

# Safety Data Sheet

## HydroBlue® 90 non food grade

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Version: 4.0

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(30667829/SDS\_GEN\_CA/EN)

### 1. Identification

#### Product identifier used on the label

## HydroBlue® 90 non food grade

#### Recommended use of the chemical and restriction on use

Recommended use\*: Chemical, auxiliary / finishing agent for the textile industry

Recommended use\*: reducing agents; Bleaching agents; for industrial use only; inorganic reducing agents

Unsuitable for use: Not intended for sale to or use by the general public.

\* 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 Canada Inc.

5025 Creekbank Road

Building A, Floor 2

Mississauga, ON, L4W 0B6, CANADA

Telephone: +1 289 360-1300

#### Emergency telephone number

##### 24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

Chemical family: stabilizing agents

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### 2. Hazards Identification

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

##### Classification of the product

Self-heat.	1	Self-heating substances and mixtures
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Aquatic Acute	3	Hazardous to the aquatic environment - acute

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### Label elements

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H251 Self-heating: may catch fire.  
H319 Causes serious eye irritation.  
H402 Harmful to aquatic life.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.  
P235 + P410 Keep cool. Protect from sunlight.  
P264 Wash contaminated body parts thoroughly after handling.  
P280 Wear protective gloves, protective clothing and eye protection or face protection.

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.  
P337 If eye irritation persists:  
P311 Call a POISON CENTER or physician.

Precautionary Statements (Storage):

P407 Maintain air gap between stacks or pallets.  
P420 Store separately.  
P413 Store bulk masses greater than 1,000 kg/2,205 lbs at temperatures not exceeding 25 °C/77 °F.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

### Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered. If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

Labeling of special preparations (GHS):

Contact with acids liberates toxic gas.

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## 3. Composition / Information on Ingredients

### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

sodium dithionite

CAS Number: 7775-14-6

Content (W/W): >= 75.0 - <= 100.0%

Synonym: Sodium hyposulfite

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Sodium metabisulfite  
CAS Number: 7681-57-4  
Content (W/W):  $\geq 3.0$  -  $< 7.0\%$   
Synonym: Disulfurous acid disodium salt; Disodium disulfite

sodium carbonate  
CAS Number: 497-19-8  
Content (W/W):  $\geq 1.0$  -  $< 5.0\%$   
Synonym: Carbonic acid, disodium salt

Methanol  
CAS Number: 67-56-1  
Content (W/W):  $\geq 0.0$  -  $\leq 0.5\%$   
Synonym: Methyl alcohol

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### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

Remove contaminated clothing.

##### If inhaled:

After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.

##### If on skin:

Wash affected areas with water for at least 15 minutes. Immediate medical attention required.

##### If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

##### If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

#### 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.

Hazards: Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed.

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

##### Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:  
Water in copious quantities

Unsuitable extinguishing media for safety reasons:  
water spray

Additional information:  
Self inflammation possible by spray waters or water in small quantities.

#### Special hazards arising from the substance or mixture

Hazards during fire-fighting:  
Sulphur dioxide,  
The substances/groups of substances mentioned can be released in case of fire.

#### Advice for fire-fighters

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

#### Further information:

Risk of bursting. Cool endangered containers with water-spray. Avoid direct contact with water.  
Separate containers involved in fire and keep under observation for at least 24 hours. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin, eyes and clothing. Use breathing apparatus if exposed to vapours/dust/aerosol.

#### Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.  
Retain and dispose of contaminated wash water.

#### Methods and material for containment and cleaning up

For small amounts: Pick up in dry form. Dispose of absorbed material in accordance with regulations.  
For large amounts: Pick up in dry form. Dispose of absorbed material in accordance with regulations.

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### 7. Handling and Storage

#### Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Closed containers should only be opened in well-ventilated areas. Do not open warm or swollen product containers. Remove persons to safety and alert fire brigade.

Protection against fire and explosion:  
The product is liable to self-heating but not explosive.

#### Conditions for safe storage, including any incompatibilities

Segregate from acids. Segregate from oxidants.

