

# MATERIAL SAFETY DATA SHEET

## SECTION 1 — PRODUCT INFORMATION

Product Identifier:	Sunifiram
Product Use:	For research purposes. Not for use in-vivo.
Supplier:	Syntharise Chemical Inc.
Emergency Contact:	3E Company
Emergency Telephone:	1-(800)360-3220

## SECTION 2 — HAZARDOUS INGREDIENTS

Hazardous Ingredients	%	CAS Number	LD50 of Ingredient	LC50 of Ingredient
Sunifiram, DM-235, 1-Benzoyl-4-propanoylpiperazine	≥98%	314728-85-3	Not available	Not available

## SECTION 3 — PHYSICAL DATA

Physical State :	Solid
Odour & Appearance :	white powder
Molecular Weight:	246.30g/mol
Molecular Formula:	C <sub>14</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>
Odour Threshold (ppm):	N/A
Specific Gravity:	N/A
Vapour Density (air = 1) :	N/A
Vapour Pressure (mmHg) :	N/A
Evaporation Rate:	N/A
Boiling Point (°C) :	N/A
Freezing Point (°C):	N/A
pH Coefficient of Water/Oil Distribution:	N/A

## SECTION 4 — FIRE AND EXPLOSION DATA

Means of Extinction:	water spray, carbon dioxide, dry chemical powder or foam
Flashpoint (°C) and Method :	N/A
Upper Flammable Limit (% by volume) :	N/A
Lower Flammable Limit (% by volume):	N/A
Autoignition Temperature (°C):	N/A
Explosion Data — Sensitivity to Impact:	No
Explosion Data — Sensitivity to Static Discharge:	No
Hazardous Combustion Products:	Thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

## SECTION 5 — REACTIVITY DATA

Chemically Stable	Yes
Incompatibility:	Strong Oxidizers
Thermal Decomposition/Conditions to be avoided:	Protect from light and heat.
Hazardous Decomposition Products:	Thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

## SECTION 6 — TOXICOLOGICAL PROPERTIES

Acute Exposure:	May be harmful by inhalation, ingestion or eye and/or skin absorption.
Chronic Exposure:	not available
Exposure Limits: (value, source, date)	not available
Irritancy:	May cause irritation to eye, mucous membranes, upper respiratory system, and/or skin.
Sensitization:	not available
Carcinogenicity:	not available
Reproductive Toxicity:	not available
Teratogenicity:	not available
Mutagenicity :	not available

Synergistic Products:	not available
-----------------------	---------------

#### SECTION 7 — PREVENTIVE MEASURES

Personal Protective Equipment:	Particulate respirators, chemical resistant gloves, chemical safety glasses/goggles, lab coat
Handling:	Avoid inhalation and contact with skin, eyes and clothing.
Leak and Spill Procedure:	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Wipe contaminated surface.
Waste Disposal:	Dispose of according to local and regional authority requirements.
Engineering Controls:	If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Storage Requirements:	Tightly sealed in a cool, dry place.
Special Shipping Information:	N/A
PIN/UN#:	not available

#### SECTION 8 — FIRST AID MEASURES

Inhalation:	If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration.
Ingestion:	If swallowed, wash out mouth with copious amounts of water; call a physician
Skin Contact:	Flush with copious amounts of water; remove contaminated clothing and shoes; call a physician.
Eye Contact:	check for and remove contact lenses and flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

#### SECTION 9 — PREPARATION INFORMATION

Prepared by:	Syntharise Chemical Inc.
Telephone Number:	1(647)766-1657
Preparation Date:	Feb 27 <sup>th</sup> , 2015

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.