 65: This product contains toluene, a chemical known to the state of California to cause birth defects or other reproductive harm.

Chemical Name	Wt.%	Listed
Toluene	< 3	Developmental Toxicity

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Combustible
Liquid



Toxic

16. OTHER INFORMATION

Date Revised: 09/13/2017

INFORMATION CONTACT: (972) 438-9111

REVISION SUMMARY: This MSDS replaces the 09/13/2017 MSDS. Revised: **Section 1:** COMMENTS.

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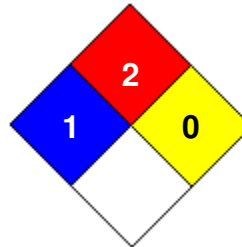
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HMIS RATING

HEALTH	*	1
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		B

NFPA CODES



GENERAL STATEMENTS: Keep out of reach of children
 For professional or industrial use only

MANUFACTURER DISCLAIMER: This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

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