

Revision number: 2 Revision date: 10/06/2014

1. IDENTIFICATION

Product	name:
Product	code:

Furfuryl Acetate A0903

Product use: Restrictions on use: For laboratory research purposes. Not for drug or household use.

Emergency telephone number:
Chemical Emergencies:
TCI America (8:00am - 5:00pm) PST
+1-503-286-7624
Transportation Emergencies:
Chemtrec 24-Hour
+1-800-424-9300 (U.S.A.)
+1-703-527-3887 (International)
Responsible department:
TCI America
Environmental Health Safety and Security +1- 503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:	Flammable Liquids [Category 4]
Signal word:	Warning!
Hazard Statement(s):	Combustible liquid
Pictogram(s) or Symbol(s):	None
Precautionary Statement(s): [Prevention] [Response] [Storage] [Disposal]	Keep away from heat, sparks, open flames or other hot surfaces No smoking. Wear protective gloves, eye protection and face protection. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish. Store in well-ventilated place. Keep cool. Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

TCI AMERICA

SAFETY DATA SHEET

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance	
Components:	Furfuryl Acetate	
Percent:	>97.0%(GC)	
CAS Number:	623-17-6	
Molecular Weight:	140.14	
Chemical Formula:	C ₇ H ₈ O ₃	
Synonyms:	Acetic Acid Furfuryl Ester	

4. FIRST-AID MEASURES

Inhalation:

Call emergency medical service. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4. FIRST-AID MEASURES		
Skin contact:	Call a poison center or doctor if you feel unwell. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.	
Eye contact:	In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.	
Ingestion:	If swallowed, seek medical advice immediately and show the container or label. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.	
Symptoms/effects:		
Acute: Delayed:	No data available No data available	
Immediate medical attention:	If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.	
5. FIRE-FIGHTING MEASURES		
Suitable extinguishing media:	Dry chemical, CO ₂ , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.	
Specific hazards arising from the che		
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Closed containers may explode from heat of a fire.	
Special precautions for fire-fighters:		
CAUTION: All these products have a ver	y low flash point: Use of water spray when fighting fire may be inefficient. Use water spray or fog; do not use	

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Use water spray or fog; do not use straight streams. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use spark-proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Splash goggles. Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Isolate area until gas has dispersed. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE

Precautions for safe handling: Do NOT breath gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

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7. HANDLING AND STORAG			
Conditions for safe storage:	Store and use away fi	nal container in a cool well-ventilated plac rom heat, sparks, open flame, or any othe iners which are opened must be carefully uged storage periods.	er ignition source. Keep away from
Storage incompatibilities:		ces, Store away from oxidizing agents	
B. EXPOSURE CONTROLS /	PERSONAL PROTECTION		
Exposure limits:	No data available		
	e sufficient to control airborne leve eas where there is any possibility	els. Ventilation is normally required when that workers could be exposed to the sub	
Personal protective equipment			
Respiratory protection: Hand protection:	Vapor respirator. Be s Wear protective glove	sure to use a MSHA/NIOSH approved res	pirator or equivalent.
Eye protection: Skin and body protection:	Splash goggles. Lab coat.		
9. PHYSICAL AND CHEMICA	L PROPERTIES		
Physical state (20°C):	Liquid		
Form: Color:	Clear Colorless - Yellow		
Ddor:	No data available		
Odor threshold:	No data available		
Melting point/freezing point:	No data available	pH:	No data available
Boiling point/range:	177°C (351°F) No data available	Vapor pressure:	No data available No data available
Decomposition temperature: Relative density:	1.12	Vapor density: Dynamic Viscosity:	No data available
Kinematic Viscosity:	No data available		
Partition coefficient: n-octanol/water (log P₀w)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	65°C (149°F) No data available	Autoignition temperature: Flammability or explosive limi	
		Lower: No data a	
Solubility(ies):		Upper: No data a	
10. STABILITY AND REACTI	VITY		
Reactivity: Chemical Stability: Possibility of Hazardous Reactio Conditions to avoid: Incompatible materials: Hazardous Decomposition Prod	ons: In use, may form flam Avoid excessive heat Reducing agents, Stro	ended storage conditions. (See Section 7 imable/explosive vapor-air mixture. and light. ong acids, Strong bases, Strong oxidizing	
11. TOXICOLOGICAL INFOR			
RTECS Number: LU9120000			

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Acute Toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity:

No data available

No data available IARC:

NTP:

No data available

OSHA: No data available

Reproductive toxicity: No data available

Routes of Exposure:

Inhalation, Eye contact, Ingestion.

Symptoms related to exposure:

No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. Potential Health Effects:

No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested. No data available

Target organ(s):

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient:	No data available No data available No data available No data available
n-octanol/water (log P _{ow}) Soil adsorption (Koc): Henry's Law: constant (PaM ³ /mol)	No data available No data available

13. DISPOSAL CONSIDERATIO	NS
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATIO	V
DOT (US)	Non-hazardous for transportation.
ΙΑΤΑ	Non-hazardous for transportation.
IMDG	Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

	nce and Reportable Quantity:	
SARA 313:	Not Listed	
SARA 302:	Not Listed	
State Regulations		
State Right-to-Know		
Massachusetts	Not Listed	
New Jersey	Listed	
Pennsylvania	Not Listed	
California Proposition 65	Not Listed	
Other Information		
NFPA Rating:	HMIS Classification	n:
Health: 0	Health:	0
Flammability: 2	Flammability:	2
Instability: 0	Physical:	0
International Inventories		
WHMIS hazard class:	B3: Combustible Liquid.	
EC-No:	210-775-9	
	2101100	

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TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.