

Safety Data Sheet

Styronal® 4411

Revision date : 2019/03/21

Version: 1.0

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(30734138/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Styronal® 4411

Recommended use of the chemical and restriction on use

Recommended use*: Raw material

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 Canada Inc.

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Telephone: +1 289 360-1300

Emergency telephone number

CHEMTREC: 1-800-424-9300

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

Other means of identification

Chemical family: Polymer, dispersion

2. Hazards Identification

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

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

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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 Hazardous Products Regulations (HPR) (SOR/2015-17)

Under the referenced regulation, this product does not contain any components classified for health hazards above the relevant cut off value.

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: (Further) symptoms and / or effects are not known so far
Hazards: No hazards anticipated.

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

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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.

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

No occupational exposure limits known.

Advice on system design:

Ensure adequate ventilation.

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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.

9. Physical and Chemical Properties

Form:	Emulsion, low viscosity
Odour:	faint
Odour threshold:	No data available.
Colour:	off-white
pH value:	7.0 - 8.0
<i>Information on: Water</i>	
Melting point:	0 °C

<i>Information on: Water</i>	
Boiling point:	100 °C

Flash point:	> 148.8 °C
Flammability:	not flammable
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Autoignition:	Based on the water content the product does not ignite.
Vapour pressure:	23 hPa (20 °C)
<i>Information on: Water</i>	
Vapour pressure:	23.4 hPa (20 °C) Literature data.

Density:	1.01 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.
Solubility in water:	(15 °C) partly soluble
Miscibility with water:	miscible
Evaporation rate:	No data available.
Other Information:	Range of particle size: < 0,1 µm - 10 µm

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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

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: ATE

Value: > 5,000 mg/kg

Inhalation

Type of value: ATE

Value: > 20 mg/l

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Determined for vapor

Type of value: ATE

Value: > 5 mg/l

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

Assessment of irritating effects: Not irritating to eyes and skin. May cause mechanical irritation. If the product adheres to skin, irritation may occur when it dries. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

Eye

Species: rabbit

Result: non-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: Not expected to cause reproductive toxicity (based on composition).

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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.

Experiences in humans

According to experience, the product is considered to be harmless to health if used in the correct manner.

Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The statement was derived from products of similar composition.

Symptoms of Exposure

(Further) symptoms and / or effects are not known so far

12. Ecological Information

Toxicity

Toxicity to fish

LC50 (96 h) > 100 mg/l, Brachydanio rerio (OECD Guideline 203, static)

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants

EC50 (72 h) > 100 mg/l, Scenedesmus subspicatus (OECD Guideline 201)

Nominal concentration.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN EN ISO 8192-OECD 209-88/302/EEC,P. C activated sludge, domestic/EC20 (0.5 h): > 100 mg/l

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

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.

Elimination information

Not readily biodegradable.

Bioaccumulative potential

Bioaccumulation potential

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

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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

TDG

Not classified as a dangerous good under transport regulations

Sea transport

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 DSL, CA released / listed

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NFPA Hazard codes:

Health: 1

Fire: 0

Reactivity: 0

Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2019/03/21

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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