1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Nifedipine
Product Number: N7654
Brand: Sigma
Supplier: Sigma Aldrich
Address: 3005 Spruce Street, SAINT LOUIS MO 63103, USA
Telephone: +1 800-525-5832
Fax: +1 800-525-5552
Emergency Phone #: (314) 776-8555
Preparation Information: Sigma-Aldrich Corporation, Product Safety - Americas Region, 1-800-521-8958

2. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
Target Organ Effect, Harmful by Ingestion, Teratogen
Target Organs
Cardiovascular system, Blood, Eyes, Central nervous system
GHS Classification
Acute toxicity, Oral (Category 4)
GHS Label elements, including precautionary statements
Pictogram
Signal word: Warning
Hazard statement(s): Harmful if swallowed.
Precautionary statement(s): none

HMIS Classification
Health hazard: 1
Chronic Health Hazard: 0
Flammability: 0
Physical hazards: 0
NFPA Rating
Health hazard: 1
Fire: 0
Reactivity Hazard: 0
Potential Health Effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 1,4-Dihydropyridine-2,6-dimethyl-(2-nitrophenyl)-3,5-pyridinedicarboxylic acid dimethyl ester
Formula: C_{17}H_{18}N_{2}O_{5}
Molecular Weight: 346.33 g/mol

Component
Nifedipine
CAS No.: 21829-25-4
EC-No.: 244-598-3

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation
May be harmful if inhaled. May cause respiratory tract irritation.

Skin
Harmful if absorbed through skin. May cause skin irritation.

Eyes
Harmful if swallowed.

Ingestion
May cause eye irritation.

5. FIREFIGHTING MEASURES

Conditions of flammability
Not flammable or combustible.

Suitable extinguishing media
Use water, dry chemical or carbon dioxide.

Special protective equipment for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions
Do not let product enter drains.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: 2 - 8 °C
Light sensitive. Keep in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OVAG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677271, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677271, Size M)

Data source: KCL GmbH, D-36124 Celle, phone: 49 (0) 6659 87300, e-mail sales@kcl.de, test method: EN374 if used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection
Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection
Complete suit protecting against chemicals. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: powder
Colour: yellow

Safety data
pH: no data available
Melting point/freezing point: 173 - 177 °C (343 - 351 °F)

Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Auto-ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: no data available
Density: no data available
Water solubility: no data available
Partition coefficient: n-octanol/water: no data available
Relative vapor density: no data available
Odour: no data available
Odour Threshold: no data available
Evaporation rate: no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NOx)
Other decomposition products: no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50
LD50 Oral - rat: 1,022 mg/kg

Inhalation LD50
no data available

Dermal LD50
no data available

Other information on acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available
Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
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.

Reproductive toxicity

no data available

Teratogenicity

Laboratory experiments have shown teratogenic effects.

Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: Harmful if swallowed.

Skin: Harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Signs and Symptoms of Exposure

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

Dizziness, Nausea, Weakness, Headache

Synergistic effects

no data available

Additional Information

RTECS: US7Q75000

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

13. DISPOSAL CONSIDERATIONS

Product Offsite disposal and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste

Contaminated packing

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
Target Organ Effect, Harmful by ingestion., Teratogenic

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
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

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

Pennsylvania Right To Know Components

Nalidixine

CAS-No. 21829-25-4 2009-07-17

New Jersey Right To Know Components

Nalidixine

CAS-No. 21829-25-4 2009-07-17

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Nalidixine

CAS-No. 21829-25-4 1999-01-29

16. OTHER INFORMATION

Further Information