# SIGMA-ALDRICH

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## SAFETY DATA SHEET

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## **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	:	Nadolol			
Product Number Brand Product Use	:	N1892 Sigma-Aldrich For laboratory research purposes.			
Supplier	:	Sigma-Aldrich Canada Co. 2149 Winston Park Drive OAKVILLE ON L6H 6J8 CANADA	Manufactur er	:	Sigma-Aldrich Corporation 3050 Spruce St. St. Louis, Missouri 63103 USA
Telephone	:	+1 9058299500			
Fax	:	+1 9058299292			
Emergency Phone # (For both supplier and manufacturer)	:	+1-703-527-3887 (CHEMTREC)			
Preparation Information	:	Sigma-Aldrich Corporation Product Safety - Americas Region 1-800-521-8956			

## 2. HAZARDS IDENTIFICATION

**Emergency Overview** 

## **Target Organs**

Cardiovascular system., Lungs

## **WHMIS Classification**

Not WHMIS controlled.

Not a dangerous substance according to GHS.

## **HMIS Classification**

Health hazard:	0
Chronic Health Hazard:	*
Flammability:	0
Physical hazards:	0

## **Potential Health Effects**

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula	:	C <sub>17</sub> H <sub>27</sub> NO <sub>4</sub>
Molecular Weight	:	309.40 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Nadolol			
42200-33-9	255-706-3	-	<=100%

## 4. FIRST AID MEASURES

## General advice

Move out of dangerous area.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

## In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

## **5. FIREFIGHTING MEASURES**

## **Conditions of flammability**

Not flammable or combustible.

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

## Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

# Explosion data - sensitivity to mechanical impact no data available

Explosion data - sensitivity to static discharge no data available

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid dust formation. Avoid breathing vapours, mist or gas.

## **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Personal protective equipment

## **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

General industrial hygiene practice.

## Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## Appearance

Form	solid
Colour	no data available
Safety data	
рН	no data available
Melting point/freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Auto-ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evapouration rate	no data available

## **10. STABILITY AND REACTIVITY**

## Chemical stability

Stable under recommended storage conditions.

## **Possibility of hazardous reactions** no data available

**Conditions to avoid** no data available

Materials to avoid Strong oxidizing agents

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Other decomposition products - no data available

## **11. TOXICOLOGICAL INFORMATION**

#### Acute toxicity

**Oral LD50** LD50 Oral - rat - 5,300 mg/kg

Inhalation LC50 no data available

Dermal LD50 no data available

Other information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation no data available

Germ cell mutagenicity

no data available

## Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

#### **Reproductive toxicity**

Reproductive toxicity - rabbit - Oral Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Reproductive toxicity - rat - Oral Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Reproductive toxicity - rat - Oral Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

no data available

## Teratogenicity

Developmental Toxicity - rat - Oral Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Musculoskeletal system. Effects on Newborn: Behavioral.

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System) no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System) no data available

## Aspiration hazard

no data available

## Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# Synergistic effects no data available

Additional Information RTECS: QJ4870000

## **12. ECOLOGICAL INFORMATION**

## Toxicity

no data available

Persistence and degradability no data available

**Bioaccumulative potential** no data available

#### Mobility in soil no data available

**PBT and vPvB assessment** no data available

#### Other adverse effects

no data available

## **13. DISPOSAL CONSIDERATIONS**

## Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

#### **DOT (US)** Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

## **15. REGULATORY INFORMATION**

## WHMIS Classification

Not WHMIS controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## Text of H-code(s) and R-phrase(s) mentioned in Section 3

## **Further information**

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