

## Interferon Alfa-2b Liquid Formulation

|         |                |             |                                 |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 30.09.2023  |
| 5.0     | 03.12.2024     | 45281-00018 | Date of first issue: 07.01.2015 |

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Interferon Alfa-2b Liquid Formulation

#### Manufacturer or supplier's details

Company : MSD

Address : Briahnager - Off Pune Nagar Road  
Wagholi - Pune - India 412 207

Telephone : +1-908-740-4000

Emergency telephone number : +1-908-423-6000

E-mail address : EHSDATASTEWARD@msd.com

#### Recommended use of the chemical and restrictions on use

Recommended use : Pharmaceutical

Restrictions on use : Not applicable

### 2. HAZARDS IDENTIFICATION

#### Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

##### Classification

Not classified as hazardous according to criteria laid down in Part I of Schedule-1.

##### GHS Classification

Reproductive toxicity : Category 1B

Specific target organ toxicity - repeated exposure : Category 2 (Blood, Bone marrow)

##### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H360FD May damage fertility. May damage the unborn child.  
H373 May cause damage to organs (Blood, Bone marrow) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**  
P203 Obtain, read and follow all safety instructions before use.

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P260 Do not breathe mist or vapours.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P318 IF exposed or concerned, get medical advice.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name      | CAS-No.    | Concentration (% w/w)  |
|--------------------|------------|------------------------|
| m-Cresol           | 108-39-4   | $\geq 0.1$ - $< 0.25$  |
| Interferon alfa-2b | 98530-12-2 | $\geq 0.001$ - $< 0.1$ |

### 4. FIRST AID MEASURES

|                                                             |                                                                                                                                                                                                                         |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice                                              | : In the case of accident or if you feel unwell, seek medical advice immediately.<br>When symptoms persist or in all cases of doubt seek medical advice.                                                                |
| If inhaled                                                  | : If inhaled, remove to fresh air.<br>Get medical attention.                                                                                                                                                            |
| In case of skin contact                                     | : In case of contact, immediately flush skin with soap and plenty of water.<br>Remove contaminated clothing and shoes.<br>Get medical attention.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse. |
| In case of eye contact                                      | : Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists.                                                                                                                  |
| If swallowed                                                | : If swallowed, DO NOT induce vomiting.<br>Get medical attention.<br>Rinse mouth thoroughly with water.                                                                                                                 |
| Most important symptoms and effects, both acute and delayed | : May damage fertility. May damage the unborn child.<br>May cause damage to organs through prolonged or repeated exposure.                                                                                              |
| Protection of first-aiders                                  | : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).                                           |
| Notes to physician                                          | : Treat symptomatically and supportively.                                                                                                                                                                               |

### 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : None known.
- Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### 7. HANDLING AND STORAGE

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- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.
- Advice on safe handling : Do not get on skin or clothing.  
Do not breathe mist or vapours.  
Do not swallow.  
Avoid contact with eyes.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Keep container tightly closed.  
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labelled containers.  
Store locked up.  
Keep tightly closed.  
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

| Components                                                                                                                     | CAS-No.    | Value type<br>(Form of exposure)   | Control parameters / Permissible concentration | Basis    |
|--------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------|------------------------------------------------|----------|
| m-Cresol                                                                                                                       | 108-39-4   | TWA                                | 5 ppm<br>22 mg/m <sup>3</sup>                  | IN OEL   |
| Further information: Potential contribution to the overall exposure by the cutaneous route including mucous membranes and eye. |            |                                    |                                                |          |
|                                                                                                                                |            | TWA (Inhalable fraction and vapor) | 20 mg/m <sup>3</sup>                           | ACGIH    |
| Interferon alfa-2b                                                                                                             | 98530-12-2 | TWA                                | 0.2 µg/m <sup>3</sup> (OEB 5)                  | Internal |
|                                                                                                                                |            | Wipe limit                         | 2 µg/100 cm <sup>2</sup>                       | Internal |

