



# TIDE INTERNATIONAL USA, INC.

—A DIVISION OF TIDE GROUP

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

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## Safety Data Sheet (SDS) of Tide Clethodim 2EC

### Section 1 – Chemical Product and Company Identification

Product name	Tide Clethodim 2EC
Synonyms name	None
Chemical Class	Cyclohexanediones
Recommended Use	Agricultural herbicide for the control of certain grass weeds.
Company details	
Importer	Tide International USA, Inc. 21 Hubble, Irvine, CA 92618
EPA Reg. No.	84229-21
Emergency phone	Chemtrec 1-800-424-9300 Tide USA 1-949-679-3535

### Section 2 – Hazard(s) 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:

Flammable liquid: Category 3.

Skin irritation (Category 3)

Eye irritation (Category 2B)

Hazardous to the Aquatic Environment (Category 3)

#### Label elements

##### HCS labeling

##### Hazard pictograms (HCS)



Signal Word: WARNING



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## GHS Hazard Statements:

Combustible liquid.  
May be harmful if swallowed and enters airways.  
Cause eye irritation  
Causes skin irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
Toxic to aquatic life with long lasting effects.

## Other hazard information:

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

**Signs and Symptoms of Systemic Effects:** Signs of toxicity in test animals exposed to lethal or near-lethal oral doses included lethargy, ataxia, irregular breathing, lacrimation and loose stools. This product contains a solvent mixture. Solvents, when inhaled, can cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possibly unconsciousness and even death. Ingestion of solvents can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of low viscosity products can cause chemical pneumonitis, which can be fatal. Acute exposure to naphthalene by inhalation, ingestion, and dermal contact has been associated with hemolytic anemia, damage to the kidneys, cataracts, and, in infants, brain damage.

**Hazards to humans and domestic animals:** Harmful if swallowed. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**Environmental hazards:** 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.

**Physical hazards:** Combustible liquid.

## Section 3 - Composition / Information on Ingredients

Active ingredient	CAS No.	Content (w/w,%)	ACIGH TLV
Clethodim (±)-2-[(E)-1-[(E)-3-chloroallyloxyimino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxycyclohex-2-enon	99129-21-2	26.4 min.	NA
Calcium dodecylbenzenesulfonate	26264-06-2	<3.0.	NA



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Active ingredient	CAS No.	Content (w/w,%)	ACIGH TLV
Aromatic Hydrocarbon	64742-94-5	<70.0	100ppm
Solvent Naphtha (Petroleum), Heavy aromatic (Contain)*			
*Naphthalene	91-20-3	5-10%	10ppm TWA
*1,2,4-Trimethylbenzene	95-63-6	1-5%	25ppm TWA
Other ingredient deemed not to be hazardous	Proprietary		

## 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 swallowed:

Call a poison control center or doctor immediately for treatment advice. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.

### 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. Get medical advice/attention.

### If inhaled:

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 further treatment advice.

### If on skin or Clothing:

Take off contaminated clothing and wash before reuse. Rinse skin immediately with plenty of water for 15-20 minutes. Get medical advice/attention.

### Note to physician:

Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid which can cause pneumonitis. If ingested, probable mucosal damage may contraindicate the use of gastric lavage.

## Section 5 – Fire-Fighting Measures

**Flashpoint:** 52.8°C (127° F)

**Flammable limits (% in air):** Not determined

**Autoignition temperature:** Not determined

**Means of Extinction:** Water fog, foam, dry chemical or CO<sub>2</sub>

**Hazardous combustion products:** Normal combustion forms carbon dioxide, water vapor and may produce oxides of nitrogen, sulfur. Combustion may produce toxic compounds of chlorine. Incomplete combustion can produce carbon monoxide.



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**Fire fighting instructions:** Liquid evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85°F. Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

## 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.

### Small spills

Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.

### Large spills

Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

## Section 7- Handling and Storage

KEEP OUT OF REACH OF CHILDREN!

### Handling:

Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Keep away from flames and hot surfaces. -- No smoking.

Use personal protective equipment as required. Wear protective gloves and eye / face protection.

Avoid breathing mist / vapours. Avoid skin and eye contact and inhalation of vapour. Wash hands thoroughly after handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Ground/Bond container and receiving equipment; Use explosion-proof electrical/ventilating/lighting/.../equipment; Use only non-sparking tools; Take precautionary measures against static discharge.

**Storage:** Store locked up. Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat or



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ignition. Keep containers closed tightly when not in use - check regularly for leaks.

