

Material Safety Datasheet (MSDS)



Updated on: 06/09/2026

Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP)
www.abmgood.com

Applied Biological Materials Inc.

1-3671 Viking Way,
Richmond, BC, CANADA
V6V 2J5

Section 1 – Identification of Substances/Mixture and of the Company/Undertaking

1.1 Product identifier.

Product Name	T Xpan™ Cell Activator (CD3/CD28/CD2)
Product Code(s)	TM139
Chemical Name	Data not relevant for safe use
Reach Number	A registration number is not required for this substance

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

Recommended Use	For research use only. Not for human or diagnostic use.
Uses advised against	No information available

1.3 Details of the supplier of the safety data sheet:

Supplier Name	Applied Biological Materials Inc.
Supplier Address	#1-3671 Viking Way Richmond BC V6V 2J5 CA
Supplier Phone Number	Tel: 604-247-2416 Fax: 604-247-2414
Supplier Email	technical@abmgood.com

1.4 Emergency telephone number:

Emergency Phone	Use your national or local emergency number. Canada or USA: Emergency Services (dial 911, 24h service)
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Section 2 – Hazards Identification

2.1 Classification of the substance or mixture.

Classification of substance according to Regulation (EC) No 1272/2008 (CLP)

Not classified as hazardous according to Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements.

Label elements according to Regulation (EC) No 1272/2008 (CLP)

Not a hazardous substance or mixture.

2.3 Other hazards.

No information available.

Section 3 – Composition/Information on Ingredients

3.1 Substances.

This product does not contain any components requiring disclosure under applicable regulations. It consists of a proprietary formulation containing biological and chemical components that may include, but are not limited to, proteins, antibodies, buffering agents, inorganic salts, amino acids, carbohydrates, and other cell culture-related materials dissolved in aqueous solution.

Section 4 – First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, remove contact lens if applicable; consult a physician.
Skin Contact	Wash off with soap and plenty of water. Consult a physician.
Inhalation	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Do not induce vomiting unless directed to do so by physician.
Most Important Symptoms and Effects, both Acute and Delayed	No information available.
Indication of any Immediate Medical Attention and Special Treatment Needed	Treat symptomatically and supportively.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide, dry chemical powder, Halon (where regulations permit), or appropriate foam.
Specific Hazards	Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Advice for Firefighters	Wear self contained breathing apparatus for firefighting if necessary. Use personal protection equipment.
Further Information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area; observe emergency procedures; consult an expert. For personal protection see section 8.
Methods and Materials for Containment and for Cleaning Up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly in marked biohazard container. Clean up affected area.
Environmental Precautions	See Section 12.
Reference to Other Sections	For disposal see Section 13.

Section 7 – Handling and Storage

7.1 Precautions for Safe Handling

Advice on Safe Handling Ensure adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Keep container tightly closed. Keep at 2-8°C or -20 to -80°C; as indicated by product label.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8 – Exposure Controls/Personal Protection

8.1. Control Parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure Controls

Personal Protective Equipment

Eye/face Protection: Use equipment for eye protection tested and approved under appropriate government standard safety glasses/goggles.

Skin and Body Protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection: Not required; except in case of aerosol formation.

Environmental Exposure Controls No information available

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Colour Data not relevant for safe use

Odour Data not relevant for safe use

Property	Values	Remarks/Method
Melting Point/Freezing Point (°C)	Data not relevant for safe use	None known
Boiling Point/Boiling Range (°C)	Data not relevant for safe use	None known
Flammability	Data not relevant for safe use	None known
Lower and Upper Exposure Limit	Data not relevant for safe use	None known
Flash Point	Data not relevant for safe use	None known
Auto-ignition Temperature	Data not relevant for safe use	None known
Flammability Limit in Air	Data not relevant for safe use	None known
Decomposition Temperature	Data not relevant for safe use	None known
pH	Data not relevant for safe use	None known
Kinematic Viscosity	Data not relevant for safe use	None known

