




## SAFETY DATA SHEET

SDS ID: 74530-44-74530

Conforms to UN Globally Harmonized System and OSHA  
Hazard Communication Standard 29 CFR 1910.1200(g)

SECTION 1. IDENTIFICATION	
Product Name:	Katagon
Synonyms:	Tolpyralate + Nicosulfuron Herbicide
Chemical Name:	Tolpyralate: 1-[[[1-ethyl-4-[3-(2-methoxyethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-1H-pyrazol-5-yl]oxy]ethyl methyl carbonate Nicosulfuron: 2-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-3-pyridinecarboxamide
Chemical Family:	Benzoyl pyrazole + Sulfonylurea mixture
Recommended Uses:	Agricultural industry: Herbicide
EPA Registration No.:	71512-44-74530
Company Identification:	HELM Agro US, Inc. 401 E Jackson St., Suite 1400 Tampa, FL 33602 813-621-8846 <a href="mailto:info@helmagro.com">info@helmagro.com</a>
24 Hour Emergency Number:	For Transportation emergency, spills, leak, fire or accident call: CHEMTREC 1-800-424-9300 For 24-Hour Medical Emergency Assistance call National Poison Control Center at 1-800-222-1222.

SECTION 2. HAZARDS IDENTIFICATION*	
Hazard Classification:	Skin sensitization (Category 1) Specific target organ toxicity, repeated exposure (Category 2) Chronic aquatic toxicity (Category 1)
Signal Word:	<b>WARNING</b>
Hazard Symbols:	
Hazard Statements:	May cause an allergic skin reaction. May cause damage to eye, liver and kidney through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.
Precautionary Statements:	Do not breathe dust/mist/vapors. Wash mouth thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/face protection. IF ON SKIN: Wash with plenty of soap and water. If exposed or concerned: Call a POISON CENTER or doctor/physician. Get medical advice/attention if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Take off contaminated clothing and wash before reuse. Collect spillage. Store locked up. Dispose of contents/container in accordance with governmental and local regulations.
*According to OSHA criteria. For FIFRA criteria, see section 15	



SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS			
Chemical Name:	CAS #:	% by Weight:	TLV/PEL:
Active Ingredient: Tolpyralate	1101132-67-5	11.72	Not established
Active Ingredient: Nicosulfuron	111991-09-4	11.72	Not established
Calcium dodecylbenzenesulfonate	26264-06-2	< 5	Not established
Isotridecanol, ethoxylated	9043-30-5	< 5	Not established

SECTION 4. FIRST-AID MEASURES	
<b>Ingestion:</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Skin Contact:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>Eye Contact:</b>	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 poison control center or doctor for treatment advice.
<b>Inhalation:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

SECTION 5. FIRE-FIGHTING MEASURES	
<b>Extinguishing Media:</b>	Use polyvalent foam, ABC powder, carbon dioxide or water spray
<b>Unusual Fire and Explosion Hazards:</b>	No data available
<b>Fire Fighting Instructions:</b>	Wear full firefighting turn-out gear and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES	
<b>Precautionary Measures:</b>	Use protective equipment and engineering controls identified in section 8 of this document.
<b>Containment and Clean-Up:</b>	Contain spill. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Wash spillage area with water. Do not allow wash water to enter drains or surface waters. If in bodies of water, immediately discontinue human and animal consumption and contact local competent authorities.

SECTION 7. HANDLING AND STORAGE	
<b>Precautions:</b>	Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.
<b>Storage:</b>	Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.



## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The recommendations in this section for exposure controls and Personal Protection are intended for industrial settings (such as formulation or packaging facilities) or for other non-application situations. For additional information, refer to the precautions/warnings on the product label. Always follow the label instructions when handling and using this product.

**Exposure Limits:** Not established.

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to manage airborne levels.

### Personal Protection:

**Ingestion:** Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**Eye Contact:** Where eye contact is possible, use protective eyewear (such as chemical splash goggles).

**Skin Contact:** Where contact is likely, wear chemical-resistant gloves (such as polyethylene, polyvinyl chloride (PVC), or nitrile rubber), coveralls over long-sleeved shirt and long pants, socks and chemical-resistant footwear.

