## Safety Data Sheet



#### Section 1: Identification

**Product identifier** 

**Product Name** 

**Product Code** 

Diclofenac Sodium Ophthalmic Solution, 0.1%

• AB45704; AB45707; Core No. 457; NDC 24208-0457-05; NDC 24208-0457-25

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

Recommended use

 Finished Pharmaceutical Product; Diclofenac Sodium Ophthalmic is indicated for the treatment of postoperative inflammation in patients who have undergone cataract extraction and for the temporary relief of pain and photophobia in patients undergoing corneal refractive surgery.

Restrictions on use

 Use in accordance with product literature. Refer to the product insert and/or prescribing information for restrictions on use and contraindications.

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

Manufacturer

Bausch & Lomb

1400 North Goodman Street Rochester, NY 14609

United States bausch.com

Telephone (General) • 1-800-553-5340

**Emergency telephone number** 

Manufacturer • 1-800-535-5053 - 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**

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

### Classification of the substance or mixture

**UN GHS** • Eye Mild Irritation 2B

Label elements

**UN GHS** 

#### WARNING

Hazard statements . May cause eye irritation

**Precautionary statements** 

**Prevention** • Use personal protective equipment as required.

Wash thoroughly after handling.

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

Preparation Date: 19/May/2015

Revision Date: 19/May/2015

Page 1 of 10

Format: GHS Language: English (US)

UN GHS

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Storage/Disposal • Keep tightly closed. Store at room temperature 20-25°C (68-77°F), to maintain product integrity. Use before date marked on carton and/or container.

Protect from light.

### 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	
Boric Acid	CAS:10043-35-3 EINECS:233-139-2	< 5%	UN GHS: Skin Irrit. 2; Eye Irrit. 2A; Acute Tox. Oral 5; Repr. 1	
Castor Oil	CAS:61791-12-6	< 10%	UN GHS: NDA	
Diclofenac Sodium	CAS:15307-79-6 EINECS:239-346-4	0.1%	UN GHS: NDA	
Edetate Disodium Dihydrate	CAS:139-33-3 EINECS:205-358-3	< 1%	UN GHS: NDA	
Sorbic Acid	CAS:110-44-1 EINECS:203-768-7	< 1%	UN GHS: NDA	
Tromethamine	CAS:77-86-1 EINECS:201-064-4	< 1%	UN GHS: Skin Irrit. 2	
Water	CAS:7732-18-5 EINECS:231-791-2	Balance	UN GHS: Classification criteria not met	

The exact percentage of composition has been withheld as a trade secret.

#### Section 4: First-Aid Measures

#### Description of first aid measures

Inhalation

No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of mists, remove to fresh air and get medical attention.

Skin

No specific treatment is necessary since this material is not likely to be hazardous by contact with the skin or mucous membranes.

Eye

For accidental and non-therapeutic applications, flush eyes with copious amounts of water for at least 15 minutes. Get medical attention if eye irritation persists.

Ingestion

No specific treatment is necessary since this material is not likely to be hazardous by ingestion. If large quantities are accidentally ingested (greater than a tablespoon), get medical attention immediately.

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

Preparation Date: 19/May/2015 Format: GHS Language: English (US) UN GHS Revision Date: 19/May/2015 Page 2 of 10

No data available

## Indication of any immediate medical attention and special treatment needed Other information

 Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### 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 Hazards

• None known - product is not flammable or combustible.

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. Refer to Section 8.

**Emergency Procedures** 

 No emergency procedures are expected to be necessary when used in accordance with product literature.

#### **Environmental precautions**

No data available

## Methods and material for containment and cleaning up

Containment/Clean-up Measures

 Contain spilled product. For small spills, add suitable absorbent material. Scoop up and place in an appropriate liquid-tight container equipped with a tight cover for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate, liquid-tight container equipped with a tight cover for disposal.

## Section 7 - Handling and Storage

### Precautions for safe handling

Handling

 No special handling is required. Refer to Section 8. Use only in accordance with product literature.

## Conditions for safe storage, including any incompatibilities

Storage

 Keep tightly closed. Store at controlled room temperature 20-25°C/68-77°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

Preparation Date: 19/May/2015
Revision Date: 19/May/2015
Page 3 of 10

Format: GHS Language: English (US)
UN GHS

### Control parameters

### **Exposure Limits/Guidelines**

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

Exposure Limits/Guidelines		
	Result	ACGIH
Boric Acid	STELs	6 mg/m3 STEL (inhalable fraction, listed under Borate compounds, inorganic)
(10043-35-3) TWAs 2 mg/m3 TWA (inhalable fraction, listed under Borate compounds, inorganic)		

#### **Exposure Control Notations**

#### **ACGIH**

#### **Exposure Limits Supplemental**

#### **ACGIH**

### **Exposure controls**

#### Engineering Measures/Controls

 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable

#### **Personal Protective Equipment**

Respiratory

No respiratory protection required during normal handling.

