Safety Data Sheet



Section 1: Identification

Product identifier

Product Name • Nifedipine extended-release tablets (Nifedical XL)

Product Code • 368682108101; 368682108309; 368682109108; 368682109306; NDC 68682-108-10;

NDC 68682-108-30; NDC 68682-109-10; NDC 68682-109-30

Relevant identified uses of the substance or mixture and uses advised against

Recommended use• Nifedipine extended release tablets are indicated for treatment of hypertension.

Restrictions on use • Refer to the product insert and/or prescribing information for restrictions on use and

contraindications.

Details of the supplier of the safety data sheet

Valeant Pharmaceuticals International, Inc.

100 LifeSciences Parkway

Steinbach R5G 1Z7

Canada valeant.com

Supplier • Oceanside Pharmaceuticals, a division of Valeant Pharmaceuticals N. America, LLC

400 Somerset Corporate Blvd.

Bridgewater, NJ 08807

United States valeant.com

Telephone (General) • 1-800-321-4576

Emergency telephone number

• 1-800-535-5053 - US - Infotrac

Supplier • +1 352-323-3500 - International - Infotrac

This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant to consumer use of the product.

Section 2: Hazard Identification

UN GHS Revision 3

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Third Revised Edition

Classification of the substance or mixture

• Acute Toxicity Oral 4

Reproductive Toxicity 2

Specific Target Organ Toxicity Single Exposure 1

Skin Irritation 2 Eve Irritation 2A

Effects on or via Lactation

Label elements

UN GHS

DANGER





Hazard statements · Harmful if swallowed

Causes skin irritation

Causes serious eve irritation

Suspected of damaging fertility or the unborn child.

Causes damage to organs.

May cause harm to breast-fed children

Precautionary statements

Prevention • Do not handle until all safety precautions have been read and understood.

Do not breathe dust, fume, gas, mist, vapours and/or spray.

Wash thoroughly after handling.

Use personal protective equipment as required.

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses.

if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations.

Other hazards

UN GHS No data available

Section 3 - Composition/Information on Ingredients

Substances

 Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Mixtures

Composition					
Chemical Name	Identifiers	%	Classifications According to Regulation/Directive		
Colloidal silicon dioxide	CAS :112945-52-5	N/A	UN GHS Revision 3: Acute Tox. Oral 5		
Ethylcellulose	CAS:9004-57-3	N/A	UN GHS Revision 3: NDA		
Hydroxyethyl cellulose	CAS:9004-62-0	N/A	UN GHS Revision 3: Skin Irrit. 2; Eye Irrit. 2A		
Hydroxypropyl methylcellulose	CAS:9004-65-3	N/A	UN GHS Revision 3: NDA		
Iron oxide red	CAS:1309-37-1 EINECS:215-168- 2	N/A	UN GHS Revision 3: NDA		
Lactose	CAS:63-42-3 EINECS:200-559- 2	N/A	UN GHS Revision 3: Skin Irrit. 2; Skin Irrit. 3; Eye Irrit. 2A; Eye Irrit. 2B		
Magnesium stearate	CAS:557-04-0 EINECS:209-150- 3	N/A	UN GHS Revision 3: NDA		
Methacrylic acid copolymer	CAS:25086-15-1	N/A	UN GHS Revision 3: NDA		

Preparation Date: 04/October/2016

Format: GHS Language: English (US) **UN GHS Revision 3** Revision Date: 07/October/2016 Page 2 of 11

Microcrystallne cellulose	CAS :9004-34-6 EINECS :232-674-9	N/A	UN GHS Revision 3: Skin Irrit. 2; Eye Irrit. 2A
Nifedipine	CAS:21829-25-4 EINECS:244-598- 3	9% TO 20%	UN GHS Revision 3: NDA
Polyethylene glycol #600 *	CAS:25322-68-3	N/A	UN GHS Revision 3: NDA
Sodium lauryl sulfate	CAS:151-21-3 EINECS:205-788- 1	N/A	UN GHS Revision 3: Skin Irrit. 2; Eye Irrit. 2; Acute Tox. Oral 4; Aquatic Acute 2
Talc*	CAS :14807-96-6 EINECS :238-877-9	N/A	UN GHS Revision 3: Skin Irrit. 3; STOT RE 1
Titanium dioxide*	CAS :13463-67-7 EINECS :236-675-5	N/A	UN GHS Revision 3: STOT RE 2; Carc. 2

N/A - Designates that the chemical percentage of composition is not available as it is considered a trade secret.

