

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

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

CATALOG #: 1200-1-05 NAME: CYCLOPENTANE

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

CAS NUMBER: 287-92-3 MOLECULAR FORMULA: C5H10 MOLECULAR WEIGHT: 70.13

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

LABEL PRECAUTIONARY STATEMENTS FLAMMABLE LIQUID. HARMFUL TO AQUATIC LIFE.

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

ORAL EXPOSURE NOT A USUAL ROUTE OF EXPOSURE 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 - 20 °C EXTINGUISHING MEDIA ALL KNOWN EXTINGUISHANTS CAN BE USED. SPECIFIC METHODS IF POSSIBLE, STOP FLOW OF PRODUCT. MOVE AWAY FROM THE CONTAINER AND COOL WITH WATER FROM A PROTECTED POSITION. SPONTANEOUS/ EXPLOSIVE RE-IGNITION MAY OCCUR. EXTINGUISH ANY OTHER FIRE. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS USE SELF-CONTAINED BREATHING APPARATUS AND CHEMICALLY PROTECTIVE CLOTHING.

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

PERSONAL PRECAUTIONS

WEAR SELF-CONTAINED BREATHING APPARATUS WHEN ENTERING AREA UNLESS ATMOSPHERE IS PROVED TO BE SAFE. EVACUATE AREA. ENSURE ADEQUATE AIR VENTILATION. ELIMINATE IGNITION SOURCES. ENVIRONMENTAL PRECAUTIONS TRY TO STOP RELEASE. PREVENT FROM ENTERING SEWERS, BASEMENTS AND WORKPITS, OR ANY PLACE WHERE ITS ACCUMULATION CAN BE DANGEROUS. CLEAN UP METHODS VENTILATE AREA.

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

PRECAUTIONS FOR SAFE HANDLING

AVOID INHALATION OF VAPOR OR MIST.

USE EXPLOSION-PROOF EQUIPMENT. KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE. CONDITIONS FOR SAFE STORAGE

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE.

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

WORKPLACE CONTROL PARAMETERS

600 ppm – USA - ACGIH TLV

PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY PROTECTION** 

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE AXBEK (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. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU). HAND PROTECTION

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

EYE PROTECTION

FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

SKIN AND BODY PROTECTION

IMPERVIOUS CLOTHING, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

HYGIENE MEASURES

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

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

APPEARANCE AND ODOR

CLEAR, COLORLESS COMPRESSED GAS PHYSICAL PROPERTIES MELTING POINT: -94°C BOILING POINT: 50°C VAPOR PRESSURE: 5.3 psi @ 21°C DENSITY: 0.751 g/mL @ 25 °C REFRACTIVE INDEX: 1.405 @ 20 °C

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

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE CONDITIONS. POSSIBILITY OF HAZARDOUS REACTIONS VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR. CONDITIONS TO AVOID HEAT, FLAMES AND SPARKS. EXTREMES OF TEMPERATURE AND DIRECT SUNLIGHT. MATERIALS TO AVOID STRONG OXIDIZING AGENTS HAZARDOUS DECOMPOSITION PRODUCTS CARBON OXIDES

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

POTENTIAL HEALTH EFFECTS INHALATION MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. INGESTION MAY BE HARMFUL IF SWALLOWED. SKIN MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. EYES MAY CAUSE EYE IRRITATION. SIGNS AND SYMPTOMS OF EXPOSURE CENTRAL NERVOUS SYSTEM DEPRESSION, SKIN IRRITATION, TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. ADDITIONAL INFORMATION RTECS: GY2390000

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

TOXICITY TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES

EC50 - DAPHNIA MAGNA - 10.52 MG/L - 48 H

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

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION DO NOT DISCHARGE INTO AREAS WHERE THERE IS A RISK OF FORMING AN EXPLOSIVE MIXTURE WITH AIR. WASTE GAS SHOULD BE FLARED THROUGH A SUITABLE BURNER WITH FLASH BACK ARRESTOR. TOXIC AND CORROSIVE GASES FORMED DURING COMBUSTION SHOULD BE SCRUBBED BEFORE DISCHARGE TO ATMOSPHERE. DO NOT DISCHARGE INTO ANY PLACE WHERE ITS ACCUMULATION COULD BE DANGEROUS.

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

DOT

UN NUMBER: 1146 CLASS: 3 PACKING GROUP: II PROPER SHIPPING NAME: CYCLOPENTANE

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

EU ADDITIONAL CLASSIFICATION SYMBOL OF DANGER: F+, Xi INDICATION OF DANGER: EXTREMELY FLAMMABLE, IRRITANT. RISK STATEMENTS: 12-52/53 SAFETY STATEMENTS: 9-16-23-24/25-26-33-36/37/39-45-61 UNITED STATES REGULATORY INFORMATION TSCA: NOT LISTED ON TSCA INVENTORY; FOR R&D USE ONLY

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.