

Epoxy Resin #200

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1. Product identifier

Product form : Mixture
Name : Epoxy Resin #200
Product code : RB200

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

Use of the substance/mixture : sealant
Additive

1.3. Details of the supplier of the safety data sheet

Nu Flow Technologies (2000) Inc.
106 McMaster Ave..
L1S 2E7 Ajax, Ontario
CANADA

Attn: Mrs. Deborah Read
Tel: 905-433-5510
Email: dread@nufLOWtech.com

1.4. Emergency telephone number

Country	Organization/Company	Address	Emergency number
MEXICO	Servicio de Informacion Toxicologica Sintox	Tintoreto #32 Edif. a Desp. Col. Nochebuena Mixcoac México, D.F.	1 800 009 2800 +52 55 5611 2634 /+52 55 5598 9095
UNITED STATES OF AMERICA	American Association of Poison Control Centers		1-800-222-1222

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315
Eye Irrit. 2A H319
Skin Sens. 1 H317
Carc. 2 H351

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H351 - Suspected of causing cancer

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing fume, vapors, mist
P264 - Wash hands thoroughly after handling
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear eye protection, protective clothing, protective gloves
P302+P352 - If on skin: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse

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P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]propane, polymer	(CAS No) 25085-99-8	>= 80	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
[[[2-ethylhexyl]oxy]methyl]oxirane	(CAS No) 2461-15-6	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Titanium(IV) oxide	(CAS No) 13463-67-7	1 - 5	Carc. 2, H351

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Gently wash with plenty of soap and water. Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Rinse immediately with plenty of water. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing fume, vapors, mist. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene measures : Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat-ignition. Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Epoxy Resin #200		
ACGIH	Not applicable	
OSHA	Not applicable	
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]propane, polymer (25085-99-8)		
ACGIH	Not applicable	
OSHA	Not applicable	
Titanium(IV) oxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
ACGIH	Remark (ACGIH)	LRT irr; A3
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
[[[(2-ethylhexyl)oxy]methyl]oxirane (2461-15-6)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation.
Personal protective equipment : Protective clothing. Protective goggles. Gloves. Avoid all unnecessary exposure.



Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.

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Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: white
Odor	: odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 300 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: Water: Solubility in water of component(s) of the mixture : • Titanium(IV) oxide: 0,15 g/100ml • [[[(2-ethylhexyl)oxy]methyl]oxirane: poorly soluble
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Acute toxicity : Not classified
(Based on available data, the classification criteria are not met)

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]propane, polymer (25085-99-8)

LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)

Titanium(IV) oxide (13463-67-7)

LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 6,8 mg/l/4h (Rat; Experimental value)

[[2-ethylhexyl]oxy]methyl]oxirane (2461-15-6)

LD50 oral rat	7800 mg/kg (Rat)
ATE US (oral)	7800,000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
(Based on available data, the classification criteria are not met)
Carcinogenicity : Suspected of causing cancer.

Titanium(IV) oxide (13463-67-7)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity : Not classified
(Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure) : Not classified
(Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure) : Not classified
(Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified
(Based on available data, the classification criteria are not met)
Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation : May cause an allergic skin reaction.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Titanium(IV) oxide (13463-67-7)

LC50 fish 1	> 1000 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	< 1000 mg/l (432 h; Daphnia magna; Static system)
LC50 fish 2	> 1 g/l (96 h; Leuciscus idus)
EC50 Daphnia 2	< 500 mg/l (720 h; Daphnia magna; Static system)
Threshold limit algae 1	61 mg/l (72 h; Pseudokirchneriella subcapitata)

[[2-ethylhexyl]oxy]methyl]oxirane (2461-15-6)

LC50 fish 1	14 mg/l (LC50; 24 h)
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12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Titanium(IV) oxide (13463-67-7)

Persistence and degradability	Biodegradability: Not applicable. Low potential for Mobility in soil.
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Titanium(IV) oxide (13463-67-7)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
[[2-ethylhexyl]oxy]methyl]oxirane (2461-15-6)	
Persistence and degradability	Biodegradability in water: no data available.
Biochemical oxygen demand (BOD)	0,14 g O ₂ /g substance
Chemical oxygen demand (COD)	2,46 g O ₂ /g substance
ThOD	2,66 g O ₂ /g substance
BOD (% of ThOD)	0,0526

12.3. Bioaccumulative potential

Epoxy Resin #200	
Bioaccumulative potential	Not established.
Titanium(IV) oxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
[[2-ethylhexyl]oxy]methyl]oxirane (2461-15-6)	
Log Pow	2,97 (Estimated value)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not dangerous goods in terms of transport regulations

Additional information

Other information : No supplementary information available.

ADR

Transport document description : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; 2,2-bis-[4-(2,3-epoxypropoxy)phenyl]propane, polymer(25085-99-8)), 9, III, (E)
Packing group (ADR) : III
Class (ADR) : 9 - Miscellaneous dangerous substances and articles
Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M6

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Hazard labels (ADR) : 9 - Miscellaneous dangerous compounds



Orange plates : 

Tunnel restriction code (ADR) : E

Limited quantities (ADR) : 5I

Excepted quantities (ADR) : E1

Transport by sea

UN-No. (IMDG) : 3082

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG) : 9 - Miscellaneous dangerous compounds

Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No. (IATA) : 3082

Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Titanium(IV) oxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Skin Sens. 1 H317

Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/38

R43

N; R51/53

Full text of R-phrases: see section 16

National regulations

Titanium(IV) oxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

No additional information available

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SECTION 16: Other information

Revision date : 07/21/2015
Other information : None.

Full text of H-phrases:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H351	Suspected of causing cancer
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard

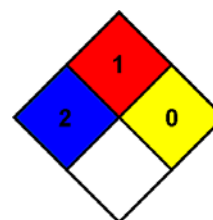
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

* - Chronic (long-term) health effects may result from repeated overexposure

Flammability

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.