



Safety Data Sheet

Issue Date: 01-Aug-2016

Revision Date: 11-Nov-2016

Version 2

1. IDENTIFICATION

Product Identifier

Product Name **Cormoran**

Other means of identification

SDS # ADAMA-177

Product Code INS00085-S

Registration Number(s) EPA Reg No 66222-264

UN/ID No UN3082

Recommended use of the chemical and restrictions on use

Recommended Use EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604
1-919-256-9300

Emergency Telephone Number

Emergency Telephone (24 hr) For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact PROSAR:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Clear yellow to pink liquid

Physical state Liquid

Odor No data available

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|-------------------------|-------------|----------|
| Novaluron | 116714-46-6 | 7-11 |
| Acetamidiprid Technical | 135410-20-7 | 6-9 |
| Surfactant 1 | Proprietary | 0.5-1.5 |
| Surfactant 2 | Proprietary | 0.5-1.5 |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

| | |
|-----------------------|---|
| General Advice | Provide this SDS to medical personnel for treatment. |
| Eye Contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician. |
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. |
| Inhalation | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. |

Most important symptoms and effects

| | |
|-----------------|-------------|
| Symptoms | None known. |
|-----------------|-------------|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

No special fire hazards are known to be associated with this product.

Protective equipment and precautions for firefighters

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 | Use personal protective equipment as required. |
|-----------------------------|--|

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Prevent from entering drains, sewers, streams or other bodies of water. If runoff occurs, notify authorities as required.

Methods for Clean-Up Take up mechanically. Place in appropriate containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

This product, as supplied, is not known to contain any materials with established occupational exposure limits.

Appropriate engineering controls

Engineering Controls Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tight sealing safety goggles.

Skin and Body Protection Suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|-----------------------------|-----------------------|-------------------|
| Physical state | Liquid | Odor | No data available |
| Appearance | Clear yellow to pink liquid | Odor Threshold | No data available |
| Color | Clear yellow to pink | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|------------------------------|-------------------------------------|-------------------------|
| pH | 3.3 | (1% solution) |
| Melting Point/Freezing Point | - | |
| Boiling Point/Boiling Range | No data available | |
| Flash Point | 95 °C / 203 °F | |
| Evaporation Rate | - | |
| Flammability (Solid, Gas) | Not applicable for liquids | |
| Flammability Limits in Air | | |
| Upper Flammability Limits | No data available | |
| Lower Flammability Limit | Not data available | |
| Vapor Pressure | - | |
| Vapor Density | No data available | |
| Relative Density | 1.08-1.18 | |
| Water Solubility | - | |
| Solubility in other solvents | - | |
| Partition Coefficient | See Section 12 for more information | |
| Auto-ignition Temperature | No data available | |
| Decomposition Temperature | No data available | |
| Kinematic Viscosity | 6.22 | |
| Dynamic Viscosity | - | |
| Explosive Properties | No data available | |
| Oxidizing Properties | No data available | |
| Bulk Density | 9.17 lb/gal (1.1 g/ml) | |

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Avoid breathing vapors or mists.

Ingestion Do not ingest.

Component Information

| Chemical Name | ATEmix (oral) | ATEmix (dermal) | Inhalation LC50 |
|--------------------------------------|----------------------|-------------------------|-----------------|
| Acetamiprid Technical 135410-20-7 | = 146 mg/kg (Rat) | - | - |
| Surfactant 2 | = 3730 mg/kg (Rat) | = 1980 mg/kg (Rabbit) | - |

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------------------|-------|----------|-----|------|
| Acetamiprid Technical 135410-20-7 | | Group 2A | | X |

Numerical measures of toxicity

Acute Oral LD50 (Rat): >2,000 mg/kg

Acute Dermal LD50 (Rabbit): >2,000 mg/kg

Acute Inhalation LC50 (Rat): >5.07 mg/L (4-hr)

Eye Irritation: Non-irritating.

Dermal Irritation: Non-irritating.

Dermal Sensitization: Not a skin sensitizer.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|---|---|---|
| Surfactant 2 | 11.5: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 | 7.5: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 27 - 29.5: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 32 - 37: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 29.7: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10.0 - 33.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static | 39: 48 h <i>Daphnia magna</i> mg/L EC50 |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|---------------|-----------------------|
| Surfactant 2 | 3.1 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

| | |
|-------------------------------|---|
| Disposal of Wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated Packaging | Disposal should be in accordance with applicable regional, national and local laws and regulations. |

California Hazardous Waste Status

| Chemical Name | California Hazardous Waste Status |
|--------------------------------------|-----------------------------------|
| Novaluron 116714-46-6 | Toxic |
| Acetamiprid Technical 135410-20-7 | Toxic |

14. TRANSPORT INFORMATION

DOT Package less than 119 Gallons: Not Regulated

Package larger than 119 Gallons:

| | |
|-----------------------------|---|
| UN/ID No | UN3082 |
| Proper Shipping Name | Environmentally hazardous substances, liquid, n.o.s. (Novaluron, Acetamiprid) |
| Hazard Class | 9 |
| Packing Group | III |
| Marine Pollutant | Yes |

IATA

| | |
|-----------------------------|---|
| UN/ID No | UN3082 |
| Proper Shipping Name | Environmentally hazardous substances, liquid, n.o.s. (Novaluron, Acetamiprid) |
| Hazard Class | 9 |
| Packing Group | III |
| Marine Pollutant | Yes |

IMDG

| | |
|-----------------------------|--|
| UN/ID No | UN3082 |
| Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. (Novaluron, Acetamiprid) |
| Hazard Class | 9 |
| Packing Group | III |
| Marine Pollutant | Yes |

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/E LINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-----------------------|------|----------|-------------------|---------|-------|---------|-------|------|
| Novaluron | X | | | | | | | |
| Acetamiprid Technical | X | | | | X | Present | | |
| Surfactant 1 | | X | X | Present | X | | X | X |
| Surfactant 2 | X | X | X | Present | X | Present | X | X |

Legend:

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 Chemical Substances/European 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

US Federal Regulations**SARA 313**

Not determined

US State Regulations**U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Surfactant 2 | | X | X |

EPA Pesticide Registration Number EPA Reg No 66222-264**EPA Statement**

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:

EPA Pesticide Label

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, and clothing. Harmful if inhaled. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Keep out of reach of children and domestic animals.

Difference between SDS and EPA pesticide label

| | EPA | OSHA |
|-----------------------------------|---|------|
| Signal Word | Caution | N/A |
| Acute toxicity - Oral | Harmful if swallowed | N/A |
| Acute Toxicity – Dermal | Harmful if absorbed through skin | N/A |
| Acute Toxicity – Inhalation | Harmful if inhaled | N/A |
| Serious eye damage/eye irritation | Causes substantial but temporary eye injury | N/A |

| |
|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

NFPA**Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

HMIS**Health Hazards****Flammability****Physical hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

Issue Date:

01-Aug-2016

Revision Date:

11-Nov-2016

Revision Note:

New format, added EPA registration number based on approval.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet