

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Version: 7.1

Page: 1/11

(30508809/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Butonal® NX 4190

Recommended use of the chemical and restriction on use

Recommended use*: for industrial use only

Recommended use*: Raw material

Unsuitable for use: Uses other than recommended

Suitable for use in industrial sector: chemical industry

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: Polymer, dispersion

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

| | | |
|-----------------|----------------|--|
| Eye Dam./Irrit. | 2A | Serious eye damage/eye irritation |
| Aquatic Acute | 2 | Hazardous to the aquatic environment - acute |
| Aquatic Chronic | 3 | Hazardous to the aquatic environment - chronic |
| Repr. | 1B (fertility) | Reproductive toxicity |

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07
Version: 7.1

Page: 2/11
(30508809/SDS_GEN_US/EN)

Repr. 1B (unborn child) Reproductive toxicity

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H319 Causes serious eye irritation.
H360 May damage fertility. May damage the unborn child.
H412 Harmful to aquatic life with long lasting effects.
H401 Toxic to aquatic life.

Precautionary Statements (Prevention):

P280 Wear protective gloves, protective clothing and eye protection or face protection.
P280 Wear eye protection.
P273 Avoid release to the environment.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical attention.
P337 + P313 If eye irritation persists: Get medical attention.

Precautionary Statements (Storage):

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered. If the product adheres to skin, irritation may occur when it dries.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Guanidine, N,N'-diphenyl-

CAS Number: 102-06-7

Content (W/W): > 0.0 - < 0.3%

Synonym: 1,3-Diphenylguanidine; N,N'-Diphenylguanidine

Ethanol

CAS Number: 64-17-5

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Version: 7.1

Page: 3/11

(30508809/SDS_GEN_US/EN)

Content (W/W): ≥ 0.0 - $\leq 2.0\%$

Synonym: Ethyl alcohol

Inorganic Substance

CAS Number: Trade Secret

Content (W/W): > 0.0 - $< 7.0\%$

Synonym: No data available.

Quaternary ammonium compound

CAS Number: Trade Secret

Content (W/W): > 0.0 - $< 5.0\%$

Synonym: No data available.

hydrochloric acid

CAS Number: 7647-01-0

Content (W/W): ≥ 0.1 - $< 0.3\%$

Synonym: No data available.

Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-Alcohols, C11-14-iso-, C13-rich, ethoxylated

CAS Number: 78330-21-9

Content (W/W): > 0.0 - $< 3.0\%$

Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes. If irritation develops, seek medical attention.

If swallowed:

Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Page: 4/11

Version: 7.1

(30508809/SDS_GEN_US/EN)

Information on: Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-omega.-hydroxy-Alcohols, C11-14-iso-, C13-rich, ethoxylated

Symptoms: Eye irritation, nausea, diarrhea, vomiting, choking, coughing, itching, skin irritation

Information on: hydrochloric acid

Symptoms: Overexposure may cause:, choking, dyspnea, coughing

Information on: Quaternary ammonium compound

Symptoms: Overexposure may cause:, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: Inorganic Substance

Symptoms: Overexposure may cause:, convulsions, acidosis, pneumonia, lethargy, confusion, dyspnea, coughing, dizziness, lacrimation

Information on: Guanidine, N,N'-diphenyl-

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, foam, dry powder

Unsuitable extinguishing media for safety reasons:
No data available.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
No particular hazards known.

Advice for fire-fighters

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Version: 7.1

Page: 5/11

(30508809/SDS_GEN_US/EN)

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with skin and eyes.

Environmental precautions

Do not release untreated into natural waters.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. No special measures necessary provided product is used correctly. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Store protected against freezing.

Protect from temperatures below: 5 °C

The packed product is destroyed at low temperatures or by frost.

Protect from temperatures above: 60 °C

The packed product must be protected against exceeding the indicated temperature.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

| | | |
|---------|------------|-----------------------------|
| Ethanol | ACGIH, US: | STEL value 1,000 ppm ; |
| | OSHA Z1: | PEL 1,000 ppm 1,900 mg/m3 ; |

Advice on system design:

Ensure adequate ventilation.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Version: 7.1

Page: 6/11

(30508809/SDS_GEN_US/EN)