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

Normal use of this product does not pose an inhalation hazard. However, during bulk handling should respiratory tract irritation develop, discontinue use and remove to fresh air. Get medical attention if irritation or other symptoms develop or persist.

Skin

 IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Eye

 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately if symptoms occur.

Ingestion

· If swallowed, seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed

 Events observed following overdose included hypotension, heart rhythm disturbances, loss of consciousness, and cardiac failure.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat according to accepted protocols. For additional guidance, refer to the current prescribing information.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media •

Water spray, carbon dioxide, dry chemical powder or appropriate foam for surrounding

Unsuitable Extinguishing Media

· No data available

Special hazards arising from the substance or mixture **Unusual Fire and Explosion**

No data available

Hazards

Hazardous Combustion Products

No data available.

Advice for firefighters

 As in any fire, wear self-contained breathing apparatus and full protective gear to prevent contact with skin and eyes.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

No special controls or personal protection required under conditions of intended use.
 In the event of bulk spills, wear suitable protective eyewear, clothing, protective boots and protective gloves. Evacuate immediate area. Ensure adequate ventilation. Refer to Section 8.

Emergency Procedures

 Keep unauthorized personnel away. Clean up spilled tablets and place in sealed container. Avoid breaking tablets or creating dust during clean up.

Environmental precautions

· No data available on the environmental impact of this product.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

 LARGE SPILLS: Use HEPA vacuum to clean up spill. If HEPA vacuum is not available, dampen spilled tablets with water prior to cleaning up to prevent dust cloud.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

 Minimize dust generation and accumulation. Use good safety and industrial hygiene practices. Avoid breaking capsules.

Conditions for safe storage, including any incompatibilities

Storage

• Keep tightly closed. Store at controlled room temperature 25°C/77°F (excursions permitted to 15-30°C/59-86°F), to maintain product integrity. Use before date marked on carton and/or container. Protect from light.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

 Refer to the occupational exposure limits / guidelines for the individual product components.

	Exposure Limits/Guidelines						
	Result	ACGIH	Canada Quebec	NIOSH	OSHA	Other Agency Information	
Talc* (14807-96-6)	TWAs	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	3 mg/m3 TWAEV (respirable dust)	2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust)	Not established	Not established	
Titanium dioxide* (13463-67-7)	TWAs	10 mg/m3 TWA	10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust)	Not established	15 mg/m3 TWA (total dust)	Not established	
Polyethylene glycol #600 * (25322-68-3)	TWAs	Not established	Not established	Not established	Not established	10 mg/m3 TWA (MW>200, aerosol)	
			5 mg/m3 TWAEV (dust and fume, as		10 mg/m3 TWA		

Iron oxide red (1309-37-1)	TWAs	5 mg/m3 TWA (respirable fraction)	Fe); 10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, regulated under Rouge, total dust)	5 mg/m3 TWA (dust and fume, as Fe)	(fume); 15 mg/m3 TWA (total dust, listed under Rouge); 5 mg/m3 TWA (respirable fraction, listed under Rouge)	Not established
Microcrystallne cellulose (9004-34-6)	TWAs	10 mg/m3 TWA	10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust)	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not established

Exposure Control Notations ACGIH

- •Titanium dioxide* (13463-67-7): Carcinogens: (A4 Not Classifiable as a Human Carcinogen)
- Talc* (14807-96-6): Carcinogens: (A4 Not Classifiable as a Human Carcinogen (containing no asbestos fibers))
- Iron oxide red (1309-37-1): Carcinogens: (A4 Not Classifiable as a Human Carcinogen)

