

Date Issued 22-Jan-2025

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE **COMPANY/UNDERSTANDING**

1.1 Product identifier Product Name: Common Name: **Chemical Name:**

ACTIMMUNE® Interferon gamma-1b Interferon gamma-1b AMG 292

1.2 Relevant identified uses of the substance or mixture and uses advised against **Recommended Use:** Pharmaceutical Uses advised against: No information available

Manufacturer: Amgen Inc.

1-805-447-7233 1-805-447-1000

One Amgen Center Drive

Synonyms:

Emergency Telephone Number: Chemtrec NORTH AMERICA 1-800-424-9300. Thousand Oaks, California 91320-1799 INTERNATIONAL 1-703-527-3887

2. HAZARDS IDENTIFICATION

Emergency Overview

Pharmaceutical product intended for clinical and commercial manufacturing purposes only. Product contains interferon gamma-1b, active ingredient for reducing the frequency and severity of serious infections associated with Chronic Granulomatous Disease (CGD) and delaying time to disease progression in patients with severe, malignant osteopetrosis (SMO). Avoid inhalation, skin contact, eye contact and accidental ingestion. Does not meet GHS classification criteria and therefore is not classified.

2.1 - Classification of the drug substance or mixture (drug product in final form, not applicable) REGULATION (EC) No 1272/2008, WHMIS 2015 (Health Canada), and Hazard Communication Standard No. 1910.1200 (US OSHA)

Not classified

2.2 Label elements

Not classified

GHSPO642

P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P281 - Use personal protective equipment as required P308 + P313 - If exposed or concerned: Get medical advice/ attention



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2.3 Other Hazards No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Ingredients:	See below	
Chemical Name:	Interferon gamma-1b	
CAS-No:	98059-61-1	

ACTIMMUNE is supplied as a sterile, clear, colorless, preservative-free solution filled in a glass vial. Each 0.5-mL vial of ACTIMMUNE solution delivers 100 µg (2 million IU/0.5 mL) of interferon gamma-1b, formulated in mannitol, sodium succinate, succinic acid, polysorbate 20, and Sterile Water for Injection, United States Pharmacopeia (USP).

4. FIRST AID MEASURES

4.1 Description of first-aid measures

Eye Contact:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician if necessary.
Inhalation:	Move to fresh air. If symptoms persist, call a physician.
Ingestion:	If symptoms persist, call a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
Notes to Physician:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Flammable Properties:	No information available.
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products: No information available.

5.3 Advice for firefighters

Protective Equipment and	As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH
Precautions for Firefighters:	(approved) and full protective gear.



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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Spill Procedures:

If material is released or spilled, cordon off spill area. Take proper precautions to minimize exposure by using appropriate personal protective equipment in cleaning up a spill. If in powder form, wet down spilled material to minimize airborne dispersion. Soak up material with absorbent e.g., paper towels, and wash spill area thoroughly with appropriate cleaning materials. Dispose of collected material in accordance with applicable waste disposal regulations. Avoid release to the environment.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Handling and Storage:

Avoid contact with skin, eyes, or clothing. Use adequate ventilation to minimize exposure. Wash hands, face and other potentially exposed areas immediately after handling this material.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limit:	No exposure guidelines established by ACGIH, NIOSH or OSHA. Amgen recommends an occupational exposure limit (OEL) of 1 μ g/m ³ as an 8-hour time weighted average over a 40-hour work week. The OEL is designed as an acceptable airborne concentration of a substance for which it is believed that workers may be repeatedly exposed day after day without adverse health effects. Interferon gamma-1b has been classified per Amgen's Hazard Classification System as an Occupational Exposure Band 5 compound (0.1 μ g/m ³ - 5 μ g/m ³).
Engineering Controls:	When practicable, handle material in enclosed processes or in processes with effective local exhaust ventilation or within a chemical hood.

