

Safety Data Sheet

1. Identification of the Substance or Mixture and of the Supplier

1.1 Product Identifier

Product Code(s): 33817-XXX ; 33813-Hard

Product Description: Bioreactor (N/NN ; P; S; Amm); Hardness; Fe

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

Product to be used for analytical purposes only

1.3 Details of the supplier of the Safety Data Sheet

Supplier:

Pinetree/Indigo Instruments

169 Lexington Crt. Unit I

Waterloo, ON N2J 4R9

Phone 519 746 4761

1.4 Emergency telephone number

1 877 746 4764

2. Hazards Identification

2.1 Classification of substance or mixture

The product is not classified as hazardous according to GHS or OSHA regulations.

The product is an "Article" as defined in the OSHA Hazard Communication Standard (29CFR 1910.1200(c), and therefore is outside the scope of the GHS standard and does not require an SDS. This SDS is provided for informational purposes only.

2.2 Label elements

The product does not require labeling.

The product does not require any hazard pictograms.

The product does not require any signal word.

2.3 Other hazards

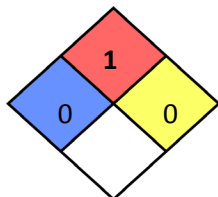
NFPA and HMIS ratings (scale 0-4)

Health = 0

Fire = 1

Reactivity = 0

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe



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3. Composition/Information on Ingredients

3.1 Substances or Mixtures

Description: Mixture of substances listed below.

Chemical Name	CAS #	EINECS #	Concentration
Cellulose	9004-34-6	232-674-9	50-100%
Indicator dye(s)	n/a	n/a	< 1%
Surfactants	n/a	n/a	< 1%
Polymers	n/a	n/a	< 1%
Buffers	n/a	n/a	< 1%
PVC	9002-86-2	n/a	5-10%

Ingredients not listed by name are proprietary to the manufacturer and considered a trade secret. These ingredients may be disclosed only in a medical emergency.

4. First Aid Measures

4.1 Description of first aid measures

General information: Adverse health effects are not reasonably expected from normal use of product.

After inhalation: Unlikely route of exposure. Supply fresh air; consult with doctor in case of complaints.

After eye contact: Unlikely route of exposure. Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After skin irritation: Immediately wash with water and soap. Rinse thoroughly. If skin irritation continues, consult a doctor.

After swallowing: May cause discomfort if ingested in large amounts. Contact medical help immediately. Do not induce vomiting unless directed to do so by a doctor.

4.2 Most important symptoms/effects, acute and delayed

Adverse health effects are not reasonably expected from normal use of product.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Indications for management of overdose or pediatric ingestion only.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture

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Formation of toxic gases is possible during heating or in case of fire

5.3 Advice to firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional Information

No further relevant information is available

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not required

6.2 Environmental precautions

No special measures required.

6.3 Methods and material for contamination and cleaning up

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and Storage

7.1 Precautions for safe handling

Handle product in accordance to test instruction provided with product, if available.

Store in a cool, dry place in tightly closed containers.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and containers:

Protect from humidity and water.

Avoid storage near extreme heat, ignition sources or open flame.

Keep away from children.

Information about storage in one common storage facility:

Keep product in original packages tightly closed during handling

Further information about storage conditions:

No special requirements

7.3 Specific end use(s)

No further relevant information available.

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8. Exposure Controls/Personal Protection

Additional information about design of technical facilities:

No further data; see Item 7.

8.1 Control parameters – Ingredients with limit values that require monitoring at the workplace:

Not required.

9004-34-6 Cellulose	
PEL (USA)	Long term value: 15* 5** mg/m ³ *total dust ** respirable fraction
REL (USA)	Long term value: 10* 5** mg/m ³ *total dust ** respirable fraction
TLV (USA)	Long term value: 10 mg/m ³
EL (Canada)	Long term value: 10 mg/m ³
EV (Canada)	Long term value: 10 mg/m ³ Paper fiber, total dust

9002-86-2 PVC	
PEL (USA)	Long term value: 15* 5** mg/m ³ *total dust ** respirable fraction
TLV (USA)	Long term value: 1 mg/m ³ as respirable dust

DNELs No further relevant information available.

