Section 1. Product and Company Identification

Product Name: Leflunomide  
Product ID: L1817  
Chemical Name (Synonyms): HWA-486; Arava

Supplier: LKT Laboratories, Inc  
545 Phalen Blvd.  
St. Paul, MN 55130 USA  
Ph: 651-644-8424 Fax: 651-644-8357  
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification:  
Acute toxicity, Oral (Category 3) H301  
Skin irritation (Category 2) H315  
Eye irritation (Category 2A) H319  
Specific target organ toxicity - single exposure (Category 3) Respiratory system H335

GHS Label elements including precautionary statements

Pictogram:  
Signal word: Danger

Hazard statements:  
H301 - Toxic if swallowed.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.

Precautionary statements:  
P261 - Avoid breathing dust, fumes, gas, mist, vapors, spray.  
P264 - Wash skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves, eye protection, face protection.  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTER/doctor if you feel unwell.  
P313 + P313 - If eye irritation persists: Get medical advice/attention.  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P337 + P313 - If skin irritation persists: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification:  
Health hazard: 2  
Chronic health hazard: *  
Flammability: 0  
Physical hazard: 0

NFPA Rating:  
Health hazard: 2  
Fire hazard: 0  
Reactivity hazard: 0

Potential Health Effects:  
Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.  
Skin - May be harmful if absorbed through skin. Causes skin irritation.  
Eyes - Causes serious eye irritation.
Ingestion - Acute toxicity. Toxic if swallowed.

### Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C\textsubscript{12}H\textsubscript{9}F\textsubscript{3}N\textsubscript{2}O\textsubscript{2}</td>
<td>Formula Wt. 270.21</td>
</tr>
<tr>
<td>CAS No.</td>
<td>75706-12-6</td>
<td>EC No.</td>
</tr>
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</table>

### Section 4. First Aid Measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eye Contact**
Flush eyes with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. 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.

### Section 5. Firefighting Measures

**Flash Point**
Not available.

**Extinguishing Media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Firefighting Procedures**
Wear self-contained breathing apparatus for firefighting if necessary.

**Unusual Fire Hazards**
Not available.

### Section 6. Accidental Release Measures

**Personal Precautions**
Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental Precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleanup**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### Section 7. Handling and Storage

**Handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage Conditions**
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: -20°C

**Hazardous Decomposition Products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), hydrogen fluoride.

**Other Remarks**
Protect from light.
**Section 8. Exposure Controls/Personal Protection**

**Personal protective equipment**

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values.
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

PERSONAL PROTECTION
Eye/face protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full and splash contact - Material: Nitrile rubber. Minimum layer thickness: 0.11 mm, Break through time: 480 min, Material tested: Dermatril® (KCL 740 / Aldrich 2677272, Size M).

Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplier air respiratory. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid.</td>
<td>White or off-white crystalline powder.</td>
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</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Not available.</th>
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</thead>
<tbody>
<tr>
<td>Melting Point</td>
<td>166.5°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in DMSO or methanol.</td>
</tr>
<tr>
<td>Volatility</td>
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</tr>
<tr>
<td>Density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>log Pow: 2.4</td>
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<tr>
<td>Relative vapor density</td>
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<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Odor Threshold</td>
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<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Section 10. Stability and Reactivity**

Stable under recommended storage conditions.

**Materials To Avoid**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), hydrogen fluoride.
### Section 11. Toxicological Information

**Oral LD50** Rat - 235 mg/kg.  
**Inhalation LC50** Not available.  
**Dermal LD50** Not available.  
**Other information on acute toxicity** Not available.  
**Skin corrosion/irritation** Not available.  
**Serious eye damage/irritation** Not available.  
**Respiratory or skin sensitization** Not available.  
**Germ cell mutagenicity** Not available.  
**Reproductive Toxicity** Not available.  
**Aspiration Hazard** Not available.  
**Specific organ toxicity**  
- **single exposure (GHS)** Inhalation - May cause respiratory irritation.  
- **repeated exposure (GHS)** Not available.  
**Synergistic effects** Not available.  
**Teratogenicity** Not available.  
**Additional Information** RTECS: NY2354200  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.  

**Possible Health Effects**  
- Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.  
- Skin - May be harmful if absorbed through skin. Causes skin irritation.  
- Eyes - Causes serious eye irritation.  
- Ingestion - Acute toxicity. Toxic if swallowed.  

**Carcinogenicity**  
- **IARC**: 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**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH  
- **NTP**: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
- **OSHA**: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  

### Section 12. Ecological Information

**Toxicity** Not available.  
**Mobility in soil** Not available.  
**PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/not
Waste Disposal

Dispose of material according to all federal, state and local regulations. Offer material to a licensed, professional waste disposal company to dispose of as unused product. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 13. Disposal Considerations

Persistence and degradability
Not available.

Bioaccumulative potential
Not available.

Section 14. Transport Information

DOT (US)
UN number: 2811  Class: 6.1  Packing Group: III
Proper shipping name: Toxic solid, organic, n.o.s. (Leflunomide)
Poison inhalation hazard: No

IATA
UN number: 2811  Class: 6.1  Packing Group: III
Proper shipping name: Toxic solid, organic, n.o.s. (Leflunomide)

IMDG
UN number: 2811  Class: 6.1  Packing Group: III  EMS #: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Leflunomide)

Further Information

Section 15. Regulatory Information

Reach No.

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 Components
Acute health hazard.

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

Pennsylvania Right To Know Components
Leflunomide  CAS #: 757061-12-6  Revision Date:

New Jersey Right To Know Components
Leflunomide  CAS #: 757061-12-6  Revision Date:

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

Section 16. Other Information

Other information
The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.