MATERIAL SAFETY DATA SHEET

Section 1 - Product and Company Information
Product Name: Oxidized Nifedipine
Synonym: 2,6-Dimethyl-4-(2-nitrophenyl)-3,5-pyridinedicarboxylic Acid Dimethyl Ester
Product Number: X30
Company: Oxford Biomedical Research
2165 Avon Industrial Dr.
Rochester Hills, MI 48309
Phone: 248 852-8815
Fax: 248 852-4466
CAS # 67035-22-7
Formula: C_{17}H_{16}N_{2}O_{6}

Section 3 - Hazards Identification
ACUTE HEALTH EFFECTS: This product may be harmful if ingested, inhaled or absorbed through the skin. Symptoms of overexposure may include, nausea, vomiting, headache, dizziness, rash, itching, or drowsiness.
CHRONIC HEALTH EFFECTS: May cause liver damage.

Section 4 - First Aid Measures
INGESTION: 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: N/A
AUTOIGNITION TEMP: N/A
FLAMMABILITY: N/A
EXTINGUISHING MEDIA: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
FIREFIGHTING: Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.
EXPOSURE HAZARD(S): May emit toxic gases upon thermal decomposition
COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas.

Section 6 - Accidental Release Measures
ENGINEERING CONTROLS: Safety shower and eye bath. Mechanical exhaust required.
PERSONAL PROTECTIVE EQUIPMENT
- Respiratory: Government approved respirator.
- Hand: Compatible chemical-resistant gloves.
- Eye: Chemical safety goggles.
GENERAL HYGIENE MEASURES: Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 7 - Handling and Storage
HANDLING: User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
STORAGE: Keep tightly closed. Store at room temperature.
PROCEDURE(S) OF PERSONAL PRECAUTION(S): Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
METHODS FOR CLEANING UP: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 9 - Physical/Chemical Properties
APPEARANCE: yellow solid
MOLECULAR WEIGHT: 213.19 AMU
PH: N/A
BP/BP Range: N/A
MP/MP Range: 100-105 °C
SOLUBILITY: ethyl acetate, diethyl ether, acetone, dichloromethane; Slightly soluble in ethanol and methanol; Insoluble in water.
FREEZING POINT: N/A
VAPOR PRESSURE: N/A
VAPOR DENSITY: N/A
SG/DENSITY: N/A
Section 10 - Stability and Reactivity
STABILITY: Stable.
CONDITIONS TO AVOID: None known.
INCOMPATIBILITIES: N/A

Section 11 - Toxicological Information
To the best of our knowledge the toxicological properties for this compound have not been investigated. Due caution should be exercised and minimum precautions taken while considering the compound as harmful.

RTECS for Nifedipine (Oxidized Nifedipine is a metabolite of Nifedipine:
ORAL LD50 (mg/kg): rat- 1022; mouse- 494
I.V. LD50 (mg/kg): rat- 15.5; mouse- 4.2

Section 12 - Ecological Information
No data available.

SECTION 13 – Disposal Consideration
The use of licensed waste hauliers and disposal contractors is advised
- mix with a combustible solvent and burn in a chemical incinerator equipped with an after burner and scrubber

SECTION 14 – Transportation information
No specific information currently available

SECTION 15 – Regulatory Information
LABEL INFORMATION: "Warning - Substance not yet fully tested for hazards and toxicity".
REGULATIONS: The user is reminded that handling of this product is subject to the requirements of the COSHH Regulations in Great Britain or other equivalent national regulations in other countries for control of substances hazardous to health. The information contained in this safety data sheet does not constitute an assessment of risk for the user's workplace as required by health and safety legislation.

SECTION 16 - OTHER INFORMATION
USE OF PRODUCT:
- synthetic chemical for research purposes only
- analytical standard
- must be handled by suitably qualified and skilled personnel