



Material Safety Data Sheet

Version 2.0

Release Date: 10/12/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : 3,5-difluoro-4-hydroxybenzylidene imidazolinone-2-oxime (DHFO)

Product Number : 500 – 1 mg/5 mg/10 mg

Product Use : For laboratory research purpose

Supplier : Lucerna, Inc.
760 Parkside Avenue
Suite 327B
Brooklyn, NY 11226
USA

Manufacturer : Lucerna, Inc.
760 Parkside Avenue
Suite 327B
Brooklyn, NY 11226
USA

Telephone : +1 855-582-3762

Fax : +1 646-792-4724

Emergency Phone : (646) 504-5697 (For both supplier and manufacturer)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : DFHO

Formula : $C_{12}H_9F_2N_3O_3$

Molecular Weight : 281.2 g/mol

CAS Number : 1420815-34-4

CAS Name : (*E*)-4-((*Z*)-3,5-difluoro-4-hydroxybenzylidene)-1-methyl-5-oxo-4,5-dihydro-1*H*-imidazole-2-carbaldehyde oxime

3. HAZARDS IDENTIFICATION

Emergency Overview

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OSHA Hazards : No known OSHA hazards

HMIS Classification

Health Hazard : 1
 Flammability : 1
 Physical hazards : 1

NFPA Rating

Health Hazard : 1
 Fire : 1
 Reactivity Hazard : 1

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

In case of skin contact

Wash off with soap and plenty of water. Consult a doctor.

In case of eye contact

Flush eyes with water as a precaution. Consult a doctor.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash Point : No data available
 Ignition Temperature : No data available

Suitable extinguishing media

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Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid dust formation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Provide appropriate exhaust ventilation at places where dust is formed.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic. Keep in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	Crystalline powder
Color	Yellow-Orange
Odor	Odorless

Safety data

pH	Not applicable
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Ignition temperature	No data available
Lower explosion limit	No data available
Solubility	Soluble at 100 mM DMSO
Upper explosion limit	No data available

10. STABILITY AND REACTIVITY**Storage stability**

Stable under recommended storage conditions.

Conditions to avoid

Avoid moisture.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products may form under fire conditions. No known decomposition information

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

No data available

Irritation and corrosion

No data available

Sensitization

No data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

12. ECOLOGICAL INFORMATION**Persistence and degradability**

No data available

Ecotoxicity effects

No data available

Further information on ecology

No data available

13. DISPOSAL CONSIDERATIONS**Product**

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

DSL Status

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

4*H*-Imidazol-4-one, 5-[(3,5-difluoro-4-hydroxyphenyl)methylene]-3,5-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-, (5*Z*)- CAS-No. 1420815-34-4

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

(*E*)-4-((*Z*)-3,5-difluoro-4-hydroxybenzylidene)-1-methyl-5-oxo-4,5-dihydro-1*H*-imidazole-2-carbaldehyde oxime CAS-No. 1420815-34-4

New Jersey Right To Know Components

(*E*)-4-((*Z*)-3,5-difluoro-4-hydroxybenzylidene)-1-methyl-5-oxo-4,5-dihydro-1*H*-imidazole-2-carbaldehyde oxime
CAS-No. 1420815-34-4

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

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