



TIDE INTERNATIONAL USA, INC.

—A DIVISION OF TIDE GROUP

MAIN OFFICE : 21 HUBBLE, IRVINE, CA 92618, USA

FAX: 1-949-679-3538

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HTTP://www.tide-usa.com

Safety Data Sheet (SDS) of Tide Hexazinone 75 WDG

Section 1 – Chemical Product and Company Identification

Product name	Tide Hexazinone 75 WDG
Synonyms name	None
Chemical Class	Triazine-dione
Recommended Use	Herbicide-manufacture use only
Company details	
Importer	TIDE INTERNATIONAL, USA, INC. 21 Hubble, Irvine , CA 92618, USA 84229-32
EPA Reg. No.	
Emergency phone	CHEMTREC 1-800-424-9300 TIDE INTERNATIONAL, USA, INC. 1-949-679-3535

Section 2 – Hazard Identification

Classified as Hazardous according to criteria of the Hazard Communication Standard (HCS) or 29 CFR §1910.1200 (2012).

Classification of the substance or mixture:

- Acute oral (Category 3)
- Eye irritation (Category 1)
- Acute aquatic toxicity (Category 1)
- Chronic aquatic toxicity (Category 1)

Label elements

HCS labeling

Hazard pictograms (HCS)



Signal Word: DANGER

GHS Hazard Statements:

- Toxic if swallowed
- Causes serious eye damage.
- Very toxic to aquatic life with long lasting effects



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Other hazard information:

NFPA Ratings: Health-2 Flammability-1 Reactivity-0

Environmental hazards:

This product is toxic to plants. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Potential Environmental Effects:

There is a high probability that the product is not acutely harmful to fish.

There is a high probability that the product is not acutely harmful to aquatic invertebrates.

Acutely harmful for aquatic plants.

With high probability not acutely harmful to terrestrial organisms.

Potential Health Effects:

Inhalation: Harmful if inhaled.

Ingestion: Harmful if swallowed.

Skin: May cause skin irritation.

Eyes: Causes serious eye irritation.

Based on animal data from study, eye contact may cause eye irritation with conjunctival redness, chemosis and discharge while cornea and iris remained unaffected..

No other known chronic effects.

Section 3 - Composition / Information on Ingredients

Active ingredient	CAS No.	Content (w/w,%)	ACIGH TWA
Hexazinone (3-Cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4 (1H, 3H)-dione	51235-04-2	≥75.0	NA
Sodium dodecyl sulfate	151-21-3	<5.0	NA
Ammonium sulfate	7783-20-2	<6.0	NA
Kaolin	1332-58-7	<12.0	2mg/m3*
Other ingredients	/	Balanced to 100	/

* Respirable fraction, particulate matter containing no asbestos and <1% crystalline silica.



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Section 4 – First Aid Measures

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

If on skin or clothing: 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.

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 the eye. If eye irritation persists: Get medical advice/attention.

If Inhaled: Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a POISON CENTER/doctor/ if you feel unwell.

If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. 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.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Section 5 – Fire-Fighting Measures

Flashpoint: Non-flammable

Combustibility: No data applicable

OSHA Flammability Classification: None

Flammable Limits (% in Air): N/A

Autog ignition Temperature: N/A

Extinguishing Media: Water Spray, Foam, Dry Chemical, CO₂.

Fire Fighting Instructions:

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

If area is exposed to fire and conditions permit, let fire burn itself out. Burning chemicals may produce by-products more toxic than the original material. If product is on fire, wear self-contained breathing apparatus and full protective equipment. Use water spray. Control runoff.

Section 6 - Accidental Release Measures

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Initial Containment:

Prevent material from entering sewers, waterways, or low areas. Discharge into the environment must be avoided. Follow applicable Federal, State/Provincial and Local laws/ regulations.



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Personal precautions:

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

Method for cleaning up:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Section 7- Handling and Storage

KEEP OUT OF REACH OF CHILDREN!

Safe handling (Personnel):

Use only outdoors or in a well-ventilated area.

Wear eye protection/face protection.

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Avoid breathing dust/vapours/spray. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Do not eat, drink or smoke when using this products.

