

# SAFETY DATA SHEET

Revision 1  
Prepared 2012-12-07

## SECTION 1. PRODUCT & COMPANY IDENTIFICATION

Product Name: **FA1065M**

**MANUFACTURER'S NAME:**

Royal Adhesives & Sealants, LLC  
Aerospace & Marine Inflatable Adhesives & Coatings Division  
48 Burgess Place  
Wayne, NJ 07470

**Manufacturer's Phone Number:** 973-694-0845

**Information and Emergency Phone Number:** 973-694-0845

**In case of spill or leak involving this material, call Chemtrec 24 hours a day:** USA: 1-800-424-9300

Outside USA: 703-527-3884

## SECTION 2. COMPOSITION

<u>Chemical Name / CAS No</u>	<u>OSHA Exposure Limits</u>	<u>ACGIH Exposure Limits</u>	<u>Other Exposure Limits</u>
TOLUENE 108-88-3	200ppm (TWA)	20ppm (TWA)	
N-HEXANE 110-54-3	500ppm (TWA)	50ppm (skin-TWA)	
CYCLOHEXANE 110-82-7	300ppm (TWA)	100ppm (TWA)	

## SECTION 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Flammable or combustible liquid and vapors. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Potential irritant of the eyes, skin, and respiratory system.



**HMIS Rating:** 2 - 3 - 0 - B

PRIMARY ROUTES OF ENTRY:

**Inhalation      Skin Contact      Eye Contact      Ingestion**

TARGET ORGANS: Overexposure may cause damage to the following target organs or systems:

**Kidneys      Central Nervous System**

### Potential Adverse Health Effects:

**OVEREXPOSURE**

Signs and symptoms of overexposure to this product include headache, irritation of upper respiratory tract, asthmatic symptoms, chest tightness, breathing difficulty, coughing, incoordination, weakness, eye irritation, blurred vision, skin irritation, diarrhea, tingling, numbness, changes in blood pressure and heart rate, and/or unconsciousness. Confusion. Metallic taste in mouth.

**CONDITIONS**

Pre-existing conditions of any organ mentioned in this MSDS as being at risk may be aggravated by overexposure to this product. Conditions of the auditory system. Conditions of the central nervous system. Conditions of the kidneys. Individuals with heart disorders may be more susceptible to arrhythmias at high concentrations. Conditions of the liver. Conditions of the male reproductive system.

**Potential Adverse Health Effects:**

EYE CONTACT	Liquid or vapors may irritate the eyes. Symptoms may include stinging, tearing, redness, swelling and blurred vision.
CHRONIC EFFECTS	Prolonged intentional abuse of Toluene may lead to damage of central and peripheral nervous systems, vision, hearing, liver, kidneys, heart, blood, and has also been associated with brain damage and hearing loss.
SKIN CONTACT	Skin irritant. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying, cracking, inflammation of the skin, blisters, burns and dermatitis. May be absorbed through the skin.
INGESTION	Harmful if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
INHALATION	This product may cause irritation to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. Symptoms can also include cough, sneezing, nasal discharge, nose and throat pain.

**CARCINOGENICITY:** The following components comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or the American Conference of Governmental and Industrial Hygienists (ACGIH):

N/A

**SECTION 4. FIRST AID MEASURES**

*Utilize the suggested methods below.*

*In an emergency, notify a physician immediately.*

**INHALATION:** Move person to fresh air or give oxygen. If the affected person is not breathing perform CPR. Refer to a physician if signs/symptoms develop.

**EYES:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**SKIN:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. For minor exposures, wash thoroughly with soap and clean water. Get medical attention if irritation persists.

**INGESTION:** If this material is swallowed, get immediate medical attention or advice. **DO NOT INDUCE VOMITING.** If vomiting occurs naturally, have the person lean forward to reduce risk of aspiration.

**SECTION 5. FIRE FIGHTING MEASURES**

LEL: 1.0 %

UEL: 8.4 %

FLASH POINT: -21.7 C, -7 F

AUTOIGNITION: 399 F is the lowest known value

**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical, foam.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** **UNUSUAL FIRE AND EXPLOSION HAZARDS:** Closed containers exposed to heat from fire may build pressure and explode. Cool with water. Vapor is heavier than air and may travel considerable distance to source of ignition and flashback.

**HAZARDOUS COMBUSTION PRODUCTS:** Refer to Section X (10).

**BASIC FIRE FIGHTING PROCEDURES:** Must use CO2, foam or dry chemical. Use water (mist only) to cool fire exposed structures or sealed containers until fire is out to prevent explosive rupture. Avoid spreading burning liquid with water used for cooling purposes. Empty containers may retain product residue including flammable or explosive vapors.

**FIRE EQUIPMENT:** Wear full protective clothing, including helmet, NIOSH/MSHA approved, self-contained breathing apparatus and face mask.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Isolate the spill area. Wear protective clothing and equipment during clean up. Eliminate all sources of ignition. **NOTE:** Vapor is heavier than air; be aware of your surroundings.

**CONTAINMENT PROCEDURES (SMALL RELEASES):** Eliminate all sources of ignition. Absorb spill in sand, earth, vermiculite or industrial absorbent material. Carefully transfer to approved hazardous waste storage container and cover.

**CONTAINMENT PROCEDURES (LARGE RELEASE):** Eliminate all sources of ignition and evacuate the immediate area. Cleanup should be handled by operators trained to handle hazardous materials, wearing the appropriate protective equipment. Absorb spill in sand, earth, vermiculite, or industrial absorbent material. Carefully transfer to approved hazardous waste container and cover. Dike spills to prevent runoffs.

