**Product Name:** Synthroid Tablets

**Issued:** Feb-25-2016

### abbvie

#### SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product Name:** Synthroid Tablets

Synonyms: Synthroid, Tablets; Levothyroxine Sodium Tablets; Sodium Levothyroxine

**Tablets** 

**Trade name:** Synthroid

**List Number:** 3727; 4341; 4552; 5182; 6594; 6624; 7068; 7069; 7070; 7148; 7149; 9296; 10118;

10119; 10120; 10121; 10122; 10123; 10124; 10125; 10126; 10127; 10129; 10130;

10523; 10524

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use:** Pharmaceuticals

## 1.3. Details of the supplier of the safety data sheet

**Supplier:** AbbVie Inc.

1 North Waukegan Road North Chicago, IL 60064

**USA** 

+1-847-932-7900

**Customer Service Telephone:** 1-800-255-5162 (US and Canada only)

+1-847-937-7433

E-mail Address: AbbVie.SDS@abbvie.com

#### 1.4. Emergency telephone number

**Emergency Telephone:** CHEMTREC: 1(800) 424-9300 (in USA and Canada)

or +1-703-527-3887 (international)

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

**Reproductive toxicity** Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

### 2.2. Label elements



Signal Word: Warning

**Hazard Statements:** H361 - Suspected of damaging fertility or the unborn child

**Precautionary Statements** P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other hazards

Not determined

# **SECTION 3: Composition/information on ingredients**

Chemical Name	Weight-%	EINECS/ELINCS Number	EEC Classification	EU - GHS Substance Classification	REACH Reg. No
Sucrose 57-50-1	30-60	Present		Not Hazardous*	No data available
Lactose 63-42-3	30-60	Present		Not Hazardous*	No data available
Talc, Nonasbestos Containing 14807-96-6	1-10	Present		Not Hazardous*	No data available
Acacia	1-5	NA		Not Hazardous*	No data available
Magnesium Stearate 557-04-0	0.1-1	Present		Not Hazardous*	No data available
Levothyroxine Sodium 55-03-8	0.01-1	Present		Repro Cat 2 (H361) STOT RE Cat 1 (H372)	No data available

Not Hazardous\* - Based on available data, not classified as hazardous according to the criteria of the Globally Harmonized System.

For the full text of the R-phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

**Eye Contact:** Remove from source of exposure. Flush with copious amounts of water. If

irritation persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

**Product Name: Synthroid Tablets** Feb-25-2016 Issued:

**Skin Contact:** Remove from source of exposure. Flush with copious amounts of water. If

irritation persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

**Inhalation:** Remove from source of exposure. If signs of toxicity occur, seek medical

attention. Provide symptomatic/supportive care as necessary.

**Ingestion:** Remove from source of exposure. If signs of toxicity occur, seek medical

attention. Provide symptomatic/supportive care as necessary.

**Protection of First-aiders:** Use personal protective equipment

### 4.2 Most important symptoms and effects, both acute and delayed

Signs and Symptoms No signs and symptoms from occupational exposure are known. Reported to cause

the following: headaches, fast heart rate, increased blood pressure, nausea,

diarrhea, sweating, low blood sugar, gastrointestinal upset. Clinical overdose may

result in the following: abnormal thyroid function.

by Exposure

**Medical Conditions Aggravated** No medical conditions aggravated by occupational exposure are known.

Data suggest any pre-existing ailments in the following organs: cardiovascular system, gastrointestinal system, thyroid. Hypersensitivity to the material and/or

similar materials. Concurrent use of medications.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes To Physician:** Treat symptomatically

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable Extinguishing Media:** Use extinguishing agent suitable for type of surrounding fire

Unsuitable Extinguishing Media: Not determined

#### 5.2. Special hazards arising from the substance or mixture

Not determined **Special Exposure Hazards:** 

**5.3.** Advice for firefighters

**Protective Equipment and** 

As in any fire, wear self-contained breathing apparatus and full protective gear

**Precautions for Firefighters:** 

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** For personal protection see section 8.