PNECs No further relevant information available.

Additional information: The lists valid during the making were used as basis

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be taken when handling chemicals.

Keep away from foodstuffs, beverages, and feed.

Respiratory protection:

Not required under normal conditions of use.

Protection of hands:

Gloves not required under normal conditions of use.

Eye protection:

Not required under normal conditions of use.

Body protection:

Not required under normal conditions of use.

Limitation and supervision of exposure into the environment:

No special requirements.

Risk management measures:

No special requirements.

9. Physical and Chemical Properties

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9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Test strip, liquid impregnated on inert carrier material

Color: Product may have color.

Odor: Odorless

Odor threshold: Not determined

pH value at 20°C: Not applicable

Melting point: Not applicable

Boiling point: Not applicable

Flash point: Not applicable

Auto/Self-ignition temperature: >451°F/232°C

Decomposition temperature: Not determined

Self-igniting: Not determined

Danger of explosion: Product does not present an explosive hazard

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor Pressure: Not applicable

Density at 20°C: Not applicable

Relative density: Not determined

Vapor density: Not applicable

Evaporation rate: Not applicable

Solubility in/Miscible with water: chemicals in strip are soluble in water

Partition coefficient:

(n-octanol/water) Not determined

Viscosity:

Dynamic: Not applicable

Kinematic: Not applicable

9.2 Other information No further relevant information available

10. Stability and Reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition/conditions to be avoided:

To avoid thermal decomposition do not overheat.

10.3 Possibility of hazardous reactions

None under normal operating conditions.

10.4 Conditions to avoid

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Keep away from ignition sources do not smoke around product

Keep product stored in a cool, dry place

10.5 Incompatible materials

None under normal operating conditions

10.6 Hazardous decomposition products:

None under normal operating conditions

11. Toxicological Information

11.1 Information on toxicological effects

This information is valid for pure substances.

Acute toxicity:

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cellulose (CAS No. 9004-34-6)	> 5000 mg/kg	> 2000 mg/kg	> 5800 _{4h} mg/m ³
Indicator dye(s)	n/a	n/a	n/a
Surfactants	n/a	n/a	n/a
Polymers	n/a	n/a	n/a
Buffers	n/a	n/a	n/a
PVC (CAS No. 9002-86-2)	n/a	n/a	n/a

Primary irritant effect:

On the skin: Slight irritant effect on skin and mucous membranes.

On the eye: Slight irritant effect on eyes

Sensitization:

No sensitizing effects known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects based on our experience and information available

The substance is not subject to classification according to the latest version of the EU lists

12. Ecological Information

12.1 Toxicity

Aquatic toxicity:

This product contains materials that are harmful to the environment.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bio accumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:

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General notes: The product contains materials that are harmful to the environment.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other adverse effects

No further relevant information available.

13. Disposal Considerations

13.1 Waste treatment methods

Recommendation

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

Uncleaned packaging

Recommendation

Disposal must be made according to official regulations.

14. Transport Information

14.1 UN-Number

DOT, ADR, AND, IMDG, IATA

Not regulated

14.2 UN proper shipping name

DOT, ADR, AND, IMDG, IATA

Not regulated

14.3 Transport hazard class(es)

DOT, ADR, AND, IMDG, IATA

Class

Not regulated

14.4 Packaging group

DOT, ADR, IMDG, IATA

Not regulated

14.5 Environmental hazards:

Marine pollutant:

No

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II

of MARPOL73/78 and IBC Code

Not applicable

UN "Model Regulation":

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15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product is not classified as hazardous according to GHS or OSHA regulations. The product is an "Article" as defined in the OSHA Hazard Communication Standard (29CFR 1910.1200(c), and therefore is outside the scope of the GHS standard and does not require an SDS.

No other regulatory information is available.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. Other Information

This information is based on our present knowledge; however, this does not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information provided in this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Pinetree/Indigo Instruments will not be responsible for damages resulting from the use or reliance upon this information.

Sources

SDS prepared by:
Pinetree/Indigo Instruments
169 Lexington Crt., Unit I
Waterloo, ON N2J 4R9
519 746-4761