SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Hexazinone 2SL Chemical Class: Trizine-dione Recommended Use: Herbicide

Importer:

Tide International, USA, INC. 21 Hubble, Irvine, CA 92618

1-949-679-3535

EPA Reg. No.: 84229-35

Emergency phone: CHEMTREC 1-800-424-9300

SECTION 2 – HAZARDOUS IDENTIFICATION

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

OSHA regulatory Status: This material is classified as hazardous under OHSA regulations.

Classification of the substance or mixture:

Flammable liquid (Category 3) Eye irritation (Category 2B)

Acute Inhalation (Category 4) Acute aquatic toxicity (Category 1)

Label elements:

GHS Hazard pictograms







Signal Word: WARNING

GHS Hazard Statements: Flammable yellow liquid May be harmful if swallowed. May be harmful in contact with skin Causes serious eve irritation. Harmful if inhaled. Very toxic to aquatic life Signs and Symptoms of Systemic Effects: Causes substantial but temporary eye injury. Causes skin irritation. May be fatal if swallowed or if absorbed through skin. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

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 System (NPDES) permit and the permitting authority has been notified in writing before discharge. Harmful to aquatic organisms. Toxic to bees.

SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS

Active ingredient	CAS No.	EINECS#	(w/w,%)	ACIGH(TWA)
Hexazinone	51235-04-2	257-074-4	25	NA
Ethanol	64-17-5	200-578-6	>35	1900 mg/m ³
Polyethylene glycol sorbitan monopalmitate	9005-66-7	NE	NA	NA
Water	7732-8-5	231-791-2	Balance	NA

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.

If in eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention. If on skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Get medical advice/attention. Wash contaminated clothing before reuse.

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

If swallowed: Immediately 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 a poison control center or doctor. Do not give any thing 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: 78.8°F (26°C) Combustible: Yes

OSHA Flammability Classification: Flammable. Auto-ignition temperature: Not determined

Other flammable properties: Burning will produce hazardous compounds including oxides of carbon, nitrogen, Extinguishing Media: Solid stream of water may spread the fire. Do not use full jets of water. Use water spray

of fog, foam, dry chemical or CO2.

Fire Fighting Procedures: Wear protective clothing and self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of material is released or spilled: Ventilate area, absorb spill with inert material and use non-sparking tools to place into a chemical waste container. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds ground water or soil.

Personal protection: Wear impervious gloves, eye protection and protective clothing.

Containment and clean up: Isolate spill area. Spills should be absorbed with sawdust, clay or sand, followed by disposal at a sanitary landfill. Rinse spill area with water.

SECTION 7- HANDLING AND STORAGE

KEEP AWAY FROM CHILDREN.

Handling: Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection. Remove contaminated clothing & wash before re-use.

Do not breathe vapor or mist. Do not get in eyes, on skin or clothing.

Avoid contact with acids, bases and oxidizing agents.

Avoid sources of ignition, and sparks.

Wash hands thoroughly after handling.

Avoid release to the environment.

Follow SDS/Label precautions.

Storage: Store in cool and dry place not to exceed 32°F (0°C), away from alkaline, acidic and oxidizing materials.

Do not store near combustible materials and/or direct sunlight.

Keep container closed when not in use.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Components.	CAS-No	Control parameters	Basis
Ethanol	64-17-5	1900 mg/m ³	OSHA

Engineering controls:

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

The operating pressure of the spray rig shall be no more than 40 psi with the use of low pressure nozzles on dilute boom sprays and no more than 100 psi on air fan sprayers. Air fan sprayers should have the fan adjusted so that the spray mist does not greatly exceed the top of vines being sprayed.

Personal protection:

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, and Viton. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Follow OHSHA recommended PPE standard (29CFR1910.132) be conducted before using this product. Follow Product label-personal protective equipment.

Applicators, **mixers**: long pants, shoes with socks, protective eyewear and chemical resistant gloves.

User Safety Requirements:

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 PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Wash PPE after each day's use.

Respiratory protection: A NIOSH's respirator is required whenever work place conditions warrant respirator use. **Eye Protection:** Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent.

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Skin Protection: Use impermeable gloves and apron. Chemical resistant gloves.

Specific Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Hands and/or face should be

washed before breaks and at the end of the shift. Store work clothing separately.

Environmental controls See Sections 6,7,12 &13.