#### **6.2.** Environmental precautions

**Environmental Precautions:** Contain material and prevent release to waterways or soil.

#### 6.3. Methods and material for containment and cleaning up

**Methods for Cleaning Up:** Recover product and place in an appropriate container for disposal.

#### 6.4. Reference to other sections

Refer to Sections 8, 12, and 13 for further information.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust.

### 7.2. Conditions for safe storage, including any incompatibilities

Store according to label instructions.

### 7.3. Specific end use(s)

**Recommended use:** Pharmaceuticals

# **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

### **Exposure limits:**

Chemical Name	Employee Exposure Limit	Skin Notation
Sucrose 57-50-1	Not applicable	None
Lactose 63-42-3	Not applicable	None
Talc, Nonasbestos Containing 14807-96-6	Not applicable	None
Acacia	Not applicable	None
Magnesium Stearate 557-04-0	Not applicable	None
Levothyroxine Sodium 55-03-8	3 mcg/m³ TWA	None

Chemical Name	ACGIH TLV	France	German MAK	Ireland	Italy
Sucrose 57-50-1	10 mg/m³ TWA	TWA: 10 mg/m <sup>3</sup>		20 mg/m <sup>3</sup> (STEL) 10 mg/m <sup>3</sup> (TWA)	
Lactose 63-42-3	10 mg/m³ total dust, 3 mg/m³ respirable dust				
Talc, Nonasbestos Containing 14807-96-6	2 mg/m³ TWA			30 mg/m³ (STEL) 2.4 mg/m³ (STEL) 10 mg/m³ (TWA) 0.8 mg/m³ (TWA)	
Magnesium Stearate 557-04-0	10 mg/m³ total dust				

Chemical Name The Netherlands		Spain	Switzerland	UK OEL/MEL
Sucrose		10 mg/m³ (TWA)		20 mg/m³ (STEL)
57-50-1				10 mg/m <sup>3</sup> (TWA)
Talc, Nonasbestos Containing	0.25 mg/m³ (TWA)	2 mg/m³ (TWA)	2 mg/m³ (TWA)	3 mg/m³ (STEL)
14807-96-6				1 mg/m³ (TWA)

### **8.2. Exposure controls**

**Engineering Controls:** No special provisions are required under normal product use conditions.

Handle product formulation inside a process enclosure.

**Respiratory Protection:** Respiratory protection is not needed during normal product use. When handling

the bulk formulation, an approved respirator (i.e. NIOSH, EN, etc.) should be

worn when exposures are expected to exceed the applicable limits.

**Eyes:** Eye protection not needed during typical product use conditions. Wear eye

protection as appropriate when handling the bulk formulation.

Gloves: Not needed during typical product use conditions. Wear impervious gloves when

handling the bulk formulation.

Other PPE Data: Wear appropriate body coverings if contact may occur.

**Environmental Exposure** 

**Controls:** 

Not determined

# SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

**Appearance:** Tablet

Odor not determined.

Odor Threshold:

PH:

Not determined

Not determined

Not determined

Not determined

Not determined

**Melting/Freezing Point (°C):** Not determined Flash Point (°C): Not determined **Evaporation Rate at 20°C:** Not determined Flammability (Solid): Not determined **Lower Explosive Limit:** Not determined **Upper Explosive Limit:** Not determined Vapor Pressure (mm Hg): Not determined Vapor Density (Air = 1): Not determined **Specific Gravity:** Not determined **Solubility(ies):** Not determined **Partition coefficient:** Not determined

n-octanol/water

**Autoignition Temp.** (°C): 360-380

**Decomposition temperature** Not determined

(°C):

Viscosity (centipoise):

Explosion Severity:

Oxidizer Properties:

Not determined

Not determined

#### 9.2. Other information

Maximum Pressure Rise (bar): 7.8 Max. rate of pressure rise 383

(bar/sec):

