ODOVIE SAFETY DATA SHEET

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name: Nimbex Injection

Synonyms: Nimbex (Cistatracurium Besylate) Injection, 2 mg/mL; Nimbex (Cistatracurium

Besylate) Injection, 10 mg/mL; Cisatracurium Besylate Injection; Nimbex; Cisatracurium Injection; Nimbex (Cisatracurium Besylate) Injection Premier

ProRx

Trade name: Nimbex

List Number: 4380; 4382; 4378

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: Manufactured for:

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

Based on available data, not classified as hazardous according to the criteria of the Globally Harmonized System.

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

Indication of danger: Not classified

2.2 Label elements

Based on available data, not classified as hazardous according to the criteria of the Globally Harmonized System.

2.3 Other hazards

Not determined

Section 3. Composition/information on ingredients

Chemical Name	Percent	EINECS/ELINCS Number	EEC Classification	EU - GHS Substance Classification	REACH No.
Water 7732-18-5	98-99.8	Present		Not Hazardous*	No data available
Cisatracurium Besylate 96946-42-8	0.1-1	NA	T;R25	Acute Tox. 3 (H301)	No data available
Benzyl Alcohol 100-51-6	0.1-1	Present	Xn; R20/22	Acute Inhal. Tox. 3 (H331) Acute Oral Tox. 4 (H302)	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: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Skin Contact: Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration,

preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical

attention.

Ingestion: Rinse mouth with water many times. Never give fluids or induce vomiting if the

victim is unconscious or having convulsions. Get immediate medical attention.

Protection of First-aiders: Use personal protective equipment

4.2 Most important symptoms and effects, both acute and delayed

Signs and Symptoms: Clinical data suggests the following: decreased blood pressure, cardiac changes,

flushing, breathing difficulty, rash, respiratory distress.

Medical Conditions Data suggest any pre-existing ailments in the following organs: eyes, central

Aggravated by Exposure: nervous system.

4.3 Indication of any immediate medical attention and special treatment needed

Notes To Physician: Monitor respiratory system function.

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

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: Pharmaceuticals

Section 8. Exposure controls/personal protection

8.1. Control parameters

Exposure limits:

Chemical Name	Employee Exposure Limit	Skin Notation
Chemical Manie	Employee Exposure Emile	

Water	Not Applicable	None
7732-18-5		
Cisatracurium Besylate	50 mcg/m ³ TWA, 170 mcg/m ³ STEL	None
96946-42-8		
Benzyl Alcohol	Not Applicable	None
100-51-6		

8.2. Exposure controls

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

When handling bulk formulation, use in a well-ventilated area.

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: Gloves not required during normal 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: Colorless MIxture Blend Slight Yellow Solution

Odor: Odorless.
Odor Threshold: Not determined

pH: 3 - 3.8

Boiling Pt. @ 760 mm **Hg** (°C): 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. Density, g / mL: 0.995 - 1.005**Specific Gravity:** Not determined.

Solubility(ies): Freely soluble in: water.

Partition coefficient: 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

Bases, and, Alkaline materials

10.6 Hazardous decompostion products

Not determined

Section 11. Toxicological information

11.1. Information on toxicological effects

Routes of Exposure:

Oral: Yes
Dermal: Yes
Inhalation: Unlikely

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

Chemical Name	Acute Test	Value	Units	Species
Cisatracurium Besylate 96946-42-8	LD50 =	50 < LD50 < 500	mg/kg, for a similar material	Rats
Benzyl Alcohol 100-51-6	LD50 =	1040-3100	mg/kg	Animals

Acute Toxicity - Dermal: Data for component (s) given below.

Chemical Name	Acute Test	Value	Units	Species
Benzyl Alcohol	LD50 =	2000	mg/kg	Rabbits
100-51-6				

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

Chemical Name	Test	Value	Units	Species
Benzyl Alcohol	LC 50 =	2000	ppm	Rats
100-51-6				

Corrosivity: Not determined.

Dermal Irritation: Active Ingredient : A similar formulation is not a skin irritant.

Eye Irritation: Active Ingredient: Similar Material: Produced mild to moderate eye irritation in

animals.

Sensitization: Active Ingredient : A similar material is not a skin sensitizer.

Toxicokinetics/Metabolism: Not determined.

Target Organ Effects: Not determined.

Reproductive Effects: Not determined.

Carcinogenicity: Minor Ingredient : Not carcinogenic in animal study.

Data for component(s) given below.

Chemical Name	Site of Tumors	Species	Dosage	Route	Units	Duration
Benzyl Alcohol	None	Animals	200	Oral	mg/kg	Unspecified
100-51-6						

Mutagenicity: Data for component (s) given below.

Chemical Name	Micronucleus Assay	Ames Test:	Mouse Lymphoma Assav	Chromosomal Abbr. Assav
Cisatracurium Besylate 96946-42-8	Negative	Negative	Equivocal results	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

Data for component (s) given below.

Chemical Name	Percent	48h EC50 (daphnia - mg/l) (48HLCD)	Species	Duration
Cisatracurium Besylate 96946-42-8	0.1-1	14	Daphnia magna	48 Hours

Chemical Name	Percent	72h IC50 (algae - mg/l) (72HICA)	Species	Duration
Cisatracurium Besylate 96946-42-8	0.1-1	>4000	Activated sludge	72 Hours

12.2. Persistence and degradability

Readily biodegradable.

Data for component (s) given below.

Chemical Name	Percent	% Degradation	Duration
Cisatracurium Besylate	0.1-1	82.26	28 days
96946-42-8			•

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Not determined.

12.5. Results of PBT or 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: Not applicable
14.2. Proper shipping name: Not applicable
14.3. Hazard class: Not applicable
14.4. Packing group: Not applicable
14.5. Environmental hazard: 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
Water	Present	X	X	Not listed.	X
7732-18-5					
Cisatracurium Besylate 96946-42-8	-	-	-	Not listed.	-
Benzyl Alcohol 100-51-6	Present	X	X	Not listed.	X

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Water 7732-18-5	-	2-(4)-1220	X	X	Present	
Cisatracurium Besylate 96946-42-8	-	-	-	-	-	
Benzyl Alcohol 100-51-6	Present	-	X	X	Present	HSR001039

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	Percent	NTP:	IARC:	ACGIH:
Water	98-99.8	Not Listed	Not Listed	Not Listed
Cisatracurium Besylate	0.1-1	Not Listed	Not Listed	Not Listed
Benzyl Alcohol	0.1-1	Not Listed	Not Listed	Not Listed

SARA 313 Information

Chemical Name	Percent	SARA 313 Chemical:	CERCLA RQ/SARA EHS RQ (lbs):	SARA EHS TPQ (lbs):
Water	98-99.8	No	Not Applicable	Not applicable
Cisatracurium Besylate	0.1-1	No	Not Applicable	Not applicable
Benzyl Alcohol	0.1-1	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: D1B TOXIC MATERIALS.

NFPA Rating:

Health: 1 Fire: 0 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

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