



SAFETY DATA SHEET (SDS) ID: EPA Reg. No. 71512-44-74530, Katagon

SECTION 1: Product and Company IDs

Product name: Katagon
Product use / type: Herbicide
Restrictions on use: See product label
SDS ID: EPA Reg. No. 71512-44-74530, Katagon
Chemical name / active ingredients: Tolpyralate & Nicosulfuron, See Sec. 3
Chemical family: Benzoyl pyrazole + Sulfonylurea mixture, See Section 3.
Manufacturer / Registrant Info:
 HELM Agro US, Inc. 401 E. Jackson St.
 Suite 1600, Tampa, FL 33602
 (813)-621-8846, info@helmagro.com
Chemical Emergency Number: 1-800-424-9300 (Chemtrec).
National Poison Control Center: 1-800-222-1222; 1-888-484-7546

SECTION 2: Hazard Communication

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Signal Word: Warning
Pictograms:



Skin sensitization: Category 1B
Organ toxicity, repeated exposure: Category 2
Chronic aquatic toxicity: Category 1

Hazard Statements:

- May cause damage to eye, liver and kidney through prolonged or repeated exposure.
- May cause an allergic reaction.
- Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Avoid release to the environment.
- Avoid breathing dust/fume/gas/mist.
- Wear protective gloves / clothing / eye and face protection
- Wash mouth, hands, and face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash before reuse.
- **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.
- If exposed or concerned: Get medical advice / attention.
- Store locked up. Collect spillage. Dispose of contents / container in accordance with local regulations.

Other Information / Potential Hazards:

- See Section 15.

SECTION 3: Ingredient Composition

Chemical Name	CAS #	% Composition* (exact values withheld as trade secrecy)
Active Ingredient: Tolpyralate	1101132-67-5	11.72
Active Ingredient: Nicosulfuron	111991-09-4	11.72
Calcium dodecylbenzenesulfonate	26264-06-2	< 5
Isotridecanol, ethoxylated	9043-30-5	< 5

*TLV/PEL: Not established for any listed.

SECTION 4: First Aid Measures

If swallowed: 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothes: Remove contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15 or 20 minutes. Call a poison control center or doctor for treatment advice.

If in eyes: 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.
If inhaled: Move person to fresh air. If person is not breathing, call 911 or get medical help, then give artificial respiration, preferably with the aid of a pocket mask equipped with a one-way valve. Call a poison control center or doctor for further treatment advice.

First Aid Note: Have this safety data sheet, the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: Treat symptomatically.

SECTION 5: Fire Fighting Measures

Flammable properties: Not listed. **Extinguishing media:** Use polyvalent foam, ABC powder, carbon dioxide or water spray. **Unsuitable extinguishing media:** High pressure water streams. **Firefighting measures:** Use extinguishing media appropriate for surrounding fire. Prevent contaminated firefighting waters and spillage from entering sewers, drains and waterways. Foam or dry chemical are preferred to minimize environmental contamination. Keep personnel upwind of fire. Wear full firefighting turn-out gear and self-contained breathing apparatus. **Protective equipment and precautions for firefighters:** Wear full protective firefighting gear including self-contained breathing apparatus pressure demand (MSHA/NIOSH approved or equivalent). **Hazardous decomposition products:** None listed.

SECTION 6: Accidental Release Measures

Personal precautions: Isolate and post spill area. Wear protective gloves / clothing and eye protection. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation. See section 8 for personal protective equipment. **Environmental precautions:** Prevent further spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Avoid release into the environment.

Methods for containment and cleanup: Contain spill. If on impervious surface, collect the product with a shovel and place in an adequately identified drum or other vessel. Remove to the area for chemical disposal. Wash the place with plenty of water, avoiding run-off to bodies of water. If on soil, collect the material according to the above description and also contaminated layer of soil. If in bodies of water, immediately discontinue human and animal consumption and contact local competent authorities.

SECTION 7: Handling and Storage

Precautions for safe handling: Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not breathe dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid contamination of work clothing. **Precautions for safe storage:** Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Store and handle in accordance with good industrial hygiene practices. Keep container tightly closed. Store in a cool, dry and well-ventilated place away from children and animals. **Incompatible storage situations:** Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, water, and feed.

SECTION 8: Exposure Control / Protection

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation, and packaging of this material; or for other non-application situations. All forms of application should refer to the product label for personal protection equipment. For additional information, refer to the precautions/warnings on the product label. Always follow the label instructions when handling and using this product. **Exposure Guidelines:** Not established. **Engineering controls** Use process enclosures, local exhaust ventilation, or other engineering controls to manage airborne levels. **Personal protective equipment: Eye / face protection:** Wear chemical-tight goggles or safety glasses and full face-shield. **Body / skin protection:** 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. Wash contaminated work clothing before reuse. **Hand protection:** Wear chemical resistant gloves / hand protection. Wash outside of gloves before removing. **Respiratory protection:** 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. If exposure limits are exceeded or irritation is experienced, a NIOSH/MSHA approved respiratory protection should be worn. Positive pressure



supplied air respirators may be required for high airborne contaminant concentrations. Use respiratory equipment in accordance with local regulations. **Ingestion:** Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. **General hygiene considerations:** Handle in accordance with good industrial hygiene practice. Remove and wash contaminated clothing before reuse. Launder separate from household laundry.