Specific Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear –light yellow liquid **Odor:** Alcoholic odor.

pH: 8.36

Flammability: Flammable Explodability: Not have explosive characteristics.

Density: 0.96g/ml³ **Solubility:** Dispersible in water

Viscosity: 0.0046 pascal at 68°F (20°C)

Note. 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

Chemical Stability: Store in cool and dry place not to exceed 68°F (20t) Possibility of Hazardous reactions: Will not occur under normal conditions.

Conditions to avoid: Open flames, sources of ignition, sparks or elevated temperatures.

Incompatibility materials: Acids, basics and Oxidizing agents.

Hazardous decomposition products: Ammonia.

SECTION 11 - Toxicological Information

Exposure routes: Eyes, skin, ingestion & inhalation.

Toxicity:

Acute Oral LD_{50(grat)} >2000 mg/kg Acute dermal toxicity: LD_{50(rat)}=>2000mg/kg

Acute inhalation toxicity: LC_{50(rat)}= >3.84 mg/l

Corrosive to eyes. Not a skin sensitizer.

Chronic: No cumulative toxicity expected.

Genotoxicity: potential of hydrogen cyanamide is considered equivocal.

Reproductive Toxicity: It is unlikely to cause reproductive effects in humans.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Avian toxicity:

LD₅₀ for Bobwhite quail = 2251 mg/kg bw

Aquatic organism toxicity:

 LD_{50} for rainbow trout>320 ppm LD_{50} for bluegill sunfish > 370ppm EC_{50} for daphnia + 151.6 ppm

Other targeted organism toxicity:

Bees: Dermal LD₅₀ for honey bees > 10µg/bee\

Macrophytes: Duckweed (lamna gibba): EC₅₀+ 37.4 ppb (14 days)

Unicellular althea, Green algae (Selenastrum capricormutum) $EC_{50} = 7$ ppb (12 hours) Unicellular althea, Blue-green algae (Anabaena flos-aquae) $EC_{50} = 0.21$ ppm (12 hours)

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.

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 contaminant groundwater.

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

Persistence and Degradation: Hexazinone is of moderate to high persistence in the soil environment. Hexazinone is broken down by soil microbes, which release carbon dioxide in the process. Sunlight may also break down the compound vis photo-degradation.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste and empty container must be disposed of in accordance with local State, provincial Federal regulations and laws. Incineration is the preferred method.

Do not contaminate water, food or feed by disposal.

Pesticide disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container disposal:

2.5-gallon containers: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14 - TRANSPORT INFORMATION

USA Ground Proper Shipping Description

UN1170. Ethanol solution. 3 III

IATA Proper Shipping Description CARGO AIRPLANE ONLY

UN1170, Ethanol solution, 3 III Marine pollutant (Hexazinone)

Use packing instruction 310. The maximum net quantity per package is 58.12 gal (2201)

IMO Proper Shipping Description:

UN1170, Ethanol solution, 3 III Marine Pollutant (Hexazinone)

Use packing instruction P001 and LP01.

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 WARNING

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

ENVIRONMENTAL HAZARDOUS

Do not apply this product directly to water, or to areas where surface water is present or in intertidal areas below the mean high water mark. Do not contaminate water by the cleaning of equipment or disposal of equipment wash waters. Do not spray when bees are active in the field.

The active ingredient Hexazinone, in this product is known to leach through soil into the 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.

Physical or chemical hazards: FLAMMABLE. Keep away from heat and open flame. Do not mix or allow contact with oxidizing agents

US Federal Regulations

TSCA list TSCA 8(b) inventory: None.

SARA Title III - section 302 - notification and information None

SARA Title III - section 313 - toxic chemical release reporting: Hexazinone

SARA Title III - section 311/312 - hazard identification

Acute health hazardous: This product contains none of the components listed as Extremely Hazardous substances.

OSHA Hazardous Components: None.

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

Right to know: Hexazinone and ethanol are listed in New Jersey and Rhode Island. Ethanol is listed in California. Connecticut and Minnesota.

Canadian Regulations: All ingredients are listed.

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Environmental

CERCLA: None. WGK (Water Danger/Protection): None.

Safe Drinking Water Act Maximum Contaminant Levels: None.

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. None.

SECTION 16 - OTHER INFORMATION

Other hazard information: Created date: 8 September 2016

Revised for: New SDS.

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