Exposure Limits Supplemental OSHA

•Talc* (14807-96-6): Mineral Dusts: (20 mppcf TWA (if 1% Quartz or more, use Quartz limit))

ACGIH

- •Microcrystallne cellulose (9004-34-6): TLV Basis Critical Effects: (upper respiratory tract irritation)
- •Titanium dioxide* (13463-67-7): TLV Basis Critical Effects: (lower respiratory tract irritation)
- •Talc* (14807-96-6): **TLV Basis Critical Effects:** (pulmonary fibrosis (containing no asbestos fibers); pulmonary function (containing no asbestos fibers))
- •Iron oxide red (1309-37-1): TLV Basis Critical Effects: (pneumoconiosis)

Exposure controls

Engineering Measures/Controls

 NO SPECIAL CONTROLS ARE REQUIRED UNDER CONDITIONS OF INTENDED USE. Local exhaust ventilation should be provided when handling bulk product.

Personal Protective Equipment

Respiratory

- For bulk handling, the personal breathing protection should be determined based upon a risk assessment and in accordance with local regulations. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are
- exceeded or symptoms are experienced. **Eye/Face** Wear protective eyewear (goggles, face s
 - Wear protective eyewear (goggles, face shield, or safety glasses) when handling bulk product before closed in final packaging.

Hands

• Wear protective gloves when handling between the state of the

Wear protective gloves when handling bulk product before closed in final packaging.

Avoid contact with skin.

General Industrial Hygiene

Considerations

Skin/Body

Environmental Exposure Controls

 Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling.

No data available

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description						
Physical Form	Solid	Appearance/Description	Reddish brown film coated round tablet.			
Color	Reddish brown.	Odor	Not relevant			

General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	172 to 174 °C(341.6 to 345.2 °F)
Decomposition Temperature	No data available	рН	Not relevant
Specific Gravity/Relative Density	Not relevant	Water Solubility	Insoluble
Solvent Solubility	Slightly soluble in methanol and ethanol	Viscosity	Not relevant
Volatility	•	-	-
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant		
Environmental			-
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

· Stable under normal temperatures and pressures.

Chemical stability

· Hazardous polymerization will not occur.

Possibility of hazardous reactions

· No data available

Conditions to avoid

· Light, heat and humidity.

Incompatible materials

· Strong oxidizing agents.

Hazardous decomposition products

· Nitric oxides and carbon monoxides.

Section 11 - Toxicological Information

Information on toxicological effects

	Components						
Nifedipine (9% TO 20%)	21829- 25-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1022 mg/kg; Behavioral:Changes in motor activity (specific assay); Lungs, Thorax, or Respiration:Dyspnea; Lungs, Thorax, or Respiration:Respiratory stimulation; Reproductive: Ingestion/Oral-Rat TDLo • 10 mg/kg (21D preg); Reproductive Effects:Specific Developmental Abnormalities:Cardiovascular (circulatory) system; Ingestion/Oral-Rat TDLo • 40 mg/kg (14D preg); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system					

GHS Properties	Classification
Acute toxicity	UN GHS 3 • Acute Toxicity - Oral 4
Skin corrosion/Irritation	UN GHS 3 • Skin Irritation 2

Serious eye damage/Irritation	UN GHS 3 • Eye Irritation 2A
Skin sensitization	UN GHS 3 • Classification criteria not met
Respiratory sensitization UN GHS 3 • Classification criteria not met	
Aspiration Hazard	UN GHS 3 • Classification criteria not met
Carcinogenicity	UN GHS 3 • Classification criteria not met
Germ Cell Mutagenicity	UN GHS 3 • Classification criteria not met
Toxicity for Reproduction	UN GHS 3 • Additional category for effects on or via lactation; Toxic to Reproduction 2
STOT-SE UN GHS 3 • Specific Target Organ Toxicity Single Exposure 1	
STOT-RE	UN GHS 3 • Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)

• Under normal conditions of use, no health effects are expected. Exposure to dust from broken capsules may cause irritation.