Eye/Face

 Avoid contact with the eye. No special controls or personal protection required under conditions of intended use. In the event of a bulk spill, appropriate eye protection should be worn.

Hands

Gloves are not required under normal handling conditions.

Skin/Body

No special personal protection required under conditions of intended use. In the event of a bulk spill, wear appropriate protective clothing.

# **Environmental Exposure**

Controls

No data available

## Section 9 - Physical and Chemical Properties

## Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Color	Clear Colorless .
Odor	Not relevant	Odor Threshold	Not relevant
General Properties			
Boiling Point	No data available	Melting Point	Not relevant
Decomposition Temperature	No data available	рН	7.2
Specific Gravity/Relative Density	= 1.0105 Water=1	Water Solubility	No data available
Viscosity	No data available		
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	No data available		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Heat of Combustion (ΔHc)	Not relevant

Preparation Date: 19/May/2015 Format: GHS Language: English (US) Revision Date: 19/May/2015 UN GHS

<sup>•</sup>Boric Acid (10043-35-3): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (listed under Borate compounds, inorganic))

<sup>•</sup>Boric Acid (10043-35-3): TLV Basis - Critical Effects: (upper respiratory tract irritation (listed under Borate compounds, inorganic))

Flame Height	Not relevant	Ignition Distance	Not relevant
Autoignition	Not relevant	Burning Rate Test	Not relevant
Flammability (solid, gas)	Not relevant		
Environmental			
Octanol/Water Partition coefficient	No data available		

## **Section 10: Stability and Reactivity**

## Reactivity

No dangerous reactions known.

### **Chemical stability**

Stable under normal temperatures and pressures.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

Extreme heat or cold. Do not freeze.

## Incompatible materials

None.

## **Hazardous decomposition products**

None expected.

## **Section 11 - Toxicological Information**

## Information on toxicological effects

Other Material Information

 Toxicological information refers to raw materials only. Concentrations and toxicological effects are substantially reduced in the product.

Components		
Diclofenac Sodium (0.1%)	15307- 79-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 53 mg/kg; Behavioral:Altered sleep time (including change in righting reflex); Behavioral:Ataxia; Lungs, Thorax, or Respiration:Respiratory stimulation
Castor Oil (< 10%)	61791- 12-6	Acute Toxicity: Intravenous-Mouse LD50 • 6500 mg/kg
Boric Acid (< 5%)	10043- 35-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 2500 mg/kg; Behavioral:Convulsions or effect on seizure threshold; Behavioral:Ataxia
Tromethamine (< 1%)	77-86-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • >3000 mg/kg
Sorbic Acid (< 1%)	110-44- 1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 7360 mg/kg
Edetate Disodium Dihydrate (< 1%)	139-33- 3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 2 g/kg

GHS Properties	Classification	
Acute toxicity  UN GHS • Classification criteria not met		
Aspiration Hazard	UN GHS • Classification criteria not met	
Carcinogenicity	UN GHS • Classification criteria not met	
Germ Cell Mutagenicity	UN GHS • Classification criteria not met	

Preparation Date: 19/May/2015 Revision Date: 19/May/2015 **UN GHS** Page 5 of 10

Skin corrosion/Irritation	UN GHS • Classification criteria not met
Skin sensitization	UN GHS • Classification criteria not met
STOT-RE	UN GHS • Classification criteria not met
STOT-SE UN GHS • Classification criteria not met	
Toxicity for Reproduction	UN GHS • Classification criteria not met
Respiratory sensitization	UN GHS • Classification criteria not met
Serious eye damage/Irritation UN GHS • Eye Mild Irritation 2B	

### **Potential Health Effects**

#### Inhalation

Acute (Immediate)

**Chronic (Delayed)** 

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

### Skin

Acute (Immediate)

**Chronic (Delayed)** 

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

#### Eve

Acute (Immediate)

**Chronic (Delayed)** 

- May cause mild irritation. Transient ocular burning and stinging.
- Under normal conditions of use, no health effects are expected.

### Ingestion

Acute (Immediate)

**Chronic (Delayed)** 

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

### Other

Acute (Immediate)

**Chronic (Delayed)** 

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

Carcinogenic Effects			
	CAS NTP		
Boric Acid	10043-35-3	Evidence of Carcinogenicity	

# 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**

Preparation Date: 19/May/2015

Revision Date: 19/May/2015

Page 6 of 10

Format: GHS Language: English (US)

UN GHS

#### **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	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

**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
Tromethamine	77-86-1	Yes	Yes	Yes
Edetate Disodium Dihydrate	139-33-3	Yes	Yes	Yes
Diclofenac Sodium	15307-79-6	Yes	Yes	No
Boric Acid	10043-35-3	Yes	Yes	Yes
Castor Oil	61791-12-6	Yes	No	Yes
Sorbic Acid	110-44-1	Yes	Yes	Yes
Water	7732-18-5	Yes	Yes	Yes