Solubility	Data not relevant for safe use	None known
Partition coefficient: n-octanol/water	Data not relevant for safe use	None known
Vapour pressure	Data not relevant for safe use	None known
Density / Relative Density	Data not relevant for safe use	None known
Relative Vapour Density	Data not relevant for safe use	None known
Particle Characteristics	Data not relevant for safe use	None known

9.2. Other Information

Physical State Softening Point	Data not relevant for safe use
Colour Molecular Weight	Data not relevant for safe use
Odour VOC Content (%)	Data not relevant for safe use
Liquid Density	Data not relevant for safe use
Bulk Density	Data not relevant for safe use
Particle Size	Data not relevant for safe use
Particle Size Distribution	Data not relevant for safe use

Section 10 – Stability and Reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions	None under normal processing
Hazardous Polymerization	Hazardous polymerization does not occur

10.4. Conditions to avoid

Excess heat.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11 – Toxicological Information

11.1. Information on Toxicological Effects

Information on Toxicological Effects

Inhalation Specific test data for the substance or mixture is not available

Eye Contact Specific test data for the substance or mixture is not available

Skin Contact Specific test data for the substance or mixture is not available

Ingestion Specific test data for the substance or mixture is not available

Information on toxicological effects

Symptoms No information available

Numerical measures of toxicity

Acute Toxicity No information available

Unknown Acute Toxicity No information available

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Skin Corrosion/Irritation No information available

Serious Eye Damage/Eye Irritation No information available

Respiratory or Skin Sensitization No information available

Germ Cell Mutagenicity No information available

Carcinogenicity No information available

Reproductive Toxicity No information available

STOT - Single Exposure No information available

STOT - Repeated Exposure No information available

Aspiration Hazard No information available

Section 12 – Ecological Information

12.1. Toxicity

Ecotoxicity No ecological information available

12.2 Persistence and Degradability

Persistence and Degradability No information available

12.3 Bioaccumulative Potential

Bioaccumulation No information available

12.4 Mobility in Soil

Mobility in Soil No information available

12.5 Results of PBT and vPvB Assessment

PBT and vPvB Assessment No information available

12.6 Other Adverse Effects

Other Adverse Effects No information available

Section 13 – Disposal Considerations

13.1 Waste Treatment Methods

Waste from Residues/Unused Products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated Packaging No information available

Section 14 – Transportation Information

IMDG

14.1 UN Number Not regulated

14.2 Proper Shipping Name Not regulated

14.3 Hazard Class Not regulated

14.4 Packing group Not regulated

14.5 Marine Pollutant Not applicable

14.6 Special Provisions None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable

RID

14.1 UN-No. Not regulated

14.2 Proper Shipping Name Not regulated

14.3 Hazard Class Not regulated

14.4 Packing Group Not regulated

14.5 Environmental hazard Not applicable

14.6 Special Provisions None

ADR

14.1 UN-No. Not regulated

14.2 Proper Shipping Name Not regulated

14.3 Hazard Class Not regulated

14.4 Packing Group Not regulated

14.5 Environmental Hazard Not applicable

14.6 Special Provisions None

IATA

14.1 UN Number Not regulated

14.2 Proper Shipping Name Not regulated

14.3 Hazard Class Not regulated
Subsidiary Class Not regulated

14.4 Packing group Not regulated

14.5 Environmental Hazard Not applicable

14.6 Special Provisions None

Section 15 – Regulatory Information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants

Not applicable.

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable.

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AICS	Contact supplier for inventory compliance status

Legend

TSCA	United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	Japan Existing and New Chemical Substances
IECSC	China Inventory of Existing Chemical Substances
KECL	Korean Existing and Evaluated Chemical Substances
PICCS	Philippines Inventory of Chemicals and Chemical Substances
AICS	Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available.

Section 16 – Other Information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	-	Skin designation

Key literature references and sources for data

www.ChemADVISOR.com/

This safety data sheet complies with the requirements of: Regulation (EC) No.1907/2006.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet