$\textbf{Date Prepared:}\ 10/07/2015$

MSDS No : FA636 **Date Revised :** 10/07/2015

Revision No: 8

FA636 Bonding Adhesive

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: FA636 Bonding Adhesive

MANUFACTURER

ITW Polymers Sealants North America

56 Air Station Industrial Park Rockland, MA 02370

Product Stewardship: (781) 878-7015

24 HR. EMERGENCY TELEPHONE NUMBERS

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

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2

Eye Irritation, Category 2A

Reproductive Toxicity, Category 2

Acute Toxicity (Dermal), Category 3

Acute Toxicity (Inhalation), Category 3

Acute Toxicity (Oral), Category 3

Target Organ Toxicity (Single exposure), Category 1

Target Organ Toxicity (Repeated exposure), Category 2

Aspiration Hazard, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 2 Chronic Hazards to the Aquatic Environment, Category 3

Physical:

Flammable Liquids, Category 4

GHS LABEL







Health hazard

Exclamation Environment mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H227: Combustible liquid. H301: Toxic if swallowed.

H304: May be fatal if swallowed and enters airways.

H311: Toxic in contact with skin.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H361: Suspected of damaging fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

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H370: Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H401: Toxic to aquatic life.

H412: Harmful to aquatic life with long lasting effects.

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.

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P284: [In case of inadequate ventilation] wear respiratory protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P302+P352: IF ON SKIN: Wash with plenty of water/...

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

P314: Get medical advice/attention if you feel unwell.

P321: Specific treatment (see ... on this label).

P330: Rinse mouth.

P331: Do NOT induce vomiting.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

P362: Take off contaminated clothing.

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

P391: Collect spillage.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

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

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: DANGER! Combustible liquid and vapor. Vapors may cause flash fire. Harmful or fatal

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if swallowed.

POTENTIAL HEALTH EFFECTS

EYES: Mildly irritating to the eyes.

SKIN: May cause moderate skin irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

SKIN ABSORPTION: May be absorbed through the skin.

INGESTION: Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage. May produce central nervous system effects, which includes dizziness, loss of balance and coordination, unconsciousness, coma and even death. Irritating to mouth, throat, and stomach.

INHALATION: Can cause severe central nervous system depression (including unconsciousness). May cause headaches and dizziness. Vapors irritating to eyes and respiratory tract. Prolonged or repeated exposure may cause liver and kidney damage. Solvent "huffing/sniffing" abuse or intentional prolonged overexposure to high levels of vapors can produce abnormal behavior, convulsions, hallucinations, delirium, nervous system damage, serious disturbances of heart rhythm and sudden death.

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

TARGET ORGAN STATEMENT: Central Nervous System (CNS)

IRRITANCY: Eyes, nose, throat, respiratory tract, and skin irritation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Toluene	3 - 10	108-88-3
Methanol	1 - 5	67-56-1

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: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Small amounts are not expected to produce adverse health effects. Larger amounts should be recovered by aspiration. Get medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Slight irritation.

SKIN: Substance causes moderate skin irritation.

SKIN ABSORPTION: Skin absorption of material may produce systemic toxicity.

INGESTION: Toxic and is harmful if swallowed; may produce (specific organ) damage.

INHALATION: Exposure to high concentrations of vapor or mist can cause central nervous system depression with symptoms of headache, dizziness, stupor, loss of consciousness or death depending on concentration and duration of exposure. Exposure to high concentrations can cause irregular heartbeat, cardiac arrest and death. Overexposure has been shown to cause adverse effects on the lungs, liver, kidney, nervous system and internal organs.

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5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Class IIIA

GENERAL HAZARD: Combustible Liquid.

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical or foam.

EXPLOSION HAZARDS: Avoid contact with open flame, electric arcs, or other hot surfaces which can cause

thermal decomposition.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus with pressure-demand,

full face piece SCBA (MSHA/NIOSH approved or equivalent) and full protective gear.

SENSITIVE TO STATIC DISCHARGE: Not Applicable

SENSITIVITY TO IMPACT: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide may form when heated to decomposition.

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. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

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. 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).

HANDLING: Containers should be tightly closed to prevent contamination with foreign materials and moisture. Employee education and training in the safe handling of this product are required under the Federal OSHA Hazard Communication Standard.

STORAGE: Keep container closed when not in use. Store in a dry well ventilated area and out of the sun.

