# SAFETY DATA SHEET

## 1. Identification

**Product identifier Prozac®** 

Other means of identification

ZD0079, CK0857, MS8320, ND0845, ND0966, ND0967, ND1008, ND1014, ND1015, ND1024, **Item Code** 

ND1058, ND1060, ND1066, ND1107, ND1108, PU3004, PU3103, PU3104, PU3105, PU3106, PU3107, PU3109, PU3120, PU3160, PU3161, PU3210, PU3220, QA512G, SA1031, SA1032, SA1035, SA1036, TA4006, TA4007, TA4169, TA4171, TA4400, UC5014, UC5015, UC5016, UC5370, UC5371, UC5905, UC8957, UC8963, UC9526, UC9551, UC9552, UC9559, VF0144, VF0145, VF0156, VF0236, VF0237, VF0268, VF0269, VF0270, VF0293, VF0299, VF0318,

VF0319, VF0324, VF0326, VF0330, VF0332, VF0334, VF0339, VF0359

Starter Kit Prozac (7-Pulvules and 7-Tablets) \* Fluoxetine HCI \* Fluoxetine Hydrochloride \* **Synonyms** 

Fluoxetine \* Fluoxetine Hydrochloride Capsules \* Fluoxetine Hydrochloride Tablets \* Fluoxetine Hydrochloride Capsule Mix \* Fluoxetine Hydrochloride Tablet Mix \* 110140 Formulation \* 3105 \*

Benzenepropanamine, N-methyl-gamma-[4-(trifluoromethyl)phenoxy]-, hydrochloride '

(+-)-N-Methyl-3-phenyl-3-[(alpha,alpha,alpha-trifluor

o-p-tolyl)oxy]propylamine hydrochloride

LY Number LY110140 Recommended use Pharmaceutical **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Eli Lilly and Company **Address** Lilly Corporate Center

Indianapolis, IN 46285

**United States** 

Telephone Phone: +1-317-276-2000

E-mail lilly msds@lilly.com

**Emergency phone number** CHEMTREC: +1-800-424-9300

2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 1

Category 3 narcotic effects Specific target organ toxicity, single exposure

Specific target organ toxicity, repeated

Category 2

exposure

**OSHA** defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** 

Causes skin irritation. H315 Causes serious eye damage. H318 May cause drowsiness or dizziness. H336

May cause damage to organs (Liver) through prolonged or repeated exposure. H373

**Precautionary statement** 

Prevention

Wash thoroughly after handling. P264

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Wear protective gloves/protective clothing/eye protection/face protection. P280

Response

P305 + P351 +

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present P338

and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor. P310

Storage Not available. **Disposal** Not available.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	<u></u>
Fluoxetine Hydrochloride	(3S)-N-methyl-3-phenyl-3-[4-(trifluoromet hyl)phenoxy]propan-1-amine hydrochloride	56296-78-7	4 - 20
Composition comments	Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.		

#### 4. First-aid measures

Inhalation Skin contact Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately. Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under Eye contact the eyelids, for at least 15 minutes. Get medical attention immediately.

Ingestion

Give several glasses of water. Never give anything by mouth to a victim who is unconscious or is

having convulsions. Call a physician or poison control center immediately.

Most important

symptoms/effects, acute and delayed

Causes eye burns. Causes skin irritation. May cause drowsiness or dizziness. Increased heart rate. Seizures. May cause damage to the liver.

Indication of immediate medical attention and special treatment needed

Fluoxetine Hydrochloride - Cardiac and vital signs monitoring is recommended, along with general symptomatic and supportive measures. No specific antidote is known. Forced diuresis, dialysis, haemoperfusion, and exchange transfusion are unlikely to be of benefit. In limited human overdose experience, seizures have been reported. Appropriate seizure precautions are advised for any patient regularly taking fluoxetine who has been exposed to an acute overdose. Based on experience in animals, which may not be relevant to humans, fluoxetine-induced seizures that fail to remit spontaneously may respond to diazepam.

**General information** 

media

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

# 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Water. Carbon dioxide (CO2). Dry chemical.

None known.

Specific hazards arising from the chemical

Hazardous decomposition products formed under fire conditions.

Special protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective clothing.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye/face protection. Do not breathe dust. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Do not sweep. Vacuum material with appropriate dust collection filter in place. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist/wet material and remove by mopping or wet wiping.

Prevent further leakage or spillage if safe to do so. **Environmental precautions** 

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## 7. Handling and storage

Avoid contact with eyes, skin, and clothing. Wear personal protective equipment. See Section 8 of Precautions for safe handling

the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: between 15 and 30 C (59 to 86 F).