### Canada

Canada - WHMIS - Classifications of Substances		
Edetate Disodium Dihydrate	139-33-3	Uncontrolled product according to WHMIS classification criteria (including 3.5%)
Tromethamine	77-86-1	D2B
Sorbic Acid	110-44-1	Uncontrolled product according to WHMIS classification criteria
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	D2A
Diclofenac Sodium	15307-79-6	Not Listed

Preparation Date: 19/May/2015 Revision Date: 19/May/2015

Format: GHS Language: English (US)

• Water	7732-18-5	Uncontrolled product according to WHMIS classification criteria
Canada - WHMIS - Ingredient Disclosure List		
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	1 %
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	1 %
Diclofenac Sodium	15307-79-6	Not Listed
Water	7732-18-5	Not Listed

# Europe

Other		
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	Repr.Cat.2; R60-61
Diclofenac Sodium	15307-79-6	Not Listed
• Water	7732-18-5	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	5.5%<=C: Repr.Cat.2; R:60-61
Diclofenac Sodium	15307-79-6	Not Listed
• Water	7732-18-5	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	T R:60-61 S:53-45
Diclofenac Sodium	15307-79-6	Not Listed
• Water	7732-18-5	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	S:53-45
Diclofenac Sodium	15307-79-6	Not Listed
Water	7732-18-5	Not Listed
Water	7732-18-5	Not Listed

## **United States**

Preparation Date: 19/May/2015 Format: GHS Language: English (US) Revision Date: 19/May/2015 **UN GHS** 

Environment U.S CERCLA/SARA - Hazardous Substances and their Reporta	able Quantities	
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	Not Listed
Diclofenac Sodium	15307-79-6	Not Listed
Water	7732-18-5	Not Listed

## **United States - California**

Edetate Disodium Dihydrate	139-33-3	Not Listed
Fromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	Not Listed
Diclofenac Sodium	15307-79-6	Not Listed
Water	7732-18-5	Not Listed
J.S California - Proposition 65 - Developmental Toxicity		
Edetate Disodium Dihydrate	139-33-3	Not Listed
Tromethamine	77-86-1	Not Listed
Sorbic Acid	110-44-1	Not Listed
Castor Oil	61791-12-6	Not Listed
Boric Acid	10043-35-3	Not Listed
Diclofenac Sodium	15307-79-6	Not Listed
Water	7732-18-5	Not Listed
J.S California - Proposition 65 - Reproductive Toxicity - Female  Edetate Disodium Dihydrate	139-33-3	Not Listed
Edetate Bioodiam Binyarate	100 00 0	
Tromethamine	77-86-1	Not Listed
•		Not Listed Not Listed
Tromethamine	77-86-1	
Tromethamine Sorbic Acid	77-86-1 110-44-1	Not Listed
Tromethamine Sorbic Acid Castor Oil	77-86-1 110-44-1 61791-12-6	Not Listed Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid	77-86-1 110-44-1 61791-12-6 10043-35-3	Not Listed Not Listed Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6	Not Listed Not Listed Not Listed Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium Water	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6	Not Listed Not Listed Not Listed Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium Water  J.S California - Proposition 65 - Reproductive Toxicity - Male	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6 7732-18-5	Not Listed Not Listed Not Listed Not Listed Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium Water  J.S California - Proposition 65 - Reproductive Toxicity - Male Edetate Disodium Dihydrate	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6 7732-18-5	Not Listed Not Listed Not Listed Not Listed Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium Water  J.S California - Proposition 65 - Reproductive Toxicity - Male Edetate Disodium Dihydrate Tromethamine	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6 7732-18-5	Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium Water  J.S California - Proposition 65 - Reproductive Toxicity - Male Edetate Disodium Dihydrate Tromethamine Sorbic Acid	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6 7732-18-5 139-33-3 77-86-1 110-44-1	Not Listed
Tromethamine Sorbic Acid Castor Oil Boric Acid Diclofenac Sodium Water  J.S California - Proposition 65 - Reproductive Toxicity - Male Edetate Disodium Dihydrate Tromethamine Sorbic Acid Castor Oil	77-86-1 110-44-1 61791-12-6 10043-35-3 15307-79-6 7732-18-5 139-33-3 77-86-1 110-44-1 61791-12-6	Not Listed

## **Section 16 - Other Information**

**Last Revision Date** 

• 19/May/2015

Preparation Date: 19/May/2015 Format: GHS Language: English (US) Revision Date: 19/May/2015 **UN GHS** Page 9 of 10

## **Preparation Date** Disclaimer/Statement of

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# 19/May/2015

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Preparation Date: 19/May/2015 Format: GHS Language: English (US) Revision Date: 19/May/2015 UN GHS Page 10 of 10