BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566

Phone: 888-466-3604 Fax: 925-215-2184 Email: boster@bosterbio.com Web: www.bosterbio.com

Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Identification of the Substance

Catalog Number M00178-32

Product Name Anti-PDCD1 / PD-1 / CD279 Reference Antibody (penpulimab)

1.2 Application of the substance or mixture

For research use only.

1.3 Company Identification

Boster Biological Technology Co., Ltd.

3942 B Valley Ave, Pleasanton, CA, 94566, USA.

Phone: (888) 466-3604 Fax: (925) 215-2184

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components need to be disclosed according to the applicable regulations.

4. FIRST AID MEASURES

Skin contact	Wash off immediately with soap and plenty of water.
Eye contact	Rinse immediately with plenty of water. Consult a physician.

Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Notes to physician	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Special hazards arising from the substance or mixture	Nature of decomposition products not known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	For personal protection see section 8.
Environmental precautions	Do not let product enter drains.
Methods and materials for containment and cleaning up	Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. HANDLING AND STORAGE

Handling	No special handling advice required.
Storage	Store according to product specifications.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values

8.2 Exposure controls

Appropriate engineering controls

Follow general industrial hygiene and safety practice.

Personal protective equipment

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment
Hand protection	Impervious gloves
Eye protection	Safety glasses with side-shields
Skin and body protection	Lightweight protective clothing

Environmental exposure controls

Prevent product from entering drains

9. PHYSICAL AND CHEMICAL PROPERTIES

Important Health Safety and Environment Information

a) Appearance Form:	Lyophilized powder or aqueous solution
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available

j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: noctanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

10. STABILITY AND REACTIVITY

Reactivity	no data available
Chemical Stability	Stable under recommended storage and handling conditions.
Possibility of hazardous reactions	no data available
Conditions to avoid	no data available
Incompatible materials	Strong oxidizing agents, strong acids/alkalis
Hazardous decomposition products	no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity no data available

Principle Routes of Exposure/Potential Health effects

Eye irritant effect	no data available
Skin irritant effect	no data available
Sensitization	no data available
Mutagenicity	no data available
Germ cell mutagenicity	no data available
Reproductive toxicity	no data available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, OSHA.
Additional toxicological information	no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity	no data available
Mobility	no data available
Biodegradation	no data available
Bioaccumulation	no data available

13. DISPOSAL CONSIDERATIONS

Disposal methods	Dispose of waste in accordance to applicable national, regional, or local regulations.
Contaminated packaging	Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Boster Corporation cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.