**Inhalation:** A respirator is not normally required when handling sealed containers. Use effective engineering controls to comply with facility occupational exposure limits.  
  
In case of emergency spills, use a NIOSH-approved particulate respirator with any N, R, P or HE filter.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Appearance:** Light yellow liquid

**Odor:** Characteristic chemical odor

**pH:** 4.7 @ 20°C (1% aqueous mixture)

**Boiling Point:** 230°F (110°C)

**Melting Point:** Not available

**Freezing Point:** Not applicable

**Evaporation Rate:** Not available

**Flash Point:** None; substance boils and extinguishes flame at 230°F

**Flammable Limits:** Not established

**Vapor Pressure:** Not available

**Vapor Density:** Not available

**Density:** 1.024 g/mL @ 20°C

**Solubility:** Not available

**N-Octanol/Water:** Not available

**Auto-Ignition Temperature:** Not available

**Decomposition Temperature:** Not available

**Volatility:** Not available



SECTION 10. STABILITY AND REACTIVITY	
<b>Reactivity:</b>	No evidence of reactivity.
<b>Stability:</b>	This product is stable under normal use and storage conditions.
<b>Possibility of Hazardous Reactions:</b>	None known.
<b>Conditions to Avoid:</b>	Avoid contact with heat or open flame.
<b>Incompatible Materials:</b>	None known.
<b>Hazardous Decomposition Products:</b>	May react with oxidizing agents or decompose under fire conditions to release vapors or gases which are toxic and irritating to the respiratory tract.

SECTION 11. TOXICOLOGICAL INFORMATION	
<b>Acute Toxicity:</b>	Acute oral toxicity (LD <sub>50</sub> ): > 5000 mg/kg [Rat] Acute dermal toxicity (LD <sub>50</sub> ): > 5000 mg/kg [Rat] Acute inhalation toxicity (LC <sub>50</sub> ): > 0.65 mg/L
<b>Skin Irritation:</b>	Mildly irritating
<b>Eye Irritation:</b>	Minimally irritating
<b>Sensitization:</b>	Skin sensitizer (GHS category 1B)
<b>Mutagenicity:</b>	No evidence of mutagenicity.
<b>Carcinogenicity:</b>	Individual testing with tolpyralate and nicosulfuron showed no potential for carcinogenicity.
<b>Reproductive Toxicity:</b>	Animal studies with tolpyralate and nicosulfuron showed no evidence of reproductive toxicity.
<b>Target Organ Effects:</b>	Ocular opacity was observed in rats and dogs at exposure levels ranging from 50 – 2000 ppm of tolpyralate. Systemic effects to liver and kidneys were seen at extremely high doses of 2000 ppm or greater. Studies with nicosulfuron show mild effects to red blood cells in rats and increased liver tumors in male mice prone to tumor generation.
<b>Aspiration:</b>	No data available.

SECTION 12. ECOLOGICAL INFORMATION	
<b>Ecotoxicity Data:</b> Fish (Rainbow Trout) 96-hour LC <sub>50</sub> = 79.2 mg/L Invertebrate ( <i>Daphnia magna</i> ) 48-hour EC <sub>50</sub> = 113 mg/L Algae ( <i>Pseudokirchneriella subcapitata</i> ) 96-hour ErC <sub>50</sub> = 70 mg/L Aquatic plant ( <i>Lemna gibba</i> ) 7-day ErC <sub>50</sub> : > 244 µg a.i./L; NOEC = 1.02 µg a.i./L (Tolpyralate)	
<b>Persistence / Degradability:</b>	Tolpyralate degrades rapidly in soil, with half-life values ranging from 0.5 – 2.6 days in field conditions. Hydrolysis is dependent on pH, with increasing pH causing faster degradation. Nicosulfuron has low to moderate persistence in soil (DT50 7 – 46 days) with slower degradation under anaerobic conditions. Hydrolysis is evident in acidic water (DT50 15 – 16 days) but not in neutral or alkaline conditions (DT50 > 32 days). Nicosulfuron is not considered readily biodegradable.
<b>Bioaccumulative Potential:</b>	The potential for tolpyralate to bioaccumulate is extremely low (Log P <sub>ow</sub> = 1.9). Nicosulfuron shows no evidence of bioaccumulation.
<b>Mobility in Soil:</b>	High to very high mobility in various soils under laboratory conditions.



