SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier
Trade name ACCLAIM® EXTRA HERBICIDE
Product code (UVP) 05954002
SDS Number 102000005372
EPA Registration No. 432-950

Relevant identified uses of the substance or mixture and uses advised against
Use Herbicide
Restrictions on use See product label for restrictions.

Information on manufacturer
Bayer CropScience
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Emergency telephone no.
Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577
Product Information Telephone Number
SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Aspiration hazard : Category 1
Eye irritation : Category 2B

Signal word Danger

Hazard statements
May be fatal if swallowed and enters airways.
Causes eye irritation.

Precautionary statements
Wash face, hands and any exposed skin thoroughly after handling.
IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
Do NOT induce vomiting.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Other hazards
No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component Name</th>
<th>CAS-No.</th>
<th>Concentration % by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenoxaprop-P-ethyl</td>
<td>71283-80-2</td>
<td>6.59</td>
</tr>
<tr>
<td>Solvent Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>40.46</td>
</tr>
<tr>
<td>Isotridecanol, ethoxylated</td>
<td>9043-30-5</td>
<td>15.00</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>5.66</td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>6.00</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice
When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Inhalation
Move 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.

Skin contact
Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

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

Ingestion
Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms
Inhalation of high vapour concentrations can cause CNS-depression and narcosis.

Symptoms of Overexposure, Headache, Loss of appetite, Nausea
Indication of any immediate medical attention and special treatment needed

Risks: Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard.

Treatment: Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable: Dry chemical, Carbon dioxide (CO2), Foam, Water spray

Unsuitable: None known.

Advice for firefighters

Special protective equipment for fire-fighters: Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. In the event of fire and/or explosion do not breathe fumes.

Further information: Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point: 100 °C

Autoignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Explosivity: not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions: Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice: Use personal protective equipment. Do not allow product to contact non-target plants. Do not allow to enter soil, waterways or waste water canal.

Reference to other sections: Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.
SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling
Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Hygiene measures
Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers
Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenoxaprop-P-ethyl</td>
<td>71283-80-2</td>
<td>2.6 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Solvent Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>2560ug/m3 (ST ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Solvent Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>460ppb (ST ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Solvent Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>256ug/m3 (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Solvent Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>46ppb (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Solvent Naphtha (petroleum), heavy aromatic</td>
<td>64742-94-5</td>
<td>1,600 mg/m3/400 ppm (TWA PEL)</td>
<td>08 2010</td>
<td>US CA OEL</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>15 ppm (STEL)</td>
<td>02 2012</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>10 ppm (TWA)</td>
<td>02 2012</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>10 ppm (TWA)</td>
<td>02 2013</td>
<td>ACGIH NIC</td>
</tr>
</tbody>
</table>
## Naphthalene

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
<th>Date</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIOSH</td>
<td>50 mg/m³/10 ppm (REL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>NIOSH</td>
<td>75 mg/m³/15 ppm (STEL)</td>
<td>2010</td>
<td>NIOSH</td>
</tr>
<tr>
<td>OSHA Z1</td>
<td>50 mg/m³/10 ppm (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>75 mg/m³/15 ppm (STEL)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>50 mg/m³/10 ppm (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>TN OEL</td>
<td>75 mg/m³/15 ppm (STEL)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>TX ESL</td>
<td>38 ppb (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>TX ESL</td>
<td>10 ppm (AN ESL)</td>
<td>07 2011</td>
<td>TX ESL</td>
</tr>
<tr>
<td>TX ESL</td>
<td>200 ppb/st (ST ESL)</td>
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<td>TX ESL</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>75 mg/m³/15 ppm (STEL)</td>
<td>08 2010</td>
<td>US CA OEL</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>50 mg/m³/10 ppm (TWA PEL)</td>
<td>08 2010</td>
<td>US CA OEL</td>
</tr>
<tr>
<td>OES BCS*</td>
<td>10 ppm (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
</tbody>
</table>

## Glycerine

### Total dust.

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
<th>Date</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Z1</td>
<td>15 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>5 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>5 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>TN OEL</td>
<td>10 mg/m³ (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
</tbody>
</table>

### Respirable fraction.

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
<th>Date</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Z1</td>
<td>5 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>5 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>TN OEL</td>
<td>10 mg/m³ (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
</tbody>
</table>

### Particulate.

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
<th>Date</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX ESL</td>
<td>100 ug/m³ (AN ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
</tbody>
</table>

### Vapor.

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
<th>Date</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX ESL</td>
<td>5000 ug/m³</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
</tbody>
</table>
Exposure controls

Personal protective equipment
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)

Eye protection Tightly fitting safety goggles

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white to beige

Physical State liquid

Odor characteristic

Odour Threshold no data available

pH 7.5 - 8.1 at 10 %

Vapor Pressure no data available

Vapor Density (Air = 1) no data available

Density ca. 1.03 g/cm³ at 20 °C

Evaporation rate no data available

Boiling Point no data available

Melting / Freezing Point no data available

Water solubility dispersible

Minimum Ignition Energy not applicable

Decomposition temperature not applicable

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"
Partition coefficient: n-octanol/water: no data available
Viscosity: no data available
Flash point: 100 °C
Autoignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Explosivity: not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity
Thermal decomposition: not applicable
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Conditions to avoid: Extremes of temperature and direct sunlight.
Incompatible materials: no data available
Hazardous decomposition products: No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Eye contact, Ingestion, Inhalation, Skin contact
Immediate Effects
Eye: Moderate eye irritation.
Ingestion: Harmful if swallowed.