8.2 Exposure controls

Personal Protective Equipment

Eye/face Protection:	Wear safety glasses with side shields, chemical splash goggles, or safety glasses with side shields and a full-face shield to prevent contact with eyes. The choice of protection should be based on the job activity and potential for exposure to the eyes and face.
Skin Protection:	Use gloves or other appropriate personal protective equipment if skin contact with formulation is possible. Wear lab coat or other protective over garment if splashing is possible. The choice of protection should be based on the job activity and potential for skin contact.
Respiratory Protection:	When possible, handle material in enclosed processes or containers. If it is properly handled with effective local exhaust ventilation or containment, respiratory protection may not be needed. For procedures involving larger quantities or dust/aerosol generating procedures such as weighing or a large transfer of liquids, an air-purifying respirator with NIOSH approval for dusts and mists may be needed. The choice of protection should be based on the job activity and the potential for exposure.
Other:	Wash hands, face and other potentially exposed areas after handling material (especially before eating, drinking or smoking). Clean protective equipment thoroughly after each use.

8.3 Environmental exposure controls

Environmental Exposure Controls Avoid release to the environment.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, co
Physical State:	Liquid
Molecular Weight:	16,465 D
Odor:	No inforr
Odor Threshold:	No inforr
pH:	No inforr
Melting Point:	No inforr
Boiling point	No inforr
Flash Point:	No inforr
Evaporation Rate:	No inforr
Lower explosive limit:	No inforr
Upper explosive limit:	No inforr
Vapor Pressure:	No inforr
Vapor Density (air = 1):	No inforr
Relative density:	No inforr
Water Solubility:	No inforr
Partition Coefficient (log Kow):	No inforr
Viscosity:	No inforr
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10. STABILITY AND REACTIVITY

10.1 Reactivity	No information available
10.2 Chemical stability	No information available
10.3 Possibility of hazardous reactions	No information available
10.4 Conditions to avoid	No Information available
10.5 Incompatible materials	No information available
10.6 Hazardous decomposition products	No information available
10.7 Other information	None

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity:	No information available
Skin corrosion/irritation:	Does not meet GHS Classification Criteria and therefore is not classified.
Serious eye damage/eye irritation:	Does not meet GHS Classification Criteria and therefore is not classified.
Respiratory or skin sensitization:	Does not meet GHS Classification Criteria and therefore is not classified.
Germ cell mutagenicity:	Based on available data, the GHS classification criteria are not met.
Carcinogenicity:	Does not meet GHS Classification Criteria and therefore is not classified.
Reproductive toxicity:	Does not meet GHS Classification Criteria and therefore is not classified.
STOT - single exposure:	Does not meet GHS Classification Criteria and therefore is not classified.
STOT - repeated exposure:	Does not meet GHS Classification Criteria and therefore is not classified.
Aspiration Hazard:	No information available



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12. ECOLOGICAL INFORMATION

12.1 Toxicity		
Ecotoxicity effects:	No information available	
2.2 Persistence and degradability		
Persistence/Degradability:	No information available	
12.3 Bioaccumulative poten	tial	
Bioaccumulation/ Accumulation:	No information available	
12.4 Mobility in soil		
Mobility in Environmental Media:	No information available	
12.5 Results of PBT and vPvB assessment		
Results of PBT and vPvB assessm	ent: No information available	
12.6 Other adverse effects		
Other Adverse Effects:	No information available	

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste Disposal Method:

Dispose of waste according to prescribed federal, state, local and competent authority guidelines.

14. TRANSPORT INFORMATION

DOT:

Not regulated by U.S. DOT, IATA, IMDG or ADR.



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15. REGULATORY INFORMATION

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

International Inventories

TSCA:	
EINECS/ELINCS	
DSL/NDSL	
PICCS:	
ENCS:	
CHINA:	
AICS:	
KECL:	

Legend

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 AICS - Australian Inventory of Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

15.2 Chemical safety assessment

No CSA has been conducted.



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16. OTHER INFORMATION

Revision Number: 2

To the best of our knowledge, the information provided here is accurate as of the date of the Safety Data Sheet (SDS). The information is specific to the material that is the subject of this SDS and may not be valid when this material is used in combination with any other materials or in any process. Each user should review the information provided here in the context of the user's intended manner of handling, using, processing, storing, transporting, and disposing of the material.

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