Hazard Overview

Version 8.5
Revision Date 08/11/2026
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SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : MILLIPLEX® Human Exosome Characterization Panel

Product Number : HEXSM-170K
Catalogue No. : 9Y2630
Brand : Millipore

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

Identified uses : Biochemical research/analysis
Restrictions on use : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
SPRUCE ST 3050
63103 St. Louis

Telephone :(314) 771-5765
Telefax: (800) 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800 424 9300 (CHEMTREC) 24/7
+1 703 527 3887 (CHEMTREC) 24/7

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards for the product as supplied

Acute toxicity (Oral)	:	Category 4
Acute toxicity (Inhalation)	:	Category 4
Acute toxicity (Dermal)	:	Category 4
Skin irritation	:	Category 2
Serious eye damage	:	Category 1
Specific target organ toxicity - repeated exposure	:	Category 2 (Respiratory Tract)
Specific target organ toxicity - repeated exposure (Oral)	:	Category 2 (Brain)
Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 2

Other hazards

None known.

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure.
H373 May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

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Supplemental Hazard Statements	:	Corrosive to the respiratory tract.
Precautionary statements	:	**Prevention:** P260 Do not breathe mist or vapours. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. **Response:** P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P314 Get medical advice/ attention if you feel unwell. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P391 Collect spillage. **Disposal:** P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Please refer to component Safety Data Sheet and/or to Section 16 Kit components

SECTION 4. FIRST AID MEASURES

Refer to component SDS

SECTION 5. FIREFIGHTING MEASURES

Refer to component SDS

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Refer to component SDS

SECTION 7. HANDLING AND STORAGE

For precautions see section 2 GHS label elements

Advice on safe handling	:	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Further information on storage conditions	:	Tightly closed. Keep locked up or in an area accessible only to qualified or authorised persons.
Storage class	:	10, Combustible liquids
Recommended storage temperature	:	36 - 46 °F / 2 - 8 °C
		/
Further information on storage stability	:	Recommended storage temperature see product label.
		Microspheres light sensitive, store in the dark

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to component SDS

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component SDS

SECTION 10. STABILITY AND REACTIVITY

Refer to component SDS

SECTION 11. TOXICOLOGICAL INFORMATION

Refer to component SDS

SECTION 12. ECOLOGICAL INFORMATION

Refer to component SDS

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SECTION 13. DISPOSAL CONSIDERATIONS

Refer to component SDS

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good
Poison Inhalation Hazard : No

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

SECTION 16. OTHER INFORMATION

Kit Components:

Human Exosome Characterization Panel Standard	Millipore	HEXSM-8170
Human Exosome Characterization Panel Quality Control	Millipore	HEXSM-6170
Human Exosome Characterization Panel Detection Antibodies	Millipore	HEXSM-1170
Streptavidin-Phycoerythrin	Millipore	L-SAPE19
12 - Ago2 Beads-Magnetic	Millipore	HAG02-MAG
14 - CALR Beads - Magnetic	Millipore	HCALR-MAG
22 - CD9 Beads - Magnetic	Millipore	HCD9-MAG
33 - CD63 Beads -	Millipore	HCD63-MAG

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Magnetic		
54 - CD81 Beads - Magnetic	Millipore	HCD81-MAG
66-GAPDH Beads-Magnetic	Millipore	HGAPDH-MAG
72 - Syn1 Beads - Magnetic	Millipore	HSYN1-MAG
74 - FLOT1 Beads - Magnetic	Millipore	HFLOT1-MAG
77 - TSG101 Beads - Magnetic	Millipore	HTSG101-MAG
Milliplex Assay Buffer	Millipore	L-AB
Bead Diluent COLD PACKS	Millipore	LBD
10X Wash Buffer - MILLIPLEX	Millipore	L-WB
MCF7 Cell Lysate: IGF treated 100uL	Millipore	47-216

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); LSPN - List of Hazardous Notified Substances (Chile); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical

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Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.
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Revision Date : 08/11/2026

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US / EN

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Kit Components:

Human Exosome Characterization Panel Standard					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HEXSM-8170		Danger	Harmful if swallowed, in contact with skin or if inhaled. Causes serious eye damage. May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure. May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed. Harmful to aquatic life with long lasting effects.	Do not breathe dust. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell. Do not eat, drink or smoke when using this product. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. Use only outdoors or in a well-ventilated area. IF IN EYES: Rinse cautiously	

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				with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Avoid release to the environment. Get medical advice/ attention if you feel unwell. Wear protective gloves/ protective clothing/ eye protection/ face protection.	

Human Exosome Characterization Panel Quality Control					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HEXSM-6170		Danger	Harmful if swallowed, in contact with skin or if inhaled. Causes serious eye damage. May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure. May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed. Harmful to aquatic life with	Do not breathe dust. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell. Do not eat, drink or smoke when	

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			long lasting effects.	using this product. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. Use only outdoors or in a well-ventilated area. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Avoid release to the environment. Get medical advice/ attention if you feel unwell. Wear protective gloves/ protective clothing/ eye protection/ face protection.	

Human Exosome Characterization Panel Detection Antibodies					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HEXSM-1170		Warning	Causes serious eye irritation. May cause damage to organs (Respiratory Tract) through	Do not breathe mist or vapours. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	

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			prolonged or repeated exposure.	lenses, if present and easy to do. Continue rinsing. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. Get medical advice/ attention if you feel unwell. Wear eye protection/ face protection. If eye irritation persists: Get medical advice/ attention.	

Streptavidin-Phycoerythrin					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - L-SAPE19		Warning	Causes serious eye irritation. May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure.	Do not breathe mist or vapours. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. Get medical advice/ attention if you feel unwell. Wear eye protection/ face protection. If eye irritation	

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				persists: Get medical advice/ attention.	

12 - Ago2 Beads- Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HAG02-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

14 - CALR Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HCALR-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

22 - CD9 Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HCD9-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

33 - CD63 Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HCD63-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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54 - CD81 Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HCD81-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

66-GAPDH Beads-Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HGAPDH-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

72 - Syn1 Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HSYN1-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

74 - FLOT1 Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HFLOT1-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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77 - TSG101 Beads - Magnetic					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - HTSG101-MAG					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Milliplex Assay Buffer					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - L-AB					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Bead Diluent COLD PACKS					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - LBD					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

10X Wash Buffer - MILLIPLEX					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - L-WB					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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MCF7 Cell Lysate: IGF treated 100uL					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Millipore - 47-216		Danger	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.	Wash skin thoroughly after handling. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Dispose of contents/ container to an approved waste disposal plant. Do not eat, drink or smoke when using this product. IF ON SKIN: Wash with plenty of water. Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Wear protective gloves/ eye protection/ face protection. If skin irritation occurs: Get medical advice/ attention. Collect spillage.	

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