9. Physical and Chemical Properties

| | | |
|---|---|---------------|
| Form: | liquid, dispersion | |
| Odour: | aromatic | |
| Odour threshold: | No data available. | |
| Colour: | white | |
| pH value: | 5.0 - 5.6 | |
| Freezing point: | No data available. | |
| <i>Information on: Water</i> | | |
| Melting point: | 0 °C | |
| ----- | | |
| <i>Information on: Water</i> | | |
| Boiling point: | 100 °C | |
| ----- | | |
| Flash point: | > 300 °F | (Unspecified) |
| Flammability: | not flammable | |
| Lower explosion limit: | not applicable | |
| Upper explosion limit: | not applicable | |
| Autoignition: | Based on the water content the product does not ignite. | |
| <i>Information on: Water</i> | | |
| Vapour pressure: | 23.4 hPa (20 °C) Literature data. | |
| ----- | | |
| Density: | approx. 0.90 - 0.95 g/cm ³ (20 °C) | |
| Relative density: | No data available. | |
| Vapour density: | not determined | |
| Partitioning coefficient n-octanol/water (log Pow): | not applicable | |
| Self-ignition temperature: | not self-igniting | |
| Thermal decomposition: | No decomposition if used correctly. | |
| Viscosity, dynamic: | approx. 250 - 2,000 mPa.s | |
| Solubility in water: | (15 °C) partly soluble | |
| Miscibility with water: | miscible | |
| Molar mass: | No data available. | |
| Evaporation rate: | No data available. | |
| Other Information: | Range of particle size: < 0,1 µm - 10 µm | |

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Version: 7.1

Page: 7/11

(30508809/SDS_GEN_US/EN)

No hazardous reactions when stored and handled according to instructions. After long storage, slight quantities of carbon monoxide may be formed.

The product is chemically stable.

Conditions to avoid

Avoid extreme heat.

Incompatible materials

metal salts

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: carbon dioxide, carbon monoxide, hydrocarbons

Thermal decomposition:

No decomposition if used correctly.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Ingestion may cause gastrointestinal disturbances. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 - 10,000 mg/kg

Inhalation

Type of value: ATE

Value: > 5 mg/l

Exposure time: 4 h

Determined for mist

Dermal

Type of value: ATE

Value: > 5,000 mg/kg

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07
Version: 7.1

Page: 8/11
(30508809/SDS_GEN_US/EN)

Assessment of irritating effects: Irritating to eyes. Irritating to skin. If the product adheres to skin, irritation may occur when it dries. The product has not been tested. The statement has been derived from the properties of the individual components.

Eye

Information on: Ethanol
Species: rabbit
Result: Irritant.
Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard
not applicable

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No adverse effects were observed after repeated exposure in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity: The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity: Contains a reproductive toxin. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Guanidine, N,N'-diphenyl-
Assessment of reproduction toxicity: Causes impairment of fertility in laboratory animals.

Teratogenicity

Assessment of teratogenicity: The data available for an assessment of the effect of the substance on developmental toxicity are not sufficient for a proper evaluation.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07
Version: 7.1

Page: 9/11
(30508809/SDS_GEN_US/EN)

Acutely toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

LC50 (96 h) 1 - 10 mg/l, Fish (OECD Guideline 203, static)

The product has not been tested. The statement has been derived from the properties of the individual components.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

The polymer component of the product is poorly biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulative potential

Bioaccumulation potential

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

No data available.

Additional information

Adsorbable organically-bound halogen (AOX):
No data available.

Other ecotoxicological advice:

Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected.

Ecological data are determined by analogy.

13. Disposal considerations

Waste disposal of substance:

Must be sent to a suitable incineration plant, observing local regulations.
Incinerate or dispose of in a licensed facility. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07
Version: 7.1

Page: 10/11
(30508809/SDS_GEN_US/EN)

IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

| <u>CERCLA RQ</u> | <u>CAS Number</u> | <u>Chemical name</u> |
|------------------|-------------------|----------------------|
| 100 LBS | 64-17-5 | Ethanol |

State regulations

| <u>State RTK</u> | <u>CAS Number</u> | <u>Chemical name</u> |
|------------------|-------------------|----------------------|
| NJ | 64-17-5 | Ethanol |
| | Trade Secret | Inorganic Substance |
| PA | 64-17-5 | Ethanol |
| | 112-80-1 | oleic acid |
| | Trade Secret | Inorganic Substance |

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including 4-VINYLCYCLOHEXENE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2022/04/07

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Safety Data Sheet

Butonal® NX 4190

Revision date : 2022/04/07

Version: 7.1

Page: 11/11

(30508809/SDS_GEN_US/EN)

Butonal® NX 4190 is a registered trademark of BASF Corporation or BASF SE
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED
HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS
PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT
PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO
DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR
TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING
WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE
MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET
FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED
WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE
SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED
A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY
UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION
FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO
OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION
GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET