1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

   Product identifier
   Trade name: KONTOS®
   EPA Registration No.: 432-1471-59807

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

   Company information: OHP, Inc.
   PO Box 51230
   Mainland, PA 19451
   (800) 659-6745

   TRANSPORTATION EMERGENCY
   (24 hours a day) call: Chemtrec: 1-800-424-9300

   MEDICAL EMERGENCY (24 hours a day) and Product Information call: 1-800-356-4647

   SDS information or request: ohp.com

2. HAZARD IDENTIFICATION

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

   Signal word: Warning

   Hazard statements
   May cause an allergic skin reaction.
   Causes eye irritation.
   Harmful if inhaled.

   Precautionary statements
   Avoid breathing mist and spray.
   Contaminated work clothing should not be allowed out of the workplace.
   Wear protective gloves.
   Wash thoroughly after handling.
   IF ON SKIN: Wash with plenty of soap and water.
   If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.

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.

Dispose of contents/container in accordance with local regulation.

Other hazards: No other hazards known

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>Name</th>
<th>CAS No.</th>
<th>Average % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirotetramat</td>
<td>203313-25-1</td>
<td>22.40%</td>
<td></td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>10.00</td>
<td></td>
</tr>
</tbody>
</table>

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.

FIRST AID MEASURES continued next page
FIRST AID MEASURES continued

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.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable ....................: Water spray, Carbon dioxide (CO2), Foam, Sand

Unsuitable ...................: None known.

Special hazards arising from the substance or mixture ....................: In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx)

Advice for firefighters

Special protective equipment for fire-fighters .....................: Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

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

Autoignon temperature : no data available

Lower explosion limit ......: no data available

Upper explosion limit ......: no data available

Explosivity ......................: not applicable

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. 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.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling ......: Handle and open container in a manner as to prevent spillage. 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.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<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>Spirotetramat</td>
<td>203313-25-1</td>
<td>2.8 mg/m³ (TWA)</td>
<td>OES BCS*</td>
<td></td>
</tr>
<tr>
<td>Glycerine (Total dust.)</td>
<td>56-81-5</td>
<td>15 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Glycerine (Respirable fraction.)</td>
<td>56-81-5</td>
<td>5 mg/m³ (PEL)</td>
<td>02 2006</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>Glycerine (Respirable fraction.)</td>
<td>56-81-5</td>
<td>5 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Glycerine (Total dust.)</td>
<td>56-81-5</td>
<td>10 mg/m³ (TWA)</td>
<td>1989</td>
<td>OSHA Z1A</td>
</tr>
<tr>
<td>Glycerine (Total dust and mist.)</td>
<td>56-81-5</td>
<td>10 mg/m³ (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>Glycerine (Respirable fraction and dust or fume.)</td>
<td>56-81-5</td>
<td>5 mg/m³ (TWA)</td>
<td>06 2008</td>
<td>TN OEL</td>
</tr>
<tr>
<td>Glycerine (Particulate.)</td>
<td>56-81-5</td>
<td>50ug/m³ (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Glycerine (Particulate.)</td>
<td>56-81-5</td>
<td>5ug/m³ (AN ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Glycerine (Vapor.)</td>
<td>56-81-5</td>
<td>100ug/m³ (AN ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
<tr>
<td>Glycerine (Vapor.)</td>
<td>56-81-5</td>
<td>1000ug/m³ (ST ESL)</td>
<td>02 2013</td>
<td>TX ESL</td>
</tr>
</tbody>
</table>

No control parameters known.

*OES BCS: Internal Bayer CropScience “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 . . . . . : Remove contaminated clothing immediately and dispose of safely.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance . . . . . . . . . : white to light beige

Physical State . . . . . . . : Liquid

Odor . . . . . . . . . . . : weak chalk-like

Odour Threshold . . . . : no data available

pH . . . . . . . . . . . : 4.5

Vapor Pressure . . . . : no data available

Vapor Density (Air = 1) . . . : no data available

Density . . . . . . . . . : 1.07 g/cm³ at 20 °C

Evaporation rate . . . . : no data available

Boiling Point . . . . : no data available

Melting / Freezing Point . . : no data available

Minimum Ignition Energy . . : not applicable

Decomposition temperature . . . . : not applicable

Partition coefficient:

n-octanol/water . . . . : 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

10. STABILITY AND 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

KONTOS®

EPA Registration Number: 432-1471-59807

**STABILITY AND REACTIVITY continued**

<table>
<thead>
<tr>
<th>Conditions to avoid</th>
<th>freezing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompatible materials</td>
<td>no data available</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>no data available</td>
</tr>
</tbody>
</table>

**11. TOXICOLOGICAL INFORMATION**

**Exposure routes**
- Skin contact, Skin Absorption, Ingestion

**Immediate Effects**
- **Eye**
  - May cause mild irritation to eyes.
- **Skin**
  - Harmful if absorbed through skin.
- **Ingestion**
  - Harmful if swallowed.