Wash hands thoroughly after handling.

Avoid release to the environment.

Safe handling (Physical Aspects):

Keep container tightly closed in a dry and well-ventilated place.

Requirements for storage rooms:

Keep pesticide in original container. Store in a cool, dry place. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

Section 8 - Exposure Controls / Personal Protection

Exposure limit values

Components.	CAS-No	Control parameters	Basis
Hexazinone	51235-04-2	NA	NA
Kaolin	1332-58-7	10 mg/m ³ TWA (total dust) 5 mg/cm ³ TWA (respirable dust)	NIOSH
		15 mg/m ³ TWA (total dust) 5 mg/m ³ TWA (respirable dust)	OSHA Final PELs

Engineering Controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before



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breaks and at the end of workday.

Personal Protective Equipment

Applicators and other handlers must wear:

Protective eyewear (goggles, face shield, or safety glasses)

Long-sleeved shirt and long pants

Shoes plus socks

Chemical resistant gloves

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Respiratory Protection: When respiratory protection is necessary under the conditions of use, wear a respirator approved for pesticides by the National Institute for Occupational Safety and Health (NIOSH).

Hand Protection:



Chemical resistant protective gloves

Eye Protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



Safety glasses with side-shields. Tightly fitting safety goggle.

Skin and Body Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, shoes and socks. An emergency shower or water supply should be readily accessible to the work area.

Specific Hygiene Measures: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash hands thoroughly after handling. Wash clothing and other absorbent materials that have been exposed to this product. Follow the manufacturer's instructions for cleaning and maintaining PPE.

Environmental controls

See Sections 6, 7, 12, 13.

Section 9 - Physical and Chemical Properties

Appearance: White granular solid



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Odor: Pleasant-mild odor

Odor threshold: No Data Available

pH: 7.69 ±0.03

Melting point/freezing point: 113.6~116.8°C for Technical

Initial boiling point and boiling range: No Data Available

Flammability: Non-flammable

Explosibility: Non-Explosibility

Evaporation rate: No Data Available

Vapor pressure: <1.33 x 10⁻⁵ Pa at 25°C for technical

Vapor density: No Data Available

Density: 1.068±0.05g/mL

Solubility: In water 29.8 g/l at 25°C at pH 7

Acetone, 792 g/l at 20°C; Chloroform, 3880 g/l at 20°C; Dimethylformamide, 836 g/l at 20°C

Methanol, 2650 g/l at 20°C; Toluene, 386 g/l at 20°C; Hexane, 3 g/l at 20°C

Octanol/water partition coefficient: log POW = 1.2 at 25°C and pH 7

Auto-ignition temperature: No Data Available

Decomposition temperature: No Data Available

These physical data are typical values based on material test but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis and any specific lot or as specification items.

Section 10 - Stability and Reactivity

Reactivity: Product will not undergo polymerization

Stability: Stable under normal conditions.

Incompatible Materials: Strong oxidizing agents

Possibility of hazardous reactions: Will not occur hazardous polymerization.

Conditions to avoid: No data available.

Section 11 - Toxicological Information

Toxicity:

Acute oral toxicity: LD50 1000 mg/kg to rats

Acute dermal toxicity: LD50 > 2000mg/kg to rats.

Acute inhalation toxicity: LC50 > 4.36 mg/L air to rats

Acute dermal irritation: Non skin irritation.

Acute eye irritation: Severely irritating

Skin sensitization: Non skin sensitizer

Chronic effects: Over a 2-week period, male rats receiving dietary doses of 300 mg/kg/day showed no evidence of cumulative toxicity. Male rats receiving doses of 50 mg/kg/day over 90 days showed no effects, but higher doses caused decreased body weights. Body weight gain



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was seen in dogs at doses of about 35 mg/kg/day and higher over 1 year. Very high doses for 8 weeks did not affect hamsters and caused only increased liver weights in mice.

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC, ACIGH, NTP, and OSHA.

Mutagenicity: Negative for mutagenic.

Reproductive toxicity: The NOEL and LOEL for reproductive toxicity were also 200 ppm and 2000 ppm, respectively. Available evidence suggests that hexazinone is unlikely to cause reproductive effects in humans.

