

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2020/878

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers:

Product Name: Nanotrap® Extracellular Vesicle Particles
Synonyms: SKU/Cat No.: 55200

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

Relevant identified uses: Laboratory chemicals

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name:	Ceres Nanosciences	Phone Number:
	9460 Innovation Drive	+1 (800)615-0418
	Manassas, VA 20110 USA	
Web site address:	https://www.ceresnano.com/	

1.4 Emergency telephone number:

Emergency Contact: Ceres Nanosciences +1 (800)615-0418

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

2.2 Label Elements:

GHS Signal Word: **None**
Hazard-determining components of labelling:
GHS Hazard Phrases:
 No phrases apply.
GHS Precautionary Phrases:
 No phrases apply.
GHS Response Phrases:
 No phrases apply.
GHS Storage and Disposal Phrases:
 No phrases apply.

UFI:

2.3 Adverse Human Health No hazard expected in normal industrial use.

Effects and Symptoms:

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
7732-18-5 ZC0110000	Water na	99.30 - 99.6 %	231-791-2 NA	No GHS classifications apply.
NA NA	Cross-linked poly(N-isopropylacrylamide) hydrogel polymer (Nanotrap® Particle)	0.450 - 0.700 %	NA NA	No GHS classifications apply.

Additional Composition Information:

This product does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

SECTION 4. FIRST AID MEASURES

- 4.1 Description of First Aid** None that are directly attributable to normal use of this material.
- Measures:**
- In Case of Inhalation:** Move to fresh air. If not breathing, give artificial respiration. Get medical aid if irritation develops and persists.
- In Case of Skin Contact:** Wash off with soap and plenty of water. Get medical aid if irritation develops and persists.
- In Case of Eye Contact:** Flush eyes with water as a precaution. If eye irritation persists, get medical advice/attention.
- In Case of Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention/advice if you feel unwell.
- Note for the Doctor:** Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE FIGHTING MEASURES

- 5.1 Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.2 Flammable Properties and Hazards:** No data available.
- Hazardous Combustion Products:** Fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: nitrogen.
- Flash Pt:** NA Method Used: Not Applicable
- Explosive Limits:** LEL: No data. UEL: No data.
- Autoignition Pt:** NA
- 5.3 Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:** Use proper personal protective equipment as indicated in Section 8.
- 6.2 Environmental Precautions:** Do not flush into sewers or natural waterways.
- 6.3 Methods and Material For Containment and Cleaning Up:** Ensure adequate ventilation. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions To Be Taken in Handling:** Avoid contact with skin and eyes. Do not ingest or inhale.
- 7.2 Precautions To Be Taken in Storing:** Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place.
- Other Precautions:** Keep out of reach of children. Handle in accordance with good industrial hygiene and safety practices.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Exposure Parameters:**
- 8.2 Exposure Controls:**
- 8.2.1 Engineering Controls (Ventilation etc.):** Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.
- 8.2.2 Personal protection equipment:**
- Eye Protection:** Safety glasses.
- Protective Gloves:** Wear appropriate gloves to prevent skin exposure.
- Other Protective Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- Respiratory Equipment (Specify Type):** Not required under normal conditions of use with adequate ventilation.
- Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- 8.2.3 Environmental Exposure Controls:** Do not flush into sewers or natural waterways.
- Exposure Scenarios:** No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on Basic Physical and Chemical Properties**
- Physical States:** [] Gas [X] Liquid [] Solid
- Appearance and Odor:** Appearance: Red. Liquid.
 Odor: None reported.
- pH:** 8.5 - 10.5
- Melting Point:** 96.1 C (205 F)
- Boiling Point:** NA
- Flash Pt:** NA Method Used: Not Applicable
- Evaporation Rate:** Not available
- Saturated Vapor Concentration:** Not available
- Flammability (solid, gas):** No data available.
- Explosive Limits:** LEL: No data. UEL: No data.
- Vapor Pressure (vs. Air or mm Hg):** Not available
- Vapor Density (vs. Air = 1):** Not available
- Specific Gravity (Water = 1):** Not available
- Density:** 0.99 - 1.01 G/ML
- Solubility in Water:** Miscible
- Octanol/Water Partition Coefficient:** No data.
- Autoignition Pt:** NA
- Decomposition Temperature:** No data.

Viscosity: Not available

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

SECTION 10. STABILITY AND REACTIVITY

- 10.1 **Reactivity:** Not reactive at normal temperatures and pressures.
- 10.2 **Stability:** Unstable [] Stable [X]
- 10.3 **Conditions To Avoid - Hazardous Reactions:** No data available.
- Possibility of Hazardous Reactions:** Will occur [] Will not occur [X]
- 10.4 **Conditions To Avoid - Instability:** Stable under normal conditions.
- 10.5 **Incompatibility - Materials To Avoid:** None known.
- 10.6 **Hazardous Decomposition or Byproducts:** Fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: nitrogen.

SECTION 11. TOXICOLOGICAL INFORMATION

- 11.1 **Information on Toxicological Effects:**
 - Epidemiology: No information available.
 - Teratogenicity: No information available.
 - Reproductive Effects: No information available.
 - Mutagenicity: No information available.
 - Neurotoxicity: No information available.
- Irritation or Corrosion:** Not classified.
- Symptoms related to Toxicological Characteristics:**
 - Eye Contact: May cause eye irritation if product contacts eyes.
 - Skin Contact: No adverse effects are expected.
 - Ingestion: Not a likely route of exposure. May be harmful if swallowed.
 - Inhalation: Not a likely route of exposure.
- Carcinogenicity/Other Information:** No component of this product is present at levels greater than or equal to 0.1% that is identified as a probable or human carcinogen by IARC, NTP, or OSHA.
- Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

SECTION 12. ECOLOGICAL INFORMATION

- 12.1 **Toxicity:**
 - Environmental: No information available.
 - Physical: No information available.
- 12.2 **Persistence and Degradability:** No data available.
- 12.3 **Bioaccumulative Potential:** No data available.
- 12.4 **Mobility in Soil:** No data available.
- 12.5 **Results of PBT and vPvB assessment:** No data available.
- 12.6 **Other adverse effects:** No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not regulated as a hazardous material.

UN Number:

Hazard Class:

SECTION 15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7732-18-5	Water	No	No	No
NA	Cross-linked poly(N-isopropylacrylamide) hydrogel polymer (Nanotrap® Particle)	No	No	No

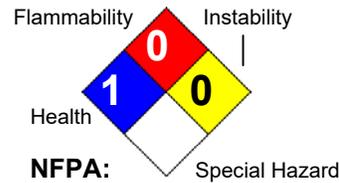
CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7732-18-5	Water	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
NA	Cross-linked poly(N-isopropylacrylamide) hydrogel polymer (Nanotrap® Particle)	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
7732-18-5	Water	Australia ICS: Yes; New Zealand IOC: Yes; Switzerland Giffliste 1: No; Switzerland INNS: No; REACH: Yes - 01-2120888954-31: Full, (P)
NA	Cross-linked poly(N-isopropylacrylamide) hydrogel polymer (Nanotrap® Particle)	Australia ICS: No; New Zealand IOC: No; Switzerland Giffliste 1: No; Switzerland INNS: No; REACH: No

SECTION 16. OTHER INFORMATION

Revision Date: 08/09/2022

Hazard Rating System:



Additional Information: 08/09/2022 Updated section(s) 2,3,4,8,11
08/09/2022 - Updated SDS to new format.

Company Policy or

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Information presented herein is believed to be accurate and reliable to the best of our knowledge. However, we make no warranty or merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. 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. Users should make their own investigations to determine the suitability of the information for their particular purposes.