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Suitable materials for containers: Carbon steel (Iron), enamelled, Stainless steel 1.4541, High density polyethylene (HDPE), Low density polyethylene (LDPE), tinned carbon steel (Tinplate), Stainless steel 1.4301 (V2), Stove-lacquer R 78433, Stainless steel 1.4306 (V2A)

Further information on storage conditions: Protect against moisture. Keep away from heat. Containers should be stored tightly sealed in a dry place. Maintain air gap between stacks or pallets.

### Storage stability:

Large quantities of the product should not be kept in stockrooms with sprinkler installations due to a possible self inflammation by small quantities of water.

Improper storage may result in a pressure build-up in the storage containers.

The packed product is not damaged by low temperatures or by frost.

Protect from temperatures above: 50 °C

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

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

Sodium metabisulfite                      ACGIH, US:      TWA value 5 mg/m<sup>3</sup> ;

### **Advice on system design:**

Provide local exhaust ventilation to control vapours/mists.

### **Personal protective equipment**

#### **Respiratory protection:**

Breathing protection if dusts are formed. Wear a NIOSH-certified (or equivalent) particulate respirator.

#### **Hand protection:**

Chemical resistant protective gloves, PVC-coated gloves, butyl rubber

#### **Eye protection:**

Tightly fitting safety goggles (chemical goggles).

#### **Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### **General safety and hygiene measures:**

Avoid contact with the skin, eyes and clothing. Do not breathe dust. Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

Form:	powder
Odour:	pungent odour
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	white
pH value:	5.5 - 8.5 ( 50 g/l)

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decomposition point:	> 80 °C Thermal decomposition above the indicated temperature is possible.
Boiling point:	The substance / product decomposes therefore not determined.
Sublimation point:	No data available.
Flash point:	not applicable
Flammability:	Risk of spontaneous ignition. (other)
Lower explosion limit:	For solids not relevant for classification and labelling.
Upper explosion limit:	For solids not relevant for classification and labelling.
Vapour pressure:	The substance / product decomposes therefore not determined.
Density:	approx. 2.4 g/cm <sup>3</sup> ( 20 °C) Literature data.
Relative density:	2.5 ( 20 °C)
Bulk density:	approx. 1,000 kg/m <sup>3</sup>
Vapour density:	The product is a non-volatile solid.
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Self-ignition temperature:	> 80 °C
Thermal decomposition:	80 °C Thermal decomposition above the indicated temperature is possible.
Viscosity, dynamic:	not applicable
Viscosity, kinematic:	not applicable, the product is a solid
Solubility in water:	> 150 g/l ( 20 °C) slow decomposition
Evaporation rate:	The product is a non-volatile solid.

## 10. Stability and Reactivity

### Reactivity

Corrosion to metals:  
Corrosive effects to metal are not anticipated.

Oxidizing properties:  
not fire-propagating

Minimum ignition energy:  
1 bar, Grain size distribution: 30 - 150 µm (VDI 2263, sheet 1, 2.1.2)  
The product is not capable of a dust explosion.

### Chemical stability

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

### Possibility of hazardous reactions

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

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Reacts with acids. Reacts with oxidizing agents. Reacts with damp air. Self inflammation possible by spray waters or water in small quantities. On contact with water, gaseous decomposition products are formed, which cause build-up of pressure in tightly closed containers.

### Conditions to avoid

> 50 degrees Celsius  
Avoid humidity.

### Incompatible materials

acids, oxidizing agents

### Hazardous decomposition products

Decomposition products:  
Hazardous decomposition products: Sulphur dioxide

Thermal decomposition:  
80 °C  
Thermal decomposition above the indicated temperature is possible.

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## 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: Of moderate toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

#### Oral

Type of value: LD50  
Species: rat (male/female)  
Value: approx. 2,500 mg/kg (BASF-Test)  
The European Union (EU) has classified this substance as 'harmful'.

#### Inhalation

Type of value: LC50  
Species: rat (male/female)  
Value: > 5.5 mg/l (OECD Guideline 403)  
Exposure time: 4 h  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Dermal

Type of value: LD50  
Species: rat (male/female)  
Value: > 2,000 mg/kg (OECD Guideline 402)  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Assessment other acute effects

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### 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

Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation.

