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

Product identifier
Trade name
DELTAGARD 20EW

Product code (UVP)
81015694

SDS Number
102000025884

PCP Registration No.
32656

Relevant identified uses of the substance or mixture and uses advised against
Use
Insecticide

Restrictions on use
See product label for restrictions.

Information on supplier
Supplier
Bayer CropScience Inc
#200, 160 Quarry Park Blvd, SE
Calgary, Alberta T2C 3G3
Canada

Responsible Department
Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.
Emergency Telephone Number (24hr/ 7 days)
1-800-334-7577

Product Information Telephone Number
1-888-283-6847

SECTION 2: HAZARDS IDENTIFICATION

Classified in accordance with Part 2 of the Hazardous Products Regulations
Skin sensitisation: Category 1B

Labelling in accordance with regulation HCS 29CFR §1910.1200

Signal word: Warning

Hazard statements
May cause an allergic skin reaction.

Precautionary statements
Avoid breathing mist and spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
SAFETY DATA SHEET

DELTAGARD 20EW

Version 1.0 / CDN
102000025884

SAFETY DATA SHEET

DELTAGARD 20EW

Version 1.0 / CDN
102000025884

IF ON SKIN: Wash with plenty of water/ soap.
If skin irritation or rash occurs: Get medical advice/ attention.
Specific treatment (see supplemental first aid instructions on this label).
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)
No physical hazards not otherwise classified.
No health hazards not otherwise classified.

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>Deltamethrin</td>
<td>52918-63-5</td>
<td>2.0</td>
</tr>
<tr>
<td>Fatty alcohol polyglycol ether 16-20 EO</td>
<td>9004-98-2</td>
<td>1.35</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
To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed
Treatment
Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
SAFETY DATA SHEET

DELTAGARD 20EW

SAFETY DATA SHEET

Version 1.0 / CDN
102000025884
Print Date: 04/05/2017

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

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

Unsuitable
None known.

Special hazards arising from the substance or mixture
Dangerous gases are evolved in the event of a fire.

Advice for firefighters
Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information
Fight fire from upwind position. Keep out of smoke. 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
No data available

Auto-ignition 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
Keep unauthorized people away. Isolate hazard area. 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. If the product is accidentally spilled, 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.
Information regarding waste disposal, see section 13.
SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use only in area provided with appropriate exhaust ventilation. Ensure adequate 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.

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>Deltamethrin</td>
<td>52918-63-5</td>
<td>0.02 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
</tbody>
</table>

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

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 nitrile rubber gloves

Eye protection
Safety glasses with side-shields

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
Physical State   emulsion
Odor             characteristic
Odour Threshold  No data available
pH               4.0 - 7.0 at 100 %
Vapor Pressure   No data available
Vapor Density (Air = 1) No data available
Density          1.02 g/cm³
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
Partition coefficient: n-octanol/water No data available
Viscosity        135 - 500 cps
Flash point      No data available
Auto-ignition 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 normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
SAFETY DATA SHEET

DELTAGARD 20EW

Version 1.0 / CDN
102000025884

Conditions to avoid
No data available

Incompatible materials
No data available

Hazardous decomposition products
No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes
Inhalation, Ingestion, Eye contact

Immediate Effects
Eye
Causes eye irritation.

Ingestion
Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity
LD50 (Rat) 3,129 mg/kg

Acute inhalation toxicity
LC50 (Rat) > 5.07 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.

Acute dermal toxicity
LD50 (Rabbit) > 5,000 mg/kg

Skin irritation
No skin irritation (Rabbit)

Eye irritation
Mild eye irritation. (Rabbit)

Sensitisation
Sensitisising (Mouse)
OECD Test Guideline 429, local lymph node assay (LLNA)

Assessment STOT Specific target organ toxicity – repeated exposure
Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment mutagenicity
Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity
Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH
None.

NTP
None.

IARC
Deltamethrin 52918-63-5 Overall evaluation: 3

OSHA
None.

Assessment toxicity to reproduction
Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity
Deltamethrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Deltamethrin are related to maternal toxicity.

Further information
Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish
LC50 (Oncorhynchus mykiss (rainbow trout)) 0.00091 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient deltamethrin.

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) 0.00056 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient deltamethrin.

Toxicity to aquatic plants
EC50 (Algae) > 9.1 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient deltamethrin.

Biodegradability
Deltamethrin: Not rapidly biodegradable

Koc
Deltamethrin: Koc: 10240000

Bioaccumulation
Deltamethrin: Bioconcentration factor (BCF) 1,400
Does not bioaccumulate.

Mobility in soil
Deltamethrin: Immobile in soil

Environmental precautions
Do not allow to get into surface water, drains and ground water.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging

Do not re-use empty containers.
Puncture container to avoid re-use.
Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.
If burned, stay out of smoke.
Follow advice on product label and/or leaflet.

SECTION 14: TRANSPORT INFORMATION

TDG
UN number 3082
Labels 9
Packaging group III
Marine pollutant Marine pollutant
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN)

49CFR
Not dangerous goods / not hazardous material

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

IATA
UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN 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.

Further Information Exempt from regulation when transported by road or rail, in accordance with TDG Regulations 1.45.1.
This exemption provides that this product does not require dangerous goods shipping documentation or safety marks when transported on land by road or rail.
SECTION 15: REGULATORY INFORMATION

PCP Registration No. 32656
US Federal Regulations
TSCA list
None.
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
None.
US States Regulatory Reporting
CA Prop65
This product does not contain any substances known to the State of California to cause cancer.
This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients
None.

Canadian Regulations
Canadian Domestic Substance List
Fatty alcohol polyglycol ether 16-20 EO 9004-98-2

Environmental
CERCLA
None.
Clean Water Section 307 Priority Pollutants
None.
Safe Drinking Water Act Maximum Contaminant Levels
None.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms
49CFR Code of Federal Regulations, Title 49
ACGIH US. ACGIH Threshold Limit Values
ATE Acute toxicity estimate
CAS-Nr. Chemical Abstracts Service number
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
EINECS European inventory of existing commercial substances
ELINCS European list of notified chemical substances
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods
N.O.S. Not otherwise specified
SAFETY DATA SHEET

DELTAGARD 20EW

Version 1.0 / CDN
102000025884

10/10
Revision Date: 04/05/2017
Print Date: 04/05/2017

NTP US. National Toxicology Program (NTP) Report on Carcinogens
OECD Organization for Economic Co-operation and Development
TDG Transportation of Dangerous Goods
TWA Time weighted average
UN United Nations
WHO World health organisation

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

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

Reason for Revision: New Safety Data Sheet.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

Revision Date: 04/05/2017

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.