# 8. Exposure controls/personal protection

# Occupational exposure limits

Lilly (LEG) Components Value **Type** Fluoxetine Hydrochloride TWA (12hrs) 30 ug/m3 (CAS 56296-78-7) TWA (8hrs) 50 ug/m3

No biological exposure limits noted for the ingredient(s). **Biological limit values** 

Appropriate engineering controls

The recommendations in this section are intended for manufacturing or other situations where exposure to contents may occur.

Open handling is not recommended. Use appropriate control measures such as fume hood,

ventilated enclosure, local exhaust ventilation, or down-draft booth.

Individual protection measures, such as personal protective equipment

Safety glasses with side shields recommended. If splash potential or dusty operations, wear Eye/face protection

goggles/faceshield.

Skin protection

**Hand protection** Chemical resistant gloves.

Other Chemical-resistant gloves and impermeable body covering to minimize skin contact.

**Respiratory protection** If the applicable occupational exposure level (OEL) is anticipated to be exceeded, wear an

approved respirator with sufficient protection factor to control exposure below the OEL.

Thermal hazards Not available.

General hygiene considerations

Engineering controls should be used as the primary means to control workplace exposures. Follow good workplace hygiene practices such as washing hands after handling this material.

## 9. Physical and chemical properties

White powder or pellets finished as capsules or coated tablets **Appearance** 

Solid. **Physical state** 

**Form** Capsules or Tablet. Color Not available. Odor Odorless **Odor threshold** Not available. Not available. Ηq Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Flash point Not applicable. **Evaporation rate** Not available.

Flammability (solid, gas) No test data available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

Vapor pressure Not available. Vapor density No data available.

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Relative density Not available.

Solubility(ies)

Soluble in water.

Partition coefficient

0.930 (pH 5) (Fluoxetine Hydrochloride)

(n-octanol/water)

1.780 (pH 7) (Fluoxetine Hydrochloride) 2.630 (pH 9) (Fluoxetine Hydrochloride)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

**Explosive properties** Not explosive.

Oxidizing properties The substance or mixture is not classified as oxidizing.

10. Stability and reactivity

**Reactivity** Not water reactive.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid None known.

Incompatible materials Strong oxidizing agents.

**Hazardous decomposition** 

products

Hazardous decomposition products formed under fire conditions.

# 11. Toxicological information

Information on toxicological effects

Acute toxicity The formulated material is not expected to pose an inhalation hazard.

Components Species Test Results

Fluoxetine Hydrochloride (CAS 56296-78-7)

**Acute** 

**Dermal** 

LD50 Rabbit > 500 mg/kg

Inhalation

LC50 Rat 898 mg/m3, 1 h

Oral

LD50 Monkey > 50 mg/kg

Mouse 248 mg/kg Rat 451 mg/kg

Skin corrosion/irritation Rabbit: No irritation. Skin irritation has been reported with occupational exposure. (Fluoxetine

hydrochloride)

Serious eye damage/eye

irritation

Rabbit: Corrosive. (Fluoxetine hydrochloride)

Respiratory or skin sensitization

**Respiratory sensitization** Due to lack of data the classification is not possible.

**Skin sensitization** Due to lack of data the classification is not possible.

Germ cell mutagenicity Result in genetic toxicity assays (in vitro and in vivo): Negative (Fluoxetine hydrochloride)

Based on available data, the classification criteria are not met.

Carcinogenicity Animal testing did not show any carcinogenic effects. (Fluoxetine hydrochloride)

Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

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## US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

#### Reproductive toxicity

Two fertility studies conducted in adult rats indicated no adverse effects on fertility. In embryo-fetal development studies in rats and rabbits, there was no evidence of teratogenicity. However, in rat reproduction studies, an increase in stillborn pups, a decrease in pup weight, and an increase in pup deaths during the first 7 days postpartum occurred following maternal exposure to 7.5 mg/kg/day during gestation and lactation. There was no evidence of developmental neurotoxicity in the surviving offspring of rats. The no effect dose for rat pup mortality was 5 mg/kg/day.

Data on a large number of exposed pregnancies in humans indicate no appearance of adverse effects on pregnancy or on the overall health of the fetus/newborn child. However, a few epidemiological studies have noted that some women treated with fluoxetine and other SSRIs late in the third trimester have had newborns with increased complications that could be consistent with drug discontinuation syndrome (e.g. transient jitteriness, difficulty feeding, tachypnea and irritability) and required prolonged hospitalizations.