- Engineering measures** : The information below is intended for larger pilot/commercial-scale operations and manufacturing. For smaller scale, clinical, or pharmacy settings, site-specific internal risk assessment practices should be conducted to determine appropriate exposure control measures. The health hazard risks of handling this material are dependent on multiple factors, including but not limited to physical form and quantity handled. If applicable, use process enclosures, local exhaust ventilation (e.g., Biosafety Cabinet, Ventilated Balance Enclosures), or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels as low as reasonably achievable.  
Use closed processing systems or containment technologies

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to control at source (e.g., glove boxes/isolators) and to prevent leakage of compounds into the workplace.  
All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.  
No open handling permitted.  
Totally enclosed processes and materials transport systems are required.  
Operations require the use of appropriate containment technology designed to prevent leakage of compounds into the workplace.

### Personal protective equipment

|                          |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respiratory protection   | : | No personal respiratory protective equipment normally required.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Hand protection          | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Material                 | : | Chemical-resistant gloves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Remarks                  | : | Consider double gloving.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Eye protection           | : | Wear safety glasses with side shields or goggles.<br>If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.<br>Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.                                                                                                                                                                                           |
| Skin and body protection | : | Work uniform or laboratory coat.<br>Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.<br>Use appropriate degowning techniques to remove potentially contaminated clothing.                                                                                                                                                                                                              |
| Hygiene measures         | : | If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.<br>When using do not eat, drink or smoke.<br>Wash contaminated clothing before re-use.<br>The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                 |   |                   |
|-----------------|---|-------------------|
| Appearance      | : | liquid            |
| Colour          | : | colourless        |
| Odour           | : | No data available |
| Odour Threshold | : | No data available |
| pH              | : | 6.5 - 8           |

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|                                                  |   |                                                          |
|--------------------------------------------------|---|----------------------------------------------------------|
| Melting point/freezing point                     | : | No data available                                        |
| Initial boiling point and boiling range          | : | No data available                                        |
| Flash point                                      | : | No data available                                        |
| Evaporation rate                                 | : | No data available                                        |
| Flammability (solid, gas)                        | : | Not applicable                                           |
| Flammability (liquids)                           | : | No data available                                        |
| Upper explosion limit / Upper flammability limit | : | No data available                                        |
| Lower explosion limit / Lower flammability limit | : | No data available                                        |
| Vapour pressure                                  | : | No data available                                        |
| Relative vapour density                          | : | No data available                                        |
| Relative density                                 | : | No data available                                        |
| Density                                          | : | No data available                                        |
| Solubility(ies)                                  |   |                                                          |
| Water solubility                                 | : | No data available                                        |
| Partition coefficient: n-octanol/water           | : | Not applicable                                           |
| Auto-ignition temperature                        | : | No data available                                        |
| Decomposition temperature                        | : | No data available                                        |
| Viscosity                                        |   |                                                          |
| Viscosity, kinematic                             | : | No data available                                        |
| Explosive properties                             | : | Not explosive                                            |
| Oxidizing properties                             | : | The substance or mixture is not classified as oxidizing. |
| Molecular weight                                 | : | Not applicable                                           |
| Particle characteristics                         |   |                                                          |
| Particle size                                    | : | Not applicable                                           |

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### 10. STABILITY AND REACTIVITY

|                    |   |                                        |
|--------------------|---|----------------------------------------|
| Reactivity         | : | Not classified as a reactivity hazard. |
| Chemical stability | : | Stable under normal conditions.        |

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Possibility of hazardous reactions : Can react with strong oxidizing agents.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

### 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

#### Components:

##### **m-Cresol:**

Acute oral toxicity : LD50 (Rat): 121 mg/kg  
Remarks: Based on data from similar materials

Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit): 301 mg/kg  
Remarks: Based on data from similar materials

#### **Skin corrosion/irritation**

Not classified based on available information.

#### Components:

##### **m-Cresol:**

Species : Rabbit

Result : Corrosive after 3 minutes to 1 hour of exposure

##### **Interferon alfa-2b:**

Species : Rat

Result : Skin irritation

#### **Serious eye damage/eye irritation**

Not classified based on available information.

