



Safety Data Sheet

Human Interferon Alpha 4b (Alpha 4) 11180

SDS Revision Date: 12/14/2015

Version No. 00

1. Identification

1.1. Product identifier

Product Identity Human Interferon Alpha 4b (Alpha 4)
Alternate Names Product No. 11180

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

Intended Use / Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name PBL Assay Science
131 W Ethel Road Suite 6
Piscataway, NJ 08854 USA

Customer Service: PBL Assay Science Phone: 1 (732) 777 9123
Fax: 1 (732) 777 9141

2. Hazard(s) identification

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

3. Composition/information on ingredients

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.



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Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	If large quantity of any component is in contact with the skin, wash with ample amounts of soap and water for at least 15 minutes. Cover the skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
Ingestion	If the person is conscious wash mouth with water. If large quantity of any component is swallowed call a physician immediately. Loosen any tight clothing.

4.2. Most important symptoms and effects, both acute and delayed

Overview	<u>Inhalation:</u> Lung irritants. <u>Skin Contact:</u> May be skin irritants and non-sensitizers. Skin inflammation is characterized by itching, reddening, and occasional blistering. <u>Eye Contact:</u> Eye irritants. <u>Ingestion:</u> Can cause nausea and vomiting.
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5. Fire-fighting measures

5.1. Extinguishing media

Small Fire: Use DRY chemical powder. Large fire: Use water spray, fog or foam. Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Toxic Fumes, Nitrogen gas and Sodium oxide

5.3. Advice for fire-fighters

Use an approved/certified respirator or equivalent. Use protective clothing to avoid contact with skin and eyes.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.



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6.3. Methods and material for containment and cleaning up

While wearing safety gloves absorb material with paper towels and place in waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow the water to evacuate through the sanitary system. If necessary, repeat again with additional paper towels and place in waste disposal container.

7. Handling and storage

7.1. Precautions for safe handling

Handling: Avoid contact with skin and eyes, and avoid ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Storage: Refer to the storage temperatures indicated in the protocol. It is recommended to use original containers for storage.

Intended Use: Refer to the protocol supplied for proper use. If questions arise please contact info@pblassaysci.com

Packaging materials: Use original containers.

Incompatible materials: May be incompatible with strong oxidizing agents.

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

8.2. Exposure controls

Respiratory

Use a respirator approved for pure Sodium Azide in powder form (no Sodium Azide in product).

Eyes

Protective safety glasses recommended

Skin

A lab coat should be worn. Safety gloves are recommended to prevent skin contact.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

9. Physical and chemical properties

Appearance

Colorless Liquid

Odor

Odorless

Odor threshold

Not determined



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pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	Not Measured
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	Not Measured
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

9.2. Other information

May be frozen or in liquid state depending on storage conditions. The color may change with change in pH. Neat serum may have a brownish tinge.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid extreme temperatures.

10.5. Incompatible materials

May be incompatible with strong oxidizing agents.

10.6. Hazardous decomposition products

Toxic Fumes, Nitrogen gas and Sodium oxide

11. Toxicological information

Acute toxicity

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.



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Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Available
Acute toxicity (dermal)	---	Not Available
Acute toxicity (inhalation)	---	Not Available
Skin corrosion/irritation	---	Not Available
Serious eye damage/irritation	---	Not Available
Respiratory sensitization	---	Not Available
Skin sensitization	---	Not Available
Germ cell mutagenicity	---	Not Available
Carcinogenicity	---	Not Available
Reproductive toxicity	---	Not Available
STOT-single exposure	---	Not Available
STOT-repeated exposure	---	Not Available
Aspiration hazard	---	Not Available

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

There are no ingredients in this product which are classified as hazardous, and/or no hazardous ingredients above the GHS cut off percentage.

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.



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14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user	No further information		

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification Not Regulated

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): No
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%) :

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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Pennsylvania RTK Substances (>1%) :

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

Not applicable

Disclaimer: For R & D use only. Not for drug, household or other uses. Warranty: The above information is correct to the best of our knowledge. This information is not guaranteed to be all inclusive. The user should handle all materials with care using the SDS as a guideline only. PBL Biomedical Laboratories shall not be held responsible for any damage resulting from handling or from contact with the above product.

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