

Material Safety Data Sheet (MSDS)

Revision Number: 1.1		Last updated May 2011	
Product and Company Identification			
Product Name:		4-(Trifluoromethyl)umbelliferone	
Catalog Number:		80006	
Manufacturer/Supplier:		AnaSpec, Inc. 34801 Campus Drive, Fremont, CA 94555 Tel: 510-791-9560 Fax: 510-791-9572	
Composition / Information on Ingredients			
Synonym: β – Trifluoromethylumbelliferone, 7 - Hydroxy - 4 - trifluoromethylcoumarin			
Molecular Formula: C ₁₀ H ₅ F ₃ O ₃			
Molecular Weight: 230.1			
CAS Number: 575-03-1			
Hazards Identification			
OSHA Hazards			
Highly toxic by ingestion, Irritant			
First Aid Measure:			
Inhalation:		If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.	
Ingestion:		If swallowed, wash out mouth with water provided person is conscious. Call a physician.	
Skin:		In case of contact, immediately wash skin with soap and plenty of water.	
Eyes:		In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.	
Fire Fighting Measures			
Extinguishing media:		Water spray, carbon dioxide, dry chemical powder or appropriate foam.	
Special firefighting procedures:		Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.	
Unusual fire and explosions hazards:		Emits toxic fumes under fire conditions.	
Accidental Release Measures			
Personal precautions			
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.			
Environmental precautions			
Do not let product enter drains.			

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Methods and materials for containment and cleaning up	
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.	
<u>Handling and Storage</u>	
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Keep container tightly closed in a dry and well-ventilated place. Store at -20 °C.	
<u>Exposure Controls / Personal Protection</u>	
<u>Personal Protection</u>	
Respiratory protection	
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).	
Hand protection	
Handle with gloves.	
Eye protection	
Safety glasses with side-shields.	
<u>ACGIH/OSHA Permissible Exposure Limit Data</u>	
Not determined	
<u>Physical and Chemical Properties</u>	
<i>Form:</i>	Solid
<i>Odor:</i>	Not determined
<i>Melting Point:</i>	175-180 C
<i>Flash Point:</i>	Not determined
<u>Stability and Reactivity</u>	
<i>Stability:</i>	Stable under recommended storage conditions
<i>Materials to Avoid:</i>	Strong oxidizing agents
<i>Hazardous decomposition products:</i>	Carbon oxides, Hydrogen fluoride
<u>Toxicological Information</u>	
<i>Acute Toxicity:</i>	No data available
<i>Health Hazards:</i>	Fatal if swallowed. Causes skin irritation Causes serious eye irritation. May cause respiratory irritation.
<i>Carcinogenicity:</i>	Not listed by NTP, IARC or OSHA.
<u>Ecological Information</u>	
Do not allow product to reach ground water, watercourse, or sewage system.	
<u>Disposal Considerations</u>	
Consult local, state or national regulations for proper disposal.	

Transport Information**DOT (US)**

UN-Number: 2811 Class: 6.1 Packing group: III

Proper shipping name: Toxic solids, organic, n.o.s. (4-Trifluoromethylumbelliferone)

Marine pollutant: No

Poison Inhalation Hazard: No

IATA

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Regulations

<i>OSHA Hazard:</i>	Highly toxic by ingestion, Irritant
<i>SARA 311/312 Hazard:</i>	Acute Health Hazard
<i>California Prop. 65 Components:</i>	This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above product.

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