**Issued:** Jul-25-2016

# ODOVIE SAFETY DATA SHEET

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

1.1. Product identifier

**Product Name:** Dibenzyl Core Succinate

Chemical Name: N,N-Dibenzylamine Succinate

Synonyms: Lopinavir Intermediate

**Drug Code Number:** 78935; 30509

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

**Recommended use:** Process Intermediate

Scientific research and development

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

**Manufacturer European:** AbbVie Inc.

via Pontina, km 52 Campoverde - LT 04010

Italia

**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** 

Serious eye damage/eye Category 2

irritation

**Chronic aquatic toxicity** Chronic toxicity 4

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

**Indication of danger:** Xi - Irritant

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**Risk Phrases:** R36 - Irritating to eyes

R53 - May cause long-term adverse effects in the aquatic environment

#### 2.2. Label elements



**Signal Word:** Warning

**Hazard Statements:** H319 - Causes serious eye irritation

H413 - May cause long lasting harmful effects to aquatic life

**Precautionary Statements** P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

### 2.3. Other hazards

Not determined

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

Chemical Name	Weight-%	EINECS/ELINCS	EEC Classification	EU - GHS	REACH Reg. No
		Number		Substance Classification	
Dibenzyl Core Succinate	90-100	NA	Xi, R36 R53	Eye Irrit. 2 (H319) Aquatic Chronic 4 (H413)	No data available

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.

**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.

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**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** None known from occupational exposure.

Medical Conditions Aggravated None known from occupational exposure.

by Exposure

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

**Special Exposure Hazards:** Not determined

**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

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### 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

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

Store according to label instructions.

### 7.3. Specific end use(s)

**Recommended use:** Process Intermediate

Scientific research and development

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

### **8.1.** Control parameters

### **Exposure limits:**

Chemical Name	Employee Exposure Limit	Skin Notation
Dibenzyl Core Succinate	Not applicable	None

### **8.2. Exposure controls**

**Engineering Controls:** Local exhaust ventilation as necessary to maintain exposures to within applicable

limits.

**Respiratory Protection:** An approved respirator (i.e. NIOSH, EN, etc.) should be worn when exposures are

expected to exceed the applicable limits.

**Eyes:** Wear eye protection appropriate to handling activities.

**Gloves:** Impervious gloves.

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:** Off-White Crystalline Powder

Odor:

Odor Threshold:

PH:

Boiling Pt. @ 760 mm Hg (°C):

Melting/Freezing Point (°C):

Flash Point (°C):

Evaporation Rate at 20°C:

Not determined

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Lower Explosive Limit:

Upper Explosive Limit:

Vapor Pressure (mm Hg):

Vapor Density (Air = 1):

Not determined

n-octanol/water

**Autoignition Temp.** (°C): Not determined **Decomposition temperature** Not determined

(°C):

Viscosity (centipoise): Not determined Explosion Severity: Not determined Oxidizer Properties: Not determined

#### 9.2. Other information

Not determined

# 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

Carbon oxides, Nitrogen oxides (NOx)

# SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

## **Routes of Exposure:**

Oral: Yes
Dermal: Yes
Inhalation: Yes

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**Acute Toxicity - Oral:** Data for similar material given below.

Chemical Name	Acute Test	Value	Units	Species
Dibenzyl Core Succinate	LD50 >	2000	mg/kg, for a similar material	Rats

**Acute Toxicity - Dermal:** Data for similar material given below.

Chemical Name	Acute Test	Value	Units	Species
Dibenzyl Core Succinate	LD50 >	2000	mg/kg, for a similar material	Rats

Acute Toxicity - Inhalation: Not determined

**Corrosivity** Not determined

**Dermal Irritation:** Similar Material: Not an irritant.

**Eye irritation** May be an eye irritant.

Sensitization Similar Material Negative in the maximization assay in guinea pigs at challenge

concentrations.

**Toxicokinetics/Metabolism:** Not determined

Target Organ Effects Not determined

**Reproductive Effects** Not determined

**Carcinogenicity** Not determined

Mutagenicity: Not determined

**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

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### 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

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

regulations.

## **SECTION 14: Transport information**

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

**Status:** Not regulated

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

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
Dibenzyl Core Succinate	-	-	-	Not listed	-

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Dibenzyl Core Succinate	-	-	-	-	-	

#### 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

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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:
Dibenzyl Core Succinate	90-100	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):
Dibenzyl Core Succinate	90-100	No	Not applicable	Not applicable

Immediate Health:YesDelayed 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 harm.

WHMIS Hazard Class Not determined

**NFPA Rating:** 

Health: 2 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**

#### **Risk Phrases:**

R36 - Irritating to eyes

R53 - May cause long-term adverse effects in the aquatic environment

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