

SynQuest Laboratories, Inc.

PO Box 309, Alachua, FL 32616-0309 Tel. 386/462-0788; FAX 386/462-7097

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

Date last revised: December 22, 2009 Date printed: December 22, 2009

SECTION 1.----- CHEMICAL IDENTIFICATION-----

CATALOG #: 2H18-3-01 NAME: 4,4,4-TRIFLUORO-1-(2-FURYL)-1,3-BUTANEDIONE

SECTION 2. ---- COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS #: 326-90-9 MF: C₈H₅F₃O₃ = 206.12

SECTION 3.----- HAZARDS IDENTIFICATION ------

LABEL PRECAUTIONARY STATEMENTS IRRITANT (EXPECTED). IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. COMBUSTIBLE LIQUID. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. SEE SECTION 11 FOR ADDITIONAL INFORMATION.

SECTION 4. ----- FIRST-AID MEASURES------

ORAL EXPOSURE IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. INHALATION EXPOSURE IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. DERMAL EXPOSURE IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. EYE EXPOSURE IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

FLASH POINT

189 °F / 87 °C METHOD: CLOSED CUP

EXTINGUISHING MEDIA

SUITABLE: FOR SMALL (INCIPIENT) FIRES, USE MEDIA SUCH AS "ALCOHOL" FOAM, DRY CHEMICAL, OR CARBON DIOXIDE. FOR LARGE FIRES, APPLY WATER FROM AS FAR AS POSSIBLE. USE VERY LARGE QUANTITIES (FLOODING) OF WATER APPLIED AS A MIST OR SPRAY; SOLID STREAMS OF WATER MAY BE INEFFECTIVE. COOL ALL AFFECTED CONTAINERS WITH FLOODING QUANTITIES OF WATER. FIREFIGHTING

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. SPECIFIC HAZARD(S): COMBUSTIBLE LIQUID. EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6.----- ACCIDENTAL RELEASE MEASURES------

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL EVACUATE AREA.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

COVER WITH DRY-LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7.----- HANDLING AND STORAGE-----

HANDLING

USER EXPOSURE: AVOID BREATHING VAPOR. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. STORAGE

SUITABLE: KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT AND OPEN FLAME.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

ENGINEERING CONTROLS

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. PERSONAL PROTECTIVE EQUIPMENT RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES. EYE: CHEMICAL SAFETY GOGGLES. GENERAL HYGIENE MEASURES WASH CONTAMINATED CLOTHING BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING.

SECTION 9.----- PHYSICAL AND CHEMICAL PROPERTIES ------

APPEARANCE AND ODOR COLORLESS LIQUID PHYSICAL PROPERTIES BOILING POINT 203 °C 760 mmHg MELTING POINT: 19 – 21 °C DENSITY 1.391 g/cm³ FLASH POINT 189 °F /87 °C METHOD: CLOSED CUP

SECTION 10. -----STABILITY AND REACTIVITY ------

STABILITY STABLE: STABLE. MATERIALS TO AVOID: STRONG OXIDIZING AGENTS. HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE. HAZARDOUS POLYMERIZATION HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11. ----- TOXICOLOGICAL INFORMATION ------

ROUTE OF EXPOSURE SKIN CONTACT: MAY CAUSE SKIN IRRITATION. SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. EYE CONTACT: MAY CAUSE EYE IRRITATION. INHALATION: MAY BE HARMFUL IF INHALED. MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. INGESTION: MAY BE HARMFUL IF SWALLOWED. SIGNS AND SYMPTOMS OF EXPOSURE TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS ------

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. ----- TRANSPORT INFORMATION -----

DOT

PROPER SHIPPING NAME: AVIATION REGULATED LIQUID, N.O.S. UN#: 3334 CLASS: 9

SECTION 15. ----- REGULATORY INFORMATION -----

EU ADDITIONAL CLASSIFICATION R: 10 RISK STATEMENTS: FLAMMABLE. S: 16 SAFETY STATEMENTS: KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. US CLASSIFICATION AND LABEL TEXT INDICATION OF DANGER: COMBUSTIBLE (USA) FLAMMABLE (EU). SAFETY STATEMENTS: KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. UNITED STATES REGULATORY INFORMATION TSCA INVENTORY ITEM; YES

SECTION 16. ----- OTHER INFORMATION-----

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SYNQUEST LABS, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.