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### Components:

#### **m-Cresol:**

|         |                                   |
|---------|-----------------------------------|
| Species | : Rabbit                          |
| Result  | : Irreversible effects on the eye |

#### **Interferon alfa-2b:**

|         |                     |
|---------|---------------------|
| Species | : Rabbit            |
| Remarks | : slight irritation |

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

#### **Germ cell mutagenicity**

Not classified based on available information.

### Components:

#### **m-Cresol:**

|                       |                                                                                                                                                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Genotoxicity in vitro | : Test Type: Chromosome aberration test in vitro<br>Method: OECD Test Guideline 473<br>Result: positive<br><br>Test Type: Bacterial reverse mutation assay (AMES)<br>Method: OECD Test Guideline 471<br>Result: negative |
| Genotoxicity in vivo  | : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)<br>Species: Mouse<br>Application Route: Ingestion<br>Method: OECD Test Guideline 475<br>Result: negative                |

#### **Interferon alfa-2b:**

|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Genotoxicity in vitro | : Test Type: Chromosome aberration test in vitro<br>Result: negative<br><br>Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative |
| Genotoxicity in vivo  | : Test Type: Micronucleus test<br>Species: Mouse<br>Result: negative<br>Remarks: Based on data from similar materials                              |

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### Carcinogenicity

Not classified based on available information.

#### Components:

##### **m-Cresol:**

|                   |                                        |
|-------------------|----------------------------------------|
| Species           | : Mouse, males                         |
| Application Route | : Ingestion                            |
| Exposure time     | : 105 weeks                            |
| Result            | : equivocal                            |
| Remarks           | : Based on data from similar materials |

|                   |                                        |
|-------------------|----------------------------------------|
| Species           | : Mouse, female                        |
| Application Route | : Ingestion                            |
| Exposure time     | : 106 - 107 weeks                      |
| Result            | : positive                             |
| Remarks           | : Based on data from similar materials |

|                              |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Carcinogenicity - Assessment | : Weight of evidence does not support classification as a carcinogen |
|------------------------------|----------------------------------------------------------------------|

### Reproductive toxicity

May damage fertility. May damage the unborn child.

#### Components:

##### **m-Cresol:**

|                               |                                                                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Effects on fertility          | : Test Type: Two-generation reproduction toxicity study<br>Species: Rat<br>Application Route: Ingestion<br>Result: negative           |
| Effects on foetal development | : Test Type: Prenatal development toxicity study (teratogenicity)<br>Species: Rat<br>Application Route: Ingestion<br>Result: negative |

##### **Interferon alfa-2b:**

|                                    |                                                                                                                                                                |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effects on fertility               | : Test Type: Fertility/early embryonic development<br>Species: Monkey<br>Fertility: LOAEL: 3.8 µg/kg<br>Result: menstrual irregularities<br>Remarks: Abortion  |
| Effects on foetal development      | : Test Type: Fertility/early embryonic development<br>Species: Monkey<br>Developmental Toxicity: LOAEL: 3.8 µg/kg body weight<br>Result: Embryo-lethal effects |
| Reproductive toxicity - Assessment | : May damage fertility. May damage the unborn child.                                                                                                           |

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### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

May cause damage to organs (Blood, Bone marrow) through prolonged or repeated exposure.

### Components:

#### Interferon alfa-2b:

|               |                                                                      |
|---------------|----------------------------------------------------------------------|
| Target Organs | : Blood, Bone marrow                                                 |
| Assessment    | : May cause damage to organs through prolonged or repeated exposure. |

### Repeated dose toxicity

### Components:

#### m-Cresol:

|                   |                           |
|-------------------|---------------------------|
| Species           | : Rat                     |
| NOAEL             | : 150 mg/kg               |
| Application Route | : Ingestion               |
| Exposure time     | : 13 Weeks                |
| Method            | : OECD Test Guideline 408 |