There are no adequate and well-controlled clinical studies on the use of fluoxetine in pregnant women. Results of a number of published epidemiological studies assessing the risk of fluoxetine exposure during the first trimester of pregnancy have demonstrated inconsistent results. More than 10 studies failed to demonstrate an increased risk for congenital malformations. An epidemiological study reported an increased risk of cardiovascular malformations in infants born to women exposed to fluoxetine during the first trimester of pregnancy compared to women who were not exposed to fluoxetine. However, a causal relationship has not been established. (Fluoxetine hydrochloride)

Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. (Fluoxetine hydrochloride)

Specific target organ toxicity - repeated exposure

Liver effects (reversible increases in serum enzymes, slight hepatic fat deposition, tissue changes). (Fluoxetine hydrochloride)

Aspiration hazard

No aspiration toxicity classification

**Further information** 

In a juvenile toxicology study in rats, where the exposure period corresponds to human childhood and adolescence, administration of 30 mg/kg resulted in skeletal muscle necrosis. Other findings in rats included necrosis of the testis and immaturity and inactivity of the female reproductive tract. Following an approximate 11-week recovery period, sperm assessments indicated an approximately 30% decrease in sperm concentrations without affecting sperm morphology or motility. Microscopic evaluation indicated that testicular degeneration was irreversible. Delays in sexual maturation occurred with administration of 10 or 30 mg/kg. The significance of these findings in humans is unknown. Femur lengths at 30 mg/kg increased to a lesser extent compared with control rats. (Fluoxetine hydrochloride)

# 12. Ecological information

**Ecotoxicity** 

Very toxic to aquatic life with long lasting effects.

Species		Test Results
6296-78-7)		
	•	1.2 μg/l
	•	30.5 μg/l (average specific growth rate)
50		1000 mg/l Bacteria (Soil)
		250 mg/l Blue-green algae
		64 mg/l Bacteria (n-fixing) (Azotobacter chroococcum)
		64 mg/l Mold
		64 mg/l Fungus
Daphnia magna		0.94 mg/l, 48 h
Rainbow Trout		1.57 mg/l, 96 h
	6296-78-7) DEC Selenastrum capi Pseudokirchnerel  50 Selenastrum capi Pseudokirchnerel  50 Daphnia magna	Selenastrum capricornutum (new name Pseudokirchnerella subca  Selenastrum capricornutum (new name Pseudokirchnerella subca  Selenastrum capricornutum (new name Pseudokirchnerella subca  Daphnia magna

#### **LILLY AQUATIC EXPOSURE GUIDELINES:**

Fluoxetine Hydrochloride

Drinking water LAEG (at the point where surface water is taken for drinking water):

2.6 µg/l

Fluoxetine Hydrochloride

Acute LAEG (at the edge of the acute mixing zone): 2.1 µg/l Chronic LAEG (at the edge of the chronic mixing zone): 0.33 µg/l

Fluoxetine Hydrochloride: Persistence and degradability

Hydrolysis rate (1/day): 0,0, 0 (pH 5, 7, 9)

Aerobic biodegradation half-life (days): not measurable

log Kow: < 4. (Fluoxetine Hydrochloride) Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Fluoxetine Hydrochloride 0.93, (pH 5) 1.78, (pH 7) 2.63, (pH 9)

Mobility in soil No data available. Other adverse effects Not available.

# 13. Disposal considerations

**Disposal instructions** Dispose of contents/container in accordance with local/regional/national/international regulations.

# 14. Transport information

DOT

Not regulated as dangerous goods.

**IATA** 

**UN** number UN3077

**UN** proper shipping name Environmentally hazardous substance, solid, n.o.s. (Fluoxetine Hydrochloride)

Transport hazard class(es)

9 Subsidiary risk Packing group Ш **Environmental hazards** Yes **ERG Code** 91

Special precautions for user Not available.

Other information

Passenger and cargo

aircraft

Cargo aircraft only

Allowed with restrictions.

Allowed with restrictions.

**IMDG** 

UN3077 **UN** number

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Fluoxetine Hydrochloride) **UN** proper shipping name

Transport hazard class(es)

9 Class Subsidiary risk Packing group Ш

**Environmental hazards** 

Marine pollutant Yes F-A, S-F **EmS** Special precautions for user Not available. Not available.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

IATA; IMDG

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#### Marine pollutant



# 15. Regulatory information

**US federal regulations** 

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)** 

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard Skin corrosion or irritation

categories Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### **International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

# 16. Other information, including date of preparation or last revision

 Issue date
 02-17-2015

 Revision date
 10-07-2019

Version # 12

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#### List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists.

DOT: Department of Transportation (49 CFR 172.101).

EC50: Effective Concentration 50%.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IC50: Inhibition Concentration 50%.

IMDG Code: International Maritime Dangerous Goods Code.

LD50: Lethal Dose 50%. LEG: Lilly Exposure Guideline.

NOEC: No observed effect concentration. NTP: National Toxicology Program.

OSHA: Occupational Safety & Health Administration.

TWA: Time Weighted Average

Disclaimer

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact: Eli Lilly and Company Hazard Communication +1-317-651-9533

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