Chronic (Delayed)

• Repeated and prolonged exposure may cause irritation.

Skin

Acute (Immediate)

· May cause skin irritation.

Chronic (Delayed)

Repeated and prolonged exposure may cause sensitization.

Eye

Acute (Immediate)

May cause mild eye irritation with direct contact to eye.

Chronic (Delayed)

Under normal conditions of use, no health effects are expected.

Ingestion

Acute (Immediate)

 Toxic if ingested in excess of prescription dose. May affect the heart and/or cardiovascular system. Symptoms may include hypotension, heart rhythm disturbances and cardiac failure.

Chronic (Delayed)

No data available

Carcinogenic Effects						
CAS IARC NTP						
Talc*	14807-96-6	Group 3-Not Classifiable	Evidence of Carcinogenicity			
Titanium dioxide*	13463-67-7	Group 2B-Possible Carcinogen	Evidence of Carcinogenicity			
Colloidal silicon dioxide	112945-52-5	Group 3-Not Classifiable	Not Listed			
Iron oxide red	1309-37-1	Group 3-Not Classifiable	Not Listed			

Reproductive Effects

 There are no adequate and well-controlled studies in humans. In rodents, rabbits, and monkeys, nifedipine has been shown to have a variety of embryotoxic, placentotoxic, and fetotoxic effects. Nifedipine is excreted in human milk.

Section 12 - Ecological Information

Toxicity

· This material has not been tested for environmental effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in Soil

· No data available

Other adverse effects

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

· Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

Packaging waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	

Special precautions for user • No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazard Classifications • No data available

Inventory					
Component	CAS	Canada DSL	EU EINECS	TSCA	
Methacrylic acid copolymer	25086-15-1	Yes	No	Yes	
Nifedipine	21829-25-4	Yes	Yes	No	
Microcrystallne cellulose	9004-34-6	Yes	Yes	Yes	
Hydroxyethyl cellulose	9004-62-0	Yes	No	Yes	
Ethylcellulose	9004-57-3	Yes	No	Yes	
Hydroxypropyl methylcellulose	9004-65-3	Yes	No	Yes	
Iron oxide red	1309-37-1	Yes	Yes	Yes	
Lactose	63-42-3	Yes	Yes	Yes	
Polyethylene glycol #600 *	25322-68-3	Yes	No	Yes	

Colloidal silicon dioxide	112945-52- 5	Yes	No	No
Sodium lauryl sulfate	151-21-3	Yes	Yes	Yes
Magnesium stearate	557-04-0	Yes	Yes	Yes
Talc*	14807-96-6	Yes	Yes	Yes
Titanium dioxide*	13463-67-7	Yes	Yes	Yes

Canada

Labor		
Canada - WHMIS 1988 - Classifications of Substances		
Hydroxypropyl methylcellulose	9004-65-3	Uncontrolled product according to WHMIS classification criteria
Magnesium stearate	557-04-0	Not Listed
• Ethylcellulose	9004-57-3	Uncontrolled product according to WHMIS classification criteria
Microcrystallne cellulose	9004-34-6	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
• Iron oxide red	1309-37-1	Uncontrolled product according to WHMIS classification criteria
• Talc*	14807-96-6	D2A
• Titanium dioxide*	13463-67-7	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS Division website.)
Sodium lauryl sulfate	151-21-3	D2B
Hydroxyethyl cellulose	9004-62-0	Uncontrolled product according to WHMIS classification criteria
Methacrylic acid copolymer	25086-15-1	Not Listed
• Lactose	63-42-3	Uncontrolled product according to WHMIS classification criteria
Colloidal silicon dioxide	112945-52-5	Not Listed
Nifedipine	21829-25-4	Not Listed
Polyethylene glycol #600 *	25322-68-3	Not Listed
Canada - WHMIS 1988 - Ingredient Disclosure List		
Hydroxypropyl methylcellulose	9004-65-3	Not Listed
Magnesium stearate	557-04-0	Not Listed
• Ethylcellulose	9004-57-3	Not Listed
Microcrystallne cellulose	9004-34-6	Not Listed
• Iron oxide red	1309-37-1	1 %
• Talc*	14807-96-6	Not Listed
Titanium dioxide*	13463-67-7	Not Listed
	.5.55	- 7