**Dispose of in accordance with federal, state, and local waste disposal regulations.**

## SECTION 7. HANDLING & STORAGE

**HANDLING:** Ground or bond all metal containers prior to transfer of material. Keep product away from heat, sparks or open flame. Vapors are heavier than air. Avoid getting product in contact with eyes and skin. Wash hands thoroughly after handling, especially before eating, drinking smoking or using restroom facilities. Avoid breathing vapors or mists of this product. Use with adequate ventilation. For Industrial Use Only.

**EMPTY CONTAINER PRECAUTION:** Containers may be hazardous when empty due to residuals present. Keep away from heat, sparks, flames or sources of ignition. **DO NOT** cut, drill, puncture, weld or grind on or near full, partially full, or empty product containers.

**STORAGE:** Store away from heat, open flame, or other sources of ignition. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents and acids.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from handling this product. Explosion proof exhaust ventilation must be used.

**VENTILATION:** As specified.

**LOCAL EXHAUST:** Remove vapors during processing.

**MECHANICAL EXHAUST:** Explosion-proof equipment.

**SPECIAL:** Reduce hazardous material concentrations below the specified limits.

**GENERAL:** Eyewash fountains and emergency showers should be readily available. Use good industrial hygiene practices in handling this material.

**EYE PROTECTION:** Splash goggles or safety glasses compliant with OSHA regulations. Contact lenses should not be worn.

**SKIN PROTECTION:** Impervious rubber gloves and protective clothing as required to prevent skin contact.

**RESPIRATORY PROTECTION:** Avoid breathing vapors or mists. Use NIOSH approved respiratory protection if airborne concentrations are above the applicable exposure limits shown in Section 2 of this document.

## SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

*Numerical values represent best estimates from available component data. Test values for the finished product are not available.*

Odor	<b>Characteristic solvent odor</b>
Physical State	<b>Liquid</b>

Vapor Density **Heavier than air**  
Vapor Pressure **50.9 mmHg(at 20C)**  
Evaporation Rate **Not available**  
Boiling Range **66 to 110 °C, 150 to 230 °F**  
Specific Gravity (SG) **0.849**  
Formula Lb / Gal **7.08**  
Lbs VOC/Gallon less water less exempts **5.41**  
Gms VOC/ Liter less water less exempts **648.18**

#### SECTION 10. STABILITY & REACTIVITY

**CONDITIONS TO AVOID:** Avoid heat, open flames, sparks, hot surfaces, ignition sources, and oxidizing agents.

**STABILITY:**Stable.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBLE PRODUCTS:** Avoid contact with:

Acids  
Oxidizing Agents

**HAZARDOUS DECOMPOSITION OR BY- PRODUCTS CONDITIONS DURING COMBUSTION:** May form:

Hydrogen Chloride  
Oxides of Carbon.

#### SECTION 11. TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL DATA:** See data listed under Hazards Identification Section III (3).

#### SECTION 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL IMPACT:** No data is currently available for the impact of this mixture of components on the environment.

#### SECTION 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Dispose of in accordance with federal, state and local regulations. The user is responsible for proper waste identifications, transportation and disposal based on the characteristics supplied as received. Any processing, use or contamination of the product invalidates this information.

#### SECTION 14. TRANSPORT INFORMATION

**TRANSPORTATION INSTRUCTIONS:** Ship in compliance with federal, state and local regulations based on hazards listed. Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments.

<u>Agency</u>	<u>UN Number</u>	<u>Proper Shipping Name</u>	<u>HazardClass</u>	<u>Packing Group</u>
DOT	1133	Adhesives	3	II

#### SECTION 15. REGULATORY INFORMATION

The user of this product is responsible for the determination of local regulatory requirements for the use, handling and labeling of the product based on the information provided.

**Top five components by weight:**

108-88-3 TOLUENE 40 to 50 %  
110-54-3 N-HEXANE 10 to 20 %  
TSR13972500025062P  
TSR13972500025294P  
TSR13972500025594P

**New Jersey Right To Know:**

108-88-3 TOLUENE 40 to 50 %  
110-54-3 N-HEXANE 10 to 20 %  
110-82-7 CYCLOHEXANE 1 to 5 %

**PROP 65:** This product contains chemicals known to the state of California to cause cancer, birth defects and/or reproductive harm.

**SARA 313:** Contains the following items above the reportable limits under SARA Title III Section 313:

TOLUENE 108-88-3  
N-HEXANE 110-54-3  
CYCLOHEXANE 110-82-7

**TSCA (TOXIC SUBSTANCES CONTROL ACT):** The ingredients in this product are listed with the following exceptions:

- None

**SECTION 16. OTHER INFORMATION**

**DISCLAIMER LIABILITY:** Since conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. The information contained in this MSDS is believed to be true and accurate, but all statements or suggestions are made without warranty, expressed or implied, regarding the accuracy of this information, the hazards connected with the use of the product, or the results to be obtained from the use thereof. Compliance with Federal, state, and local laws and regulations remains the responsibility of the user.

**USER'S RESPONSIBILITY:** This MSDS cannot cover all possible situations which the user may experience during processing. You should examine each aspect of your operation and determine if additional precautions should be taken. All health and safety information contained in this MSDS should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee training programs for your operation.