Kst Value (bar.m/s): 104

Min. Ignition Energy-Cloud

50-100

(mJ):

Min. Ignition Temp.-Layer (°C): 150

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Not determined

#### 10.2. Chemical stability

Stable under normal conditions

#### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Not determined

### 10.4. Conditions to avoid

Not determined

### 10.5. Incompatible materials

Not determined

### 10.6. Hazardous decomposition products

Not determined

# SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

#### **Routes of Exposure:**

Oral: Clinical Route
Dermal: Not determined
Inhalation: Not determined

**Acute Toxicity - Oral:** Data for component (s) given below:

Chemical Name	Acute Test	Value	Units	Species
Sucrose 57-50-1	LD50 >	29,700	mg/kg	Rats
Lactose 63-42-3	LD50 >	10000	mg/kg	Rats
Levothyroxine Sodium 55-03-8	LD50 >	10,000	mg/kg	Rats

**Acute Toxicity - Dermal:** Not determined

**Acute Toxicity - Inhalation:** Data for component (s) given below:

Chemical Name	Test	Value	Units	Species
Magnesium Stearate	LC 50 >	2000	mg/m <sup>3</sup> , 1 hour	Rats
557-04-0				

Other Toxicology Data: Data for component (s) given below:

Chemical Name	Test Type	Value	Units	Species	Comments
Levothyroxine Sodium	LD50 (ip) =	20	mg/kg	Rats	None
55-03-8	LD50 (sc) =	50	mg/kg		

Corrosivity Not determined

**Dermal Irritation:** Not determined

**Eye irritation** Not determined

**Sensitization** Not determined

**Toxicokinetics/Metabolism:** Not determined

**Target Organ Effects** Clinical dose is less than (<) 10 mg/day. In clinical use, target organs include:

thyroid, endocrine system.

Chemical Name	Target Organs:	Species	Dosage	Units	Route	Duration
Levothyroxine Sodium	Thyroid	Rats	200	mcg/kg	Oral	Variable exposure
55-03-8		Rabbits				periods

**Reproductive Effects** In animals adverse reproductive effects include: fetal abnormalities. maternal

toxicity, reduced fetal growth, fetal toxicity.

Chemical Name	Species	Dosage	Units	Route	Duration
Levothyroxine Sodium	Rats	120	mcg/kg	Oral	During Gestation
55-03-8	Rabbits				_

**Carcinogenicity** Data for component (s) given below:

Chemical Name	<b>Site of Tumors</b>	Species	Dosage	Route	Units	Duration
Talc, Nonasbestos Containing	Lungs	Rats	18	Inhalation	mg/m³, 6 hours	2 years
14807-96-6	-				_	·

**Mutagenicity:** Data for component (s) given below:

Chemical Name	Micronucleus Assay	Ames Test:	Mouse Lymphoma	Chromosomal Abbr.
			Assay	Assay
Magnesium Stearate 557-04-0	No Data.	Negative	No Data.	No Data.

**Aspiration hazard:** Not determined

#### **Notes:**

- 1. ALD: Approximate lethal dosage
- 2. LC50: Concentration in air that produces 50% mortality
- 3. LD50: Oral or dermal dosage that produces 50% mortality

# **SECTION 12: Ecological information**

### **12.1. Toxicity**

Not determined

### 12.2. Persistence and degradability

Not determined

#### 12.3. Bioaccumulative potential

Not determined

#### 12.4. Mobility in soil

Not determined

#### 12.5. Results of PBT and vPvB assessment

Chemical safety report is not required for this substance/product.

### 12.6. Other adverse effects

Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

#### Notes:

- 1. EC50: Concentration in water that produces 50% mortality in Daphnia sp.
- 2. LC50: Concentration in water that produces 50% mortality in fish.
- 3. EbC50/ErC50: Concentration in water that produces 50% inhibition of growth and in algae.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Disposal should be made in accordance with country, federal, state and local **Waste Disposal Methods:** 

regulations.

# **SECTION 14: Transport information**

#### ADR, DOT, ICAO/IATA, IMDG/IMO

Not regulated **Status:** 

14.1. UN number Not applicable 14.2. Proper shipping name: Not applicable 14.3. Hazard class: Not applicable Not applicable 14.4. Packing group: 14.5. Environmental hazard: Not applicable Not applicable **14.6.** Special provisions: Not applicable 14.7. Transport in bulk

according to Annex II of

MARPOL 73/78 and the IBC

Code:

# SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **International Inventories**

Chemical Name	EINECS/ ELINCS	TSCA	DSL	NDSL	PICCS
Sucrose 57-50-1	Present	X	X	Not listed	X
Lactose 63-42-3	Present	X	X	Not listed	X
Talc, Nonasbestos Containing 14807-96-6	Present	X	X	Not listed	X

Acacia	-	-	-	Not listed	-
Magnesium Stearate 557-04-0	Present	X	X	Not listed	Х
Levothyroxine Sodium 55-03-8	Present	X	-	X	-

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Sucrose 57-50-1	-	Present	X	X	Present	
Lactose 63-42-3	-	Present	X	X	Present	
Talc, Nonasbestos Containing 14807-96-6	Present	-	X	X	Present	
Acacia	-	-	-	-	-	
Magnesium Stearate 557-04-0	Present	-	X	X	Present	
Levothyroxine Sodium 55-03-8	Present	Present	-	X	-	

### Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

ISHL - Japan Industrial Safety and Health Law

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

### **Carcinogenicity Rating:**

Chemical Name	Weight-%	NTP:	IARC:	ACGIH:
Sucrose	30-60	Not listed	Not listed	A4 - Not Classifiable as a Human Carcinogen
Lactose	30-60	Not listed	Not listed	Not listed
Talc, Nonasbestos Containing	1-10	Not listed	Not listed	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)
Acacia	1-5	Not listed	Not listed	Not listed
Magnesium Stearate	0.1-1	Not listed	Not listed	Not listed
Levothyroxine Sodium	0.01-1	Not listed	Not listed	Not listed

#### **SARA 313 Information**

Chemical Name	Weight-%	SARA 313 Chemical:	CERCLA RQ/SARA	SARA EHS TPQ
			EHS RQ (lbs):	(lbs):
Sucrose	30-60	No	Not applicable	Not applicable
Lactose	30-60	No	Not applicable	Not applicable
Talc, Nonasbestos Containing	1-10	No	Not applicable	Not applicable
Acacia	1-5	No	Not applicable	Not applicable
Magnesium Stearate	0.1-1	No	Not applicable	Not applicable
Levothyroxine Sodium	0.01-1	No	Not applicable	Not applicable

Immediate Health:NoDelayed Health:NoFire:NoSudden Pressure:NoReactivity:No

RCRA Status: Not determined

**Proposition 65 Status:**Does not contain chemicals known to the state of California to cause cancer or

reproductive harpage 9 of 10

WHMIS Hazard Class Exempt

**NFPA Rating:** 

Health: 0 Fire: 1 Reactivity: 0

**Notes:** 

1. SARA = Superfund Amendments and the Reauthorization Act.

2. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act.

3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act.

4. TSCA = Toxic Substances Control Act.

5. EC = European Community.

6. WHMIS = Canadian Workplace Hazardous Materials Information System.

7. UN GHS = United Nations Globally Harmonized System for Hazard Identification.

#### 15.2. Chemical safety assessment

Chemical safety assessment has not been conducted on the substance/product.

### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3

H361 - Suspected of damaging fertility or the unborn child if inhaled

H372 - Causes damage to organs (a,b,c) through prolonged or repeated exposure if inhaled

**Document Authored By:** Occupational and Environmental Toxicology

**Issued:** Feb-25-2016

**Supersedes the SDS dated:** May-28-2011

#### Disclaimer:

The information and recommendations contained herein are based upon tests believed to be reliable. However, AbbVie Inc. does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. AbbVie Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.