**Information on toxicological effects**

<table>
<thead>
<tr>
<th>Acute oral toxicity</th>
<th>LD50 (female rat) &gt; 2,000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute inhalation toxicity</td>
<td>LC50 (male/female combined rat)</td>
</tr>
<tr>
<td></td>
<td>&gt; 3 mg/l</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 4 h</td>
</tr>
<tr>
<td></td>
<td>Determined in the form of liquid aerosol.</td>
</tr>
<tr>
<td></td>
<td>highest concentration tested</td>
</tr>
<tr>
<td></td>
<td>No deaths</td>
</tr>
<tr>
<td></td>
<td>LC50 (male/female combined rat)</td>
</tr>
<tr>
<td></td>
<td>&gt; 12 mg/l</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 1 h</td>
</tr>
<tr>
<td></td>
<td>Determined in the form of liquid aerosol.</td>
</tr>
<tr>
<td></td>
<td>Extrapolated from the 4 hr LC50.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute dermal toxicity</th>
<th>LD50 (male/female combined rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; 4,000 mg/kg</td>
</tr>
<tr>
<td>Skin irritation</td>
<td>No skin irritation (rabbit)</td>
</tr>
<tr>
<td>Eye irritation</td>
<td>Mild eye irritation. (rabbit)</td>
</tr>
<tr>
<td>Sensitisation</td>
<td>Sensitising (guinea pig)</td>
</tr>
</tbody>
</table>

**Assessment repeated dose toxicity**
- Spirotetramat did not cause specific target organ toxicity in experimental animal studies.

**Assessment Mutagenicity**
- Spirotetramat was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

**Assessment Carcinogenicity**
- Spirotetramat was not carcinogenic in lifetime feeding studies in rats and mice.

**ACGIH**
- None.

**NTP**
- None.

**IARC**
- None.

**OSHA**
- None.

**Assessment toxicity to reproduction**
- Spirotetramat caused male reproductive toxicity in the presence of general toxicity in the rat at very high experimental dose levels. There were no effects on male fertility in mice and dogs. The reproductive toxicity seen with Spirotetramat is due to an overwhelmed elimination capacity at high doses. The high dose levels needed for this effect cannot be achieved even in a worst case exposure scenario.

**Assessment developmental toxicity**
- Spirotetramat caused developmental toxicity only at dose levels toxic to the dams. Spirotetramat caused a delayed foetal growth, an increased incidence of variations.

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

**12. ECOLOGICAL INFORMATION**

**Toxicity to fish**
- LC50 (Lepomis macrochirus (Blue-gill sunfish))
  - 2.20 mg/l
  - Exposure time: 96 h

**Toxicity to aquatic invertebrates**
- EC50 (Water flea (Daphnia magna))
  - > 42.7 mg/l
  - Exposure time: 48 h
SAFETY DATA SHEET

KONTOS®

EPA Registration Number: 432-1471-59807

Toxicity to aquatic plants
IC50 (Pseudokirchneriella subcapitata)
8.15 mg/l
Growth rate; Exposure time: 72 h

Biodegradability
Spirotetramat: not rapidly biodegradable

Koc
Spirotetramat: Koc: 289

Bioaccumulation
Spirotetramat: Does not bioaccumulate

Mobility in soil
Spirotetramat: Moderately mobile in soils

Additional ecological information
The ecological data given are those of the active ingredient.

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 allow to get into surface water, drains and ground water.
Do not allow to get into surface water, drains and ground water.
Do not apply when weather conditions favor runoff or drift.
Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.
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.
Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

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: Follow advice on product label and/or leaflet.
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.

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.

14. TRANSPORT INFORMATION
According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

15. REGULATORY INFORMATION
EPA Registration No.: 432-1471-59807

US Federal Regulations
TSCA list
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 . . . . . . . . . . None.

US States Regulatory Reporting
CA Prop65
This product does not contain any substances known to the State of California to cause cancer.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Product: Dispose in accordance with all local, state/provincial and federal regulations.
Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law.
This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**
- Glycerine 56-81-5 MN

**Canadian Regulations**
- Canadian Domestic Substance List
  - Glycerine 56-81-5

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

**International Regulations**
- European Inventory of Existing Commercial Substances (EINECS)
  - 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:** Harmful if swallowed or absorbed through skin.
- Avoid contact with skin and clothing.
- Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
- Wash thoroughly with soap and water after handling.

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

**Revision Date:** 02/18/2014

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.

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