<b>SECTION 13. DISPOSAL CONSIDERATIONS</b>	
<b>Waste Disposal:</b>	Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
<b>Container Disposal:</b>	Nonrefillable container. DO NOT reuse or refill this container. Proper disposal procedures depend on the size and composition of the product container, so follow the disposal directions on the product label which are specific to the container.

<b>SECTION 14. TRANSPORT INFORMATION</b>		
<b>US DOT Classification:</b>	CLASS 9. Not regulated when shipped in non-bulk packaging by highway or rail.	
	<b>Non-bulk (Ground Transport)</b>	<b>Bulk (Ground Transport)</b>
<b>Proper Shipping Name:</b>	Not regulated	Environmentally Hazardous Substance, Liquid, N.O.S. (Nicosulfuron, Tolpyralate)
<b>Hazard Class:</b>	Not regulated	Class 9
<b>Identification Number:</b>	Not regulated	UN 3082
<b>Packing Group:</b>	Not regulated	PG III
<b>Hazardous Substances Reportable Quantity:</b>	Not applicable.	
<b>Special Provisions for Transport:</b>	Class 9 placard not required for non-bulk packaging transported by highway or rail within the U.S. [49CFR 172.504(f)(9)].	
	<b>IATA (Air Transport)</b>	<b>IMDG (Ocean Transport)</b>
<b>Proper Shipping Name:</b>	Environmentally Hazardous Substance, Liquid, N.O.S. (Nicosulfuron, Tolpyralate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NICOSULFURON, TOLPYRALATE)
<b>Hazard Class:</b>	Class 9	CLASS 9
<b>Identification Number:</b>	UN 3082	UN 3082
<b>Packing Group:</b>	PG III	PG III

<b>SECTION 15. REGULATORY INFORMATION</b>	
<b>U.S. Federal and State Regulations:</b>	
<b>SARA 313 Inventory Ingredients:</b>	Not Listed
<b>SARA 312 Hazards Classification:</b>	Acute health
<b>Listed as carcinogen by:</b>	
<b>IARC:</b>	Not Listed
<b>NTP:</b>	Not Listed
<b>OSHA:</b>	Not Listed
<b>CA Prop 65:</b>	Not Listed
<b>TSCA:</b>	Exempt from TSCA, subject to FIFRA.



## SECTION 15. REGULATORY INFORMATION (Continued)

### FIFRA:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law (FIFRA). FIFRA requirements differ from the OSHA classification criteria and hazard information required for safety data sheets in Section 2 above, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required by FIFRA on the pesticide label:

### CAUTION

Harmful if inhaled. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

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 contaminate water when disposing of equipment rinsewater. DO NOT apply where/when conditions could favor runoff. The two active ingredients in the product are known to leach through soil into groundwater under certain conditions as a result of label use. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application.

**Canada (WHMIS):**

Exempt

## SECTION 16. OTHER INFORMATION

### NFPA Hazard Ratings

Health: 2

Flammability: 0

Instability: 0

**0 Minimal**

**1 Slight**

**2 Moderate**

**3 Serious**

**4 Extreme**

### Notice to Reader

*All information contained in this Safety Data Sheet is furnished free of charge and is intended for your evaluation. In our opinion, the information as of the date of the Safety Data Sheet is reliable; however, it is your responsibility to determine the suitability of the information for your use. You are advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exist or because of applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information gathered by you; and you must make independent determinations of the suitability and completeness of the information from all sources to assure both proper use of the material described herein and the safety and health of employees. Accordingly, no guarantee expressed or implied is made by HELM Agro US, Inc. as to the results to be obtained based upon your use of the information, nor does HELM Agro US, Inc. assume any liability arising out of your use of the information.*

**Prepared by:** HELM Agro US, Inc.

**Contact:** 813-621-8846