### Skin

Species: rabbit

Result: non-irritant

Method: BASF-Test

### Sensitization

Mouse Local Lymph Node Assay (LLNA)

Species: mouse

Result: Non-sensitizing.

Method: OECD Guideline 429

### Aspiration Hazard

not applicable

## Chronic Toxicity/Effects

### Repeated dose toxicity

Assessment of repeated dose toxicity: No known chronic effects.

### Genetic toxicity

Assessment of mutagenicity: Most of the results from the available studies show no evidence of a mutagenic effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Carcinogenicity

Assessment of carcinogenicity: In long-term studies in rats in which the substance was given by feed, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

#### Toxicity to fish

LC50 (96 h) 62.3 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

Nominal concentration.

#### Aquatic invertebrates



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EC50 (48 h) 98.3 mg/l, Daphnia magna (Directive 79/831/EEC, static)  
Nominal concentration.

### Aquatic plants

EC50 (72 h) 206 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)  
Nominal concentration.

### Chronic toxicity to fish

No observed effect concentration (34 d)  $\geq$  316 mg/l, Brachydanio rerio (OECD Guideline 210, Flow through.)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d)  $>$  10 mg/l, Daphnia magna (semistatic)  
Nominal concentration.

### Assessment of terrestrial toxicity

Study scientifically not justified.

## **Microorganisms/Effect on activated sludge**

### Toxicity to microorganisms

OECD Guideline 209 aquatic

activated sludge of a predominantly domestic sewage/EC20 (3 h): 120.5 mg/l

## **Persistence and degradability**

### Assessment biodegradation and elimination (H<sub>2</sub>O)

Inorganic product which cannot be eliminated from water by biological purification processes.  
Study scientifically not justified.

### Assessment of stability in water

In contact with water the substance will hydrolyse rapidly.

### Information on Stability in Water (Hydrolysis)

$t_{1/2}$  1.5 h (50 °C, pH value 8.5), (Directive 84/449/EEC, C.10)

## **Bioaccumulative potential**

### Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

### Bioaccumulation potential

Study scientifically not justified.

## **Mobility in soil**

### Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

## **Additional information**

### Sum parameter

Chemical oxygen demand (COD): approx. 210 mg/g

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Adsorbable organically-bound halogen (AOX):  
This product contains no organically-bound halogen.

Other ecotoxicological advice:  
Do not allow to enter soil, waterways or waste water channels. Higher concentrations of the substance may cause a strong chemical oxygen consumption in biological sewage-treatment plants and/or waterways.

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### 13. Disposal considerations

**Waste disposal of substance:**  
Dispose of in a licensed facility. Observe all local regulations.

**Container disposal:**  
Do not reuse empty containers.

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### 14. Transport Information

#### Land transport

TDG

Hazard class: 4.2  
Packing group: II  
ID number: UN 1384  
Hazard label: 4.2  
Proper shipping name: SODIUM DITHIONITE (SODIUM HYDROSULPHITE)

#### Sea transport

IMDG

Hazard class: 4.2  
Packing group: II  
ID number: UN 1384  
Hazard label: 4.2  
Marine pollutant: NO  
Proper shipping name: SODIUM DITHIONITE (SODIUM HYDROSULPHITE)

#### Air transport

IATA/ICAO

Hazard class: 4.2  
Packing group: II  
ID number: UN 1384  
Hazard label: 4.2  
Proper shipping name: SODIUM DITHIONITE

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### 15. Regulatory Information

#### Federal Regulations

**Registration status:**  
Chemical DSL, CA released / listed

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### NFPA Hazard codes:

Health: 2      Fire: 1      Reactivity: 2      Special:

### Assessment of the hazard classes according to UN GHS criteria (most recent version):

Aquatic Acute	3	Hazardous to the aquatic environment - acute
Skin Corr./Irrit.	3	Skin corrosion/irritation
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Self-heat.	1	Self-heating substances and mixtures
Acute Tox.	5 (oral)	Acute toxicity

## 16. Other Information

### SDS Prepared by:

BASF NA Product Regulations  
SDS Prepared on: 2021/12/20

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.

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