Teratogenicity: Pregnant female rats receiving doses up to 100 mg/kg/day during gestation, and rabbits receiving up to 125 mg/kg/day, evidenced no fetal abnormalities. Teratogenic effects were observed in rats only at maternal doses greater than 400 mg/kg/day during gestation. It is unlikely that hexazinone would pose a teratogenic effects in humans under normal conditions.

Section 12 - Ecological Information

Hexazinone

Avian toxicity:

Bird: LD50 for Bobwhite quail 2251 mg/kg bw.

Aquatic organism toxicity:

LC50 for Rainbow trout >320 ppm

LC50 for Bluegill sunfish >370 ppm

Daphnia EC50 (48 h) 151.6 ppm.

Other non-target organism toxicity:

Bees: Dermal LD50 for honeybees >100 µg/bee.

Macrophytes, Duckweed (*Lemna gibba*): EC50 = 37.4 ppb (14 days)

Unicellular Algae, Green algae (*Selenastrum capricornutum*): EC50 = 7 ppb (12hrs)

Unicellular Algae, Blue-green algae (*Anabaena flos-aquae*): EC50 = 0.21 ppm (12hrs)

Environmental Hazards:

Toxic to plants. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. See product label for additional application instructions relating to environmental precautions.

Movement: Hexazinone is very poorly adsorbed to soil particles, very soluble in water, and slowly degraded, so it is likely to be mobile in most soils and has the potential to contaminate groundwater.

Adsorption: Hexazinone does not evaporate to any appreciable extent from soil. Hexazinone is very poorly adsorbed to soil particles,

Persistence and Degradation: Hexazinone is of moderate to high persistence in the soil environment. Measured field half-lives range from less than 30 to 180 days, with a representative value of about 90 days. Hexazinone is broken down by soil microbes, which



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release carbon dioxide in the process. Sunlight may also break down the compound via photodegradation. The rate of breakdown under natural field conditions will depend on many site-specific variables, including sunlight, rainfall, soil type, and rate of application.

Section 13 - Disposal Considerations

Dispose of contents/container in accordance with local/regional/national/international regulations. End users must dispose of any unused product as per the label recommendations.

Pesticide Disposal:

Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. 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.

Container Disposal:

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. If not emptied in this manner, the bag may be considered an acute hazardous waste and must be disposed of in accordance with local, state and federal regulations. When completely empty, offer for recycling if available. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Section 14 - Transport Information

UN number;	3077
Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s. (Hexazinone)
Technical Shipping Name:	Tide Hexazinone 75 WDG
Packing Group:	III
Hazard Class:	9
Marine pollutant	Yes

Section 15 - Regulatory Information

FIFRA –

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. The following is the hazard information as required on the pesticide label:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. May be fatal if swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin or clothing. Prolonged or frequently repeated skin



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contact may cause allergic reactions in some individuals.

Environmental hazards

Do not apply directly to water, or 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 washwaters.

The active ingredient hexazinone, in this product is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

US Federal Regulations

TSCA list: The ingredients of this product are listed on the TSCA inventory or are exempt.

SARA Title III - section 302 - notification and information None

SARA Title III - section 313 - toxic chemical release reporting

Hexazinone (75.0%) CAS 51235-04-2

This material contains Kaolin (CAS# 1332-58-7) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

SARA Title III - section 311/312 - hazard identification

Acute (immediate) health hazardous

This product contains none of the components listed as Extremely Hazardous substances.

US States Regulatory Reporting

CA Prop65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

State information:

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

CAS# 51235-04-2 can be found on the following states right to know lists: PA, NJ

CAS#7783-20-2 can be found on the following states right to know lists: NJ, PA, MA.

CAS# 1332-58-7 can be found on the following states right to know lists: PA, MN, MA.

Canadian Regulations

All ingredients are on the inventory or exempt from Canadian's DSL list.

Environmental

CERCLA

None

Clean Air Act:

This material does not contain any hazardous air pollutants.



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This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

Section 16 - Other Information

SDS# TIC-HER8422932

Created date: 12/29/2014

Update date: 10/10/2015

Revised for:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Tide International USA, Inc. assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data.