SECTION 9: Physical & Chemical Properties

Physical state: Liquid. **Appearance:** Light yellow. **Odor:** Chemical. **pH:** 4.7 @ 20°C (in 1% aqueous). **Melting point:** Not available. **Boiling point:** 230°F (110°C). **Freezing point:** Not applicable. **Flash point:** None. **Evaporation rate:** Not available. **Flammable limits:** Not established. **Vapor pressure:** N/A. **Vapor density:** N/A. **Density:** 1.024 g/mL @ 20°C. **Solubility:** N/A. **Viscosity:** Not listed. **n-Octanol / water partition coefficient:** N/A. **Auto-ignition temperature, decomposition temperature, volatility:** Each not listed or not available.

SECTION 10: Stability & Reactivity

Reactivity / chemical stability: Stable under normal temperature and conditions / no evidence of reactivity. **Conditions / Materials to avoid:** Extreme heat, sparks and fire. **Incompatible materials:** None known. **Hazardous decomposition products:** May react with oxidizing agents or decompose under fire conditions to release vapors or gases which are toxic and irritating to the respiratory tract. **Hazardous reactions:** None known.

SECTION 11: Toxicological Information

Acute Toxicity: Acute oral toxicity (LD50): >5000 mg/kg [Rat]. Acute dermal toxicity (LD50): >5000 mg/kg [Rat]. Acute inhalation toxicity (LC50): >0.65 mg/L. **Skin Irritation:** Mildly irritating. **Eye Irritation:** Minimally irritating. **Sensitization:** Skin sensitizer (GHS category 1B). **Mutagenicity:** No evidence of mutagenicity. **Carcinogenicity:** Individual testing with Tolpyralate and Nicosulfuron showed no potential for carcinogenicity. **Reproductive Toxicity:** Animal studies with Tolpyralate and Nicosulfuron showed no evidence of reproductive toxicity. **Target Organ Effects:** 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. **Aspiration:** No data available.

SECTION 12: Ecological Information

Ecotoxicity Data: Fish (Rainbow Trout) 96-hour LC50 = 79.2 mg/L. Invertebrate (Daphnia magna) 48-hour EC50 = 113 mg/L. Algae (Pseudokirchneriella subcapitata) 96-hour ErC50 = 70 mg/L. Aquatic plant (Lemna gibba) 7-day ErC50: > 244 µg a.i./L; NOEC = 1.02 µg a.i./L (Tolpyralate). **Persistence / Degradability:** 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. **Bioaccumulative Potential:** The potential for Tolpyralate to bioaccumulate is extremely low (Log Pow = 1.9). Nicosulfuron shows no evidence of bioaccumulation. **Mobility in Soil:** High to very high mobility in various soils under laboratory conditions.

SECTION 13: Disposal Information

Product / waste disposal: Wastes resulting from the use of this product that cannot be used must be disposed in accordance with applicable Federal, State or local regulations at an approved waste disposal facility. Do not contaminate water, food, or feed by disposal. **Container Disposal:** 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. Refer to container label for additional information.

SECTION 14: Transport Information

Not subject to U.S. DOT regulation in packages less than or equal to 119 gallons (450 liters). U.S. DOT for packages greater than 119 gallons (450 liters), IMDG, IATA: UN3082, Environmentally Hazardous Substance, liquid, n.o.s. (Nicosulfuron, Tolpyralate), 9, III.

SECTION 15: Regulatory 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 as required on the pesticide label: **Signal word:** Caution. **EPA Registration No.:** 71512-44-74530. **Hazards to Humans and Domestic Animals.** 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. **ENVIRONMENTAL HAZARDS. 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. **Ground Water Advisory.** 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. **Surface Water Advisory.** This product may impact surface water quality due to runoff of rainwater. 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. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of Nicosulfuron from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. **Non-Target Organism Advisory.** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label. **Windblown Soil Particles Advisory.** Katagon has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying if prevailing local conditions may be expected to result in off-site movement. **Read product label and, label advisories, and ensure all necessary precautions.**

SARA 312: Acute health. **SARA 313 & California Proposition 65:** Not listed

SECTION 16: Other Information

NFPA Ratings:	NFPA Ratings: Health	NFPA Ratings: Fire	NFPA Ratings: Instability
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Acronyms which may or may not be referenced: ACGIH - American Conference of Governmental Industrial Hygienists; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; CST - Centistokes; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; FIFRA - Federal Insecticide, Fungicide and Rodenticide Act; GHS - Global Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MF - Marine Pollutant; NFPA - National Fire Protection Association; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

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Revision Date: September 14th, 2023. **Revision no. 2** (prior has 'Revision Date') **Reason for Revision:** SDS review and truncate. Confirm/Update Section 2, 4-5, 8, 15 (added [safety] language). Section 16 update. Address change.

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