1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier
Product Description: Broadloom Herbicide

Other means of identification
Product code 12U-BRLM
Registration number(s) 70506-306

Recommended use of the chemical and restrictions on use
Recommended use Herbicide.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet
Supplier Address
United Phosphorus Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number
Company Phone Number 1-800-438-6071
Emergency telephone number
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center (866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral Category 5
Skin sensitization Not classified

Label elements

WARNING

Hazard Statements
HARMFUL IF SWALLOWED
May cause an allergic skin reaction

Appearance Yellow Physical state Liquid Odor characteristic
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not get in eyes, on skin, or on clothing
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response
IF exposed
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)
OTHER INFORMATION
• Harmful to aquatic life with long lasting effects

3. Composition/information on Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentazone-Sodium</td>
<td>50723-80-3</td>
<td>44</td>
</tr>
</tbody>
</table>

If CAS number is “proprietary”, the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

Eye contact
Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact
Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Inhalation
Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

Ingestion
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Protection of First-aiders
Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects
no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician
Treat symptomatically.

5. Fire-fighting measures
Suitable extinguishing media
Carbon dioxide (CO2).
Use: Dry chemical. Water spray. alcohol-resistant foam.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical
No information available.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO2). Hydrocarbons, Oxides of nitrogen, Sulfur oxides.

Explosion data

Protective equipment and precautions for firefighters
Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapours or spray mist. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a cool, well-ventilated place.
incompatible materials Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields. If splashes are likely to occur, wear:. Goggles.
Skin protection
Respiratory protection
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

General hygiene considerations
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>VALUES</th>
<th>Remarks/ • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>6.95</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Range</td>
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<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;100 C</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
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<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
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<td></td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
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<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
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<td></td>
</tr>
<tr>
<td>vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.1906 g/cm³</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
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</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
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<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
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<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
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</tr>
<tr>
<td>Dynamic viscosity</td>
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<td></td>
</tr>
<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Oxidizing properties</td>
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<td></td>
</tr>
</tbody>
</table>

OTHER INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
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</tr>
<tr>
<td>molecular weight</td>
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<td></td>
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<tr>
<td>VOC Content</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Liquid Density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Reactivity
no data available

Chemical stability
Stable under normal conditions. Hazardous polymerisation does not occur.

Possibility of hazardous reactions
None under normal processing.

Hazardous polymerization
Hazardous polymerisation does not occur.

Conditions to avoid
Not known. Heat, flames and sparks. Take precautionary measures against static charges.
incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information
Broadloom:
Acute oral (rat) LD50 = 4545 mg/kg
Acute dermal (rabbit/rat) LD50 = >2,000 mg/kg
Acute inhalation (rat) LC50 = >5.257 mg/L
Primary eye irritation (rabbit) = Mildly irritating
Primary dermal irritation (rabbit) = Not irritatin
Dermal sensitization = Not a sensitizer

Inhalation
May cause irritation of respiratory tract.

Eye contact
Mild eye irritant.

Skin contact
Substance may cause slight skin irritation.

Ingestion
MAY BE HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
No information available.

Mutagenic effects
no data available.

Carcinogenicity
The information below indicates whether any agency has listed any ingredient as a carcinogen.

Reproductive effects
Not Available.

STOT - Single Exposure
no data available.

STOT - Repeated Exposure
no data available.

Chronic toxicity
Avoid repeated exposure.

Aspiration hazard
No information available.

Numerical Measures of Toxicity - Product information

<table>
<thead>
<tr>
<th>LD50 Oral</th>
<th>4545 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Dermal</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 Inhalation</td>
<td>&gt; 5.257 mg/L</td>
</tr>
</tbody>
</table>

12. Ecological Information

ecotoxicity

Broadloom: (Information on Sodium bentazon):
Rainbow trout LC50 96 hr = >100 mg/L
Bluegill sunfish LC50 96 hr = >100 mg/L
Daphnia magna EC50 48 hr = >500 mg/L
Bobwhite quail LD50 = >5000 mg/kg
Mallard duck LD50 = >5000 mg/kg
### Persistence/Degradability
no data available.

### Bioaccumulation/ Accumulation
Bioaccumulative potential.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentazone-Sodium</td>
<td>0.28</td>
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<tr>
<td>50723-80-3</td>
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</tbody>
</table>

### Other Adverse Effects
no data available

### 13. Disposal Considerations

#### Waste Treatment Methods

**Waste Disposal Method**
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated packaging**
Refer to product label.

### 14. Transport Information

**DOT**
NOT REGULATED

**ICAO**
NOT REGULATED

**IATA**
NOT REGULATED

**IMDG**
NOT REGULATED

### 15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**signal word**
CAUTION

**Ventilation Control**
PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Keep out of Reach of Children. Harmful if absorbed through the skin. Harmful if swallowed. Causes moderate eye irritation.
International Inventories

USINV  Not present
DSL/NDSL  Not present
EINECS/ELINCS  Not Present
ENCS  Not Present
China  Not Present
KECL  Not Present
PICCS  Not Present
AICS  Not Present
TSCA  Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Acute health hazard  yes
Chronic health hazard  No
Fire hazard  No
Sudden release of pressure hazard  No
Reactive Hazard  No

CERCLA
Not applicable

CERCLA
SARA Product RQ  0

RCRA

Pesticide Information

State Regulations

State Right-to-Know
Not applicable

International regulations

U.S. EPA Label information
EPA Pesticide registration number  70506-306

16. Other Information

NFPA  HEALTH  1  flammability  0  Instability  0  Physical hazard  -

Preparation Date  23-Apr-2015
Revision date  27-Nov-2018
Revision Summary  3 year cycle update***
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End of SDS