Information on toxicological effects
Acute oral toxicity: LD50 (male/female combined rat) > 5,000 mg/kg
Acute inhalation toxicity: LC50 (male/female combined rat) > 10.7 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
(actual)
LC50 (male/female combined rat) > 20 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)

**Acute dermal toxicity**
LD50 (male/female combined rat) > 4,000 mg/kg

**Skin irritation**
Slight irritation (rabbit)

**Eye irritation**
Moderate eye irritation. (rabbit)

**Sensitisation**
Non-sensitizing. (guinea pig)

**Assessment repeated dose toxicity**
Fenoxaprop-P-ethyl did not cause specific target organ toxicity in rats. Fenoxaprop-P-ethyl caused specific target organ toxicity in experimental animal studies in mice in the following organ(s): kidneys.

**Assessment Mutagenicity**
Fenoxaprop-P-ethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment Carcinogenicity**
Fenoxaprop-P-ethyl demonstrated no carcinogenic potential in a lifetime feeding study in rats. Fenoxaprop-P-ethyl caused an increased incidence of liver tumours in mice at high doses. Fenoxaprop-P-ethyl causes tumours through peroxisome proliferation. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

**ACGIH**
Naphthalene 91-20-3 Group A4

**NTP**
Naphthalene 91-20-3

**IARC**
Naphthalene 91-20-3 Overall evaluation: 2B

**OSHA**
None.

**Assessment toxicity to reproduction**
Fenoxaprop-P-ethyl did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**
Fenoxaprop-P-ethyl did not cause developmental toxicity in rats and rabbits.

**Further information**
Acute toxicity studies have been bridged from a similar formulation(s). The non-acute information pertains to the active ingredient(s).

**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity to fish**
LC50 (Oncorhynchus mykiss (rainbow trout)) 0.39 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient fenoxaprop-P-ethyl.

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) > 1.058 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient fenoxaprop-P-ethyl.
No acute toxicity was observed at its limit of water solubility.

Toxicity to aquatic plants
EC50 (Pseudokirchneriella subcapitata) 0.54 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient fenoxaprop-P-ethyl.

Biodegradability
Fenoxaprop-P-ethyl: not rapidly biodegradable

Koc
Fenoxaprop-P-ethyl: Koc: 11354

Bioaccumulation
Fenoxaprop-P-ethyl: Bioconcentration factor (BCF) 338; Does not bioaccumulate.

Mobility in soil
Fenoxaprop-P-ethyl: Immobile in soil

Environmental precautions
Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Do not apply when weather conditions favor runoff or drift.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Do not contaminate water, food, or feed by disposal.
Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law.
If these wastes cannot be disposed of by use 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
Do not re-use empty containers.
Triple rinse containers.
Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning.
If burned, stay out of smoke.
Follow advice on product label and/or leaflet.

RCRA Information
Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.
SECTION 14: TRANSPORT INFORMATION

49CFR
UN number 3082
Class 9
Packaging group III
Marine pollutant Marine pollutant
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (FENOXAPROP-P-ETHYL, NAPHTHALENE)

RQ Reportable Quantity is reached with 1,666 lb of product.

IMDG
UN number 3082
Class 9
Packaging group III
Marine pollutant YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENOXAPROP-P-ETHYL SOLUTION)

IATA
UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FENOXAPROP-P-ETHYL SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-950
US Federal Regulations
TSCA list
Solvent Naphtha (petroleum), heavy aromatic 64742-94-5
Isotridecanol, ethoxylated 9043-30-5
Naphthalene 91-20-3
Glycerine 56-81-5

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) None.
SARA Title III - Section 302 - Notification and Information None.
SARA Title III - Section 313 - Toxic Chemical Release Reporting
US States Regulatory Reporting
CA Prop65
This product contains a chemical known to the State of California to cause cancer.
Naphthalene 91-20-3

US State Right-To-Know Ingredients
Naphthalene 91-20-3 CA, CT, IL, MN, NJ, RI
Glycerine 56-81-5 MN

Canadian Regulations
Canadian Domestic Substance List
Solvent Naphtha (petroleum), heavy aromatic 64742-94-5
Glycerine 56-81-5

Environmental
CERCLA
Naphthalene 91-20-3 100 lbs

Clean Water Section 307 Priority Pollutants
Naphthalene 91-20-3

Safe Drinking Water Act Maximum Contaminant Levels
Naphthalene 91-20-3

International Regulations
European Inventory of Existing Commercial Substances (EINECS)
Solvent Naphtha (petroleum), heavy aromatic 64742-94-5
Glycerine 56-81-5

EPA/FIFRA 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 required on the pesticide label:

Signal word: Caution!

Hazard statements:
Moderate eye irritation.
Harmful if swallowed.
Avoid contact with skin, eyes and clothing.

SECTION 16: OTHER INFORMATION
NFPA 704 (National Fire Protection Association):
Health - 1  Flammability - 1  Instability - 0  Others - none

Health - 2  Flammability - 1  Physical Hazard - 0  PPE -
0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 11/12/2014

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.