#### Interferon alfa-2b:

|                   |                                                |
|-------------------|------------------------------------------------|
| Species           | : Monkey                                       |
| NOAEL             | : 0.095 mg/kg                                  |
| Application Route | : Intramuscular                                |
| Exposure time     | : 1 Months                                     |
| Remarks           | : No significant adverse effects were reported |

|                   |                                                |
|-------------------|------------------------------------------------|
| Species           | : Rat                                          |
| NOAEL             | : 0.38 mg/kg                                   |
| Application Route | : Subcutaneous                                 |
| Exposure time     | : 3 Months                                     |
| Remarks           | : No significant adverse effects were reported |

|                   |                                                |
|-------------------|------------------------------------------------|
| Species           | : Mouse                                        |
| NOAEL             | : 0.076 mg/kg                                  |
| Application Route | : Intraperitoneal                              |
| Exposure time     | : 9 d                                          |
| Remarks           | : No significant adverse effects were reported |

|                   |                                            |
|-------------------|--------------------------------------------|
| Species           | : Monkey                                   |
| LOAEL             | : 0.38 mg/kg                               |
| Application Route | : Intramuscular                            |
| Exposure time     | : 3 Months                                 |
| Target Organs     | : Blood, Bone marrow                       |
| Remarks           | : Significant toxicity observed in testing |

### Aspiration toxicity

Not classified based on available information.

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### Experience with human exposure

#### Components:

##### Interferon alfa-2b:

|              |                                                                                          |
|--------------|------------------------------------------------------------------------------------------|
| Skin contact | : Symptoms: The most common side effects are:, flu-like symptoms, Fever, chills, Fatigue |
|--------------|------------------------------------------------------------------------------------------|

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### m-Cresol:

|                                                                        |                                                                                                                                            |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish                                                       | : LC50 (Oncorhynchus mykiss (rainbow trout)): 8.6 mg/l<br>Exposure time: 96 h                                                              |
| Toxicity to daphnia and other aquatic invertebrates                    | : EC50 (Daphnia pulex (Water flea)): > 99.5 mg/l<br>Exposure time: 48 h                                                                    |
| Toxicity to fish (Chronic toxicity)                                    | : NOEC: 1.35 mg/l<br>Exposure time: 32 d<br>Species: Pimephales promelas (fathead minnow)<br>Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : NOEC: 1 mg/l<br>Exposure time: 21 d<br>Species: Daphnia magna (Water flea)<br>Remarks: Based on data from similar materials              |

### Persistence and degradability

#### Components:

##### m-Cresol:

|                  |                                                                                                                     |
|------------------|---------------------------------------------------------------------------------------------------------------------|
| Biodegradability | : Result: Readily biodegradable.<br>Biodegradation: 90 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301D |
|------------------|---------------------------------------------------------------------------------------------------------------------|

### Bioaccumulative potential

#### Components:

##### m-Cresol:

|                                        |                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------|
| Bioaccumulation                        | : Species: Leuciscus idus (Golden orfe)<br>Bioconcentration factor (BCF): 17 - 20 |
| Partition coefficient: n-octanol/water | : log Pow: 1.96                                                                   |

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### Mobility in soil

No data available

### Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

|                        |   |                                                                                                                                                             |
|------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste from residues    | : | Do not dispose of waste into sewer.<br>Dispose of in accordance with local regulations.                                                                     |
| Contaminated packaging | : | Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>If not otherwise specified: Dispose of as unused product. |

## 14. TRANSPORT INFORMATION

### International Regulations

#### UNRTDG

Not regulated as a dangerous good

#### 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.

### Special precautions for user

Not applicable

## 15. REGULATORY INFORMATION

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

#### The components of this product are reported in the following inventories:

|       |   |                |
|-------|---|----------------|
| AICS  | : | not determined |
| DSL   | : | not determined |
| IECSC | : | not determined |

## 16. OTHER INFORMATION

Revision Date : 03.12.2024

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : dd.mm.yyyy

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
IN OEL : India. Permissible levels of certain chemical substances in work environment.

ACGIH / TWA : 8-hour, time-weighted average  
IN OEL / TWA : Time-Weighted Average Concentration (TWA) (8 hrs.)

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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 Harmonized System; GLP - Good Laboratory Practice; 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; 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); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

# SAFETY DATA SHEET

according to the Globally Harmonized System



## Interferon Alfa-2b Liquid Formulation

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5.0

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