1. Product and Company Identification

Product Name : Pretilachlor Technical
Chemical Name : 2-chloro-2',6'-diethyl-N-(2-propoxyethyl)acetanilide
Type : Herbicide
Molecular formula : C_{17}H_{26}ClNO_{2}

2. Composition / Information on ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Percent or content (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretilachlor a.i.</td>
<td>51218-49-6</td>
<td>94.00 % Max.</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>-</td>
<td>6.00 % Min.</td>
</tr>
</tbody>
</table>

3. Health Hazards Identification

Eyes : Irritating to eyes
Skin : Irritating to skin
       May cause sensitization by skin contact
Ingestion : Harmful if swallowed

4. First Aid Measures

Eye : Rinse eyes with plenty of clean water for several minutes and immediately call a physician.
Skin : Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water including hair and under fingernails.
Ingestion : Repeatedly administer medicinal charcoal in a large quantity of water.
     NOTE: Never give anything by mouth to an unconscious person. Do not induce vomiting.
Inhalation : Remove the affected person from the danger zone to a well ventilated room or to fresh air, and protect from under cooling. Get medical attention.
Medical instructions : No specific antidote is known. Apply symptomatic therapy
5. Fire Fighting Measures

Fire and Explosion hazards
Combustion products are toxic and/or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.

Extinguishing media
Dry chemical extinguisher, foam, carbon dioxide or water spray (do not use direct jet of water)

Firefighting Equipment
Use respirator to protect from fumes.

6. Accidental Release Measures

Environmental Protection Measures following Accidents
Soak up with absorptive material such as sand, soil, diatomaceous earth, etc. Prevent material from spreading, e.g. by damming in with absorptive material. Collect material in specially marked, tightly closing containers. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, the dealer or the local representative. Do not contaminate waters and sewers.

7. Handling and Storage

Handling information
General: Avoid contact with skin, eyes and clothing. Avoid inhalation of fog and vapours. Do not eat, drink or smoke while working. In addition to the measures usually taken in chemical works like splash proof filling and measuring equipment (including vapour stripping), further personal protection measures may have to be implemented to avoid possible contact with the product.

Storage
Store the product in closed original containers. Protect from light and humidity. Store separately from feed, food and stimulants.
8. Exposure Controls/Personal Protection

Eye/ Face protection  Goggles or face-shield
Skin Protection  Heavy duty cotton or synthetic fabric working clothes (e.g. overalls). Rubber apron. Heavy duty shoes or boots. Chemical resistant gloves.
Ingestion  Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material.
Respiratory protection  Gas mask with universal filter.

9. Physical and Chemical Properties

Appearance  : Yellow to light brown liquid
Physical state  : Liquid
Boiling point  : 170°C
Vapour Pressure  : 0.133 mPa (20°C)
Solubility  : In water 50mg/L (20°C)

Very soluble in benzene, hexane, methanol and dichloromethane.

10. Stability and Reactivity

Chemical stability  Stable under standard conditions.
Incompatibility  Strong oxidizing agents and strong bases
Hazardous decomposition  Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide and nitrogen.

11. Toxicological Information

Acute Oral Toxicity  LD$_{50}$ (rats) 6049 mg/kg
Acute Dermal Toxicity  LD$_{50}$ (Rabbit) >2000 mg/kg b.w
Acute Inhalation \( \text{LC}_{50} \) (rats): >3.30 mg/l
Eye Irritation Rabbit: Non irritant
Skin Irritant Rabbit: Non irritant

12. Ecological Information

Birds Acute oral \( \text{LC}_{50} \) (5 d) Japanese quail: >10,000 mg/kg
Non-toxic to birds

Fish \( \text{LC}_{50} \) (96 h) for Common carp 2.8 mg/l
Rainbow trout 1.6 mg/l

Algae \( \text{EC}_{50} \) for \textit{Selenastrum capricornutum} 0.0028 mg/l

Bees \( \text{LD}_{50} \) (contact) >200 \( \mu \)g/bee

Worms \( \text{LD}_{50} \) (14 d) 686 mg/kg dry weight

13. Disposal Considerations

Waste Disposal Pay attention to protective clothing and measures. Cover up product with absorptive material such as sand, soil, diatomaceous earth, etc. Collect material in specially marked, tightly closing containers. Clean dirty areas with water and detergent. Put washing water in containers too, to avoid any contamination of surface and ground water, water supplies and drains. Hose down the area for a prolonged period. Heavily contaminated soil layers have to be dug out down to clean soil. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, the dealer or the local representative and dispose of in an incinerator approved for chemicals.

Container disposal method Dispose off empty containers in an incinerator approved for chemicals.

Damaged Containers Place original containers in specially marked larger ones. Check possibilities of recycling large empty containers, drums and barrels.
14. Transport Information

**Rail/Road (RID/ADR)**
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Class : 9
UN No. : 3082
Packing Group : III

**Sea (IMDG – Code)**
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Class : 9
IMDG No. : 3082
Packing Group : III

**Air (ICAO/IATA)**
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Class : 9
UN No. : 3082
Packing Group : III

**Packing Instructions:**
Packing instructions on sea: P001
Packing instructions on air: Y914/914

15. Regulatory Information

**EU- Classification**
Xn Harmful

**Hazard Symbol**
N Dangerous for the environment

**Special Risks (R-Phrases)**
R36/38 Irritating to eyes and skin
R51 Toxic to aquatic organisms

**Safety Advice (S- Phrases)**
S7/8 Keep out of the reach of children.
S20/21 When using do not eat, drink or smoke
S24/25  Avoid contact with skin

International WHO U  Product unlikely to present acute hazard in normal use.

16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.

Revised date: 04.02.2014