STORAGE TEMPERATURE: 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

SHELF LIFE: 1 year from manufacture date

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA	OSHA PEL ACGIH TLV		
Chemical Name		ppm mg/m³ ppm mg/m³		mg/m³	
Toluene	TWA	200 ppm	NL	20 ppm	NL
	STEL	300 ppm ^[1]	NL ^[1]	NL ^[2]	NL ^[2]
Methanol	TWA	200 ppm	260 mg/m3	200 ppm	262 mg/m3
	STEL	NL ^[2]	NL ^[2]	250 ppm	327 mg/m3

Footnotes:

- 1. C = Ceiling
- 2. NL = Not Listed

ENGINEERING CONTROLS: Provide sufficient ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits. Use only in a well ventilated area. Ground and bond all equipment.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields. A face shield may be necessary if spraying the product.

SKIN: Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

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

COLOR: White

PERCENT VOLATILE: 46.1

FLASHPOINT AND METHOD: 91.1°C (196°F)

FLAMMABLE LIMITS: 1.2 to 7.1

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Notes: The UFL and LFL are for toluene, not for the FA636 adhesive. The FA636 adhesive is a water based product categorized as a combustible liquid.

AUTOIGNITION TEMPERATURE: (725°F) to (997°F)

VAPOR PRESSURE: Not Determined **VAPOR DENSITY:** Not Determined

BOILING POINT: > (212°F)

FREEZING POINT: Not Determined
MELTING POINT: Not Determined
POUR POINT: Not Determined
SOLUBILITY IN WATER: Soluble

PARTITION COEFFICIENT: N-OCTANOL/WATER: Not Determined

EVAPORATION RATE: > 1 (n-Butyl Acetate=1)

DENSITY: 8.99 lbs/gal

PARTICLE SIZE: Not Determined

SPECIFIC GRAVITY: 1.078
VISCOSITY: Not Determined

MOLECULAR WEIGHT: Not Determined **(VOC):** 179.000 gr/L EPA Method 24 VOC

Notes: Photochemically Reactive Only VOC: 109.7 gr/L

OXIDIZING PROPERTIES: Not Determined

COMMENTS: 0.19 lb VHAP/lb Solid

10.1% by weight HAP

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid fire, sparks, static electricity and hot surfaces.

POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide may form when heated to

decomposition.

INCOMPATIBLE MATERIALS: Oxidizing materials

11. TOXICOLOGICAL INFORMATION

ACUTE

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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)
Methanol	No data	12800 mg/kg (rabbits)	64000 ppm (4-hr dose - rat)

CARCINOGENICITY

Chemical Name	IARC Status
Toluene	3

IRRITATION: Slight eyes and skin irritation.

CORROSIVITY: Not Applicable SENSITIZATION: Not Applicable NEUROTOXICITY: Not Applicable GENETIC EFFECTS: Not Applicable

REPRODUCTIVE EFFECTS: Not Applicable **TERATOGENIC EFFECTS:** Not Applicable

MUTAGENICITY: Not Applicable

SYNERGISTIC MATERIALS: Not Applicable

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.

BIOACCUMULATION/ACCUMULATION: Contains components with the potential to bio-accumulate.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Combustible Liquid, N.O.S.

UN/NA NUMBER: 1993

NAERG: 128

MARINE POLLUTANT #1: None

OTHER SHIPPING INFORMATION: contains (Toluene, Methanol)

SPECIAL SHIPPING NOTES: If individual container size is less than 1.3 gallons, the proper shipping name is:

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ORM-D Consumer Commodity Non-Regulated

15. REGULATORY INFORMATION

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 - 10	108-88-3
Methanol	1 - 5	67-56-1

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Toluene	3 - 10	1,000 lbs.
Methanol	1 - 5	5,000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Toluene	108-88-3
Methanol	67-56-1

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Toluene	3 - 10	108-88-3
Methanol	1 - 5	67-56-1

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
Methanol	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.

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Chemical Name	Wt.%	Listed
Toluene	3 - 10	Developmental Toxicity

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION





16. OTHER INFORMATION

Date Revised: 10/07/2015

INFORMATION CONTACT: (781) 878-7015

REVISION SUMMARY: This MSDS replaces the 06/03/2015 MSDS. Revised: Section 1: COMMENTS, Date

Issued.

HMIS RATING

HEALTH *	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	В



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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