Sodium lauryl sulfate	151-21-3 1 %
Hydroxyethyl cellulose	9004-62-0 Not Listed
Methacrylic acid copolymer	25086-15-1 Not Listed
• Lactose	63-42-3 Not Listed
Colloidal silicon dioxide	112945-52-5 Not Listed
Nifedipine	21829-25-4 Not Listed
Polyethylene glycol #600 *	25322-68-3 Not Listed

United States - California

Environment U.S California - Proposition 65 - Carcinogens List		
Hydroxypropyl methylcellulose	9004-65-3	Not Listed
Magnesium stearate	557-04-0	Not Listed
• Ethylcellulose	9004-57-3	Not Listed
Microcrystallne cellulose	9004-34-6	Not Listed
Iron oxide red	1309-37-1	Not Listed
• Talc*	14807-96-6	Not Listed
	11007 00 0	carcinogen, 9/2/2011
Titanium dioxide*	13463-67-7	(airborne, unbound particles of respirable size)
Sodium lauryl sulfate	151-21-3	Not Listed
Hydroxyethyl cellulose	9004-62-0	Not Listed
Methacrylic acid copolymer	25086-15-1	Not Listed
• Lactose	63-42-3	Not Listed
Colloidal silicon dioxide	112945-52-5	Not Listed
Nifedipine	21829-25-4	Not Listed
Polyethylene glycol #600 *	25322-68-3	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Hydroxypropyl methylcellulose	9004-65-3	Not Listed
Magnesium stearate	557-04-0	Not Listed
Ethylcellulose	9004-57-3	Not Listed
Microcrystallne cellulose	9004-34-6	Not Listed
Iron oxide red	1309-37-1	Not Listed
• Talc*	14807-96-6	Not Listed
Titanium dioxide*	13463-67-7	Not Listed
Sodium lauryl sulfate	151-21-3	Not Listed
Hydroxyethyl cellulose	9004-62-0	Not Listed
Methacrylic acid copolymer	25086-15-1	Not Listed
• Lactose	63-42-3	Not Listed
Colloidal silicon dioxide	112945-52-5	Not Listed
Nifedipine	21829-25-4	developmental toxicity, 1/29/1999
Polyethylene glycol #600 *	25322-68-3	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Hydroxypropyl methylcellulose	9004-65-3	Not Listed
Magnesium stearate	557-04-0	Not Listed
Ethylcellulose	9004-57-3	Not Listed
Microcrystallne cellulose	9004-34-6	Not Listed
Iron oxide red	1309-37-1	Not Listed
• Talc*	14807-96-6	Not Listed
Titanium dioxide*	13463-67-7	Not Listed
	10 100 01 1	I VOL LISICU

25086-15-1	Not Listed
00.40.0	
63-42-3	Not Listed
112945-52-5	Not Listed
21829-25-4	female reproductive toxicity 1/29/99
25322-68-3	Not Listed
9004-65-3	Not Listed
557-04-0	Not Listed
9004-57-3	Not Listed
9004-34-6	Not Listed
1309-37-1	Not Listed
14807-96-6	Not Listed
13463-67-7	Not Listed
151-21-3	Not Listed
9004-62-0	Not Listed
25086-15-1	Not Listed
63-42-3	Not Listed
112945-52-5	Not Listed
21829-25-4	male reproductive toxicity, 1/29/99
25322-68-3	Not Listed
	112945-52-5 21829-25-4 25322-68-3 9004-65-3 557-04-0 9004-57-3 9004-34-6 1309-37-1 14807-96-6 13463-67-7 151-21-3 9004-62-0 25086-15-1 63-42-3 112945-52-5 21829-25-4

Section 16 - Other Information

Revision Date
Last Revision Date
Preparation Date
Disclaimer/Statement of
Liability

- 07/October/2016
- 04/October/2016
- 04/October/2016
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