## Section 8 - Exposure Controls/Personal Protection

### Exposure limit values

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit/Standard			Note	Source	Year
Clethodim		None					
1,2,4-Trimethylbenzene		TWA	25 ppm			ACGIH	2009
Naphthalene		STEL	75 mg/m <sup>3</sup>		Skin	China OELs	2008
Naphthalene		TWA	50 mg/m <sup>3</sup>		Skin	China OELs	2008
Naphthalene		STEL	15 ppm		Skin	ACGIH	2009
Naphthalene		TWA	10 ppm		Skin	ACGIH	2009
Solvent naphtha (petroleum), heavy aromatic	Vapour	RCP - TWA	100 mg/m <sup>3</sup>	17 ppm	Total Hydrocar- bons	ExxonMobil	2009

### Biological limits

Substance Name	Specimen	Sampling Time	Limit	Determinant	Source
Naphthalene	Urine	End of shift at end of work wk		1-Hydroxypyrene, with hydrolysis (1-HP)	ACGIH BELs

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

### Engineering controls

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Handle only with adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

### Personal protection

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator, Type A filter material.

**Hand Protection:** The glove material has to be impermeable and resistant to the product/ the



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substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.



Protective gloves

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.



Tightly sealed goggle

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: Chemical/oil resistant clothing is recommended.

**Specific Hygiene Measures:** Wash hands thoroughly after handling. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash clothing and other absorbent materials that have been exposed to this product. Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Environmental controls**

See Sections 6, 7, 12, 13.

## **Section 9 - Physical and Chemical Properties**

**Appearance:** Light yellow liquid

**Odor:** Aromatic odor

**Odor threshold:** No Data Available

**pH:** 3.0-6.0

**Melting point/freezing point:** Not Applicable

**Initial boiling point and boiling range:** No Data Available

**Flashpoint:** 52.8°C (127° F)

**Evaporation rate:** No Data Available

**Vapor pressure:** No Data Available

**Vapor density:** No Data Available

**Density:** 0.96±0.02 g/mL

**Solubility:** Emulsifies in water

**Octanol/water partition coefficient:** Not Applicable

**Auto-ignition temperature:** No Data Available

**Decomposition temperature:** No Data Available





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**Viscosity:** 3.37centipoise at 24°C; 2.53 centipoise at 37°C

These physical data are typical values based on material test but may vary from sample to sample. Typical values should not 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:** This material is thermally unstable.

**Possibility of hazardous reactions:** No dangerous reactions known

**Conditions to avoid:** Elevated temperatures and sources of ignition.

**Incompatible Materials:** Oxidizing agents.

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

## Section 11 - Toxicological Information

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimize exposure.

### Exposure routes:

**Eye:** Based on an evaluation of the ingredients and/or similar products, this product is expected to cause prolonged and/or significant irritation. The degree of injury will depend on the amount and duration of contact and the speed and thoroughness of the first aid treatment. The expected adverse health effects resulting from an exposure may include redness, swelling and pain, which could last for an extended period of time.

**Skin:** Based on an evaluation of the similar products, this product is expected to cause moderate skin irritation. The degree of injury will depend on the amount and duration of contact and the speed and thoroughness of the first aid treatment. The expected adverse health effects resulting from an exposure may include redness and swelling. This product may cause allergic skin reactions. In sensitized individuals even small exposures can trigger allergic reactions. The expected adverse health effects may include itching, redness, swelling and blistering of the skin. This product is expected to be minimally toxic when absorbed through the skin. The degree of injury will depend on the amount of material inhaled and the speed and thoroughness of the first aid treatment. The expected adverse systemic health effects are described above.

**Ingestion:** Based on an evaluation of the ingredients and/or similar products, this product is expected to be slightly toxic when ingested. The degree of injury will depend on the amount of material ingested and the speed and thoroughness of the first aid treatment. The expected adverse systemic health effects are described above. Ingestion of this product may cause gastrointestinal



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irritation, nausea, vomiting and diarrhea. Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause injury to the lungs and death.

**Inhalation:** Exposure to high concentrations may result in respiratory irritation. Signs and symptoms may include, but not be limited to, nasal discharge, sore throat, coughing and difficulty in breathing. Based on an evaluation of the ingredients and/or similar products, this product is expected to be minimally toxic when inhaled. The degree of injury will depend on the amount of material inhaled and the speed and thoroughness of the first aid treatment. The expected adverse systemic health effects are described above.

**Medical conditions aggravated by exposure:** Exposure to vapors may increase tendency to respiratory or bronchial infections.

## Toxicity

Acute oral toxicity	LD <sub>50</sub> for female rat >2000mg/kg
Acute dermal toxicity	LD <sub>50</sub> for rabbits >2000mg/kg
Acute inhalation toxicity	LC <sub>50</sub> (4h) >2.0mg/L
Skin irritation	No product specific data available. Based in an evaluation of the ingredients and/or similar products, this product is expected to produce moderate skin irritation (Category 3)
Eye irritation	No product specific data available. Based in an evaluation of the ingredients and/or similar products, this product is expected to cause prolonged and/or significant eye irritation. (Category 2B)
Sensitization	No sensitizer

**Chronic Toxicity (Including Cancer):** Increased liver weights and anemia have been observed in animals exposed to Clethodim Technical. Clethodim Technical was not carcinogenic to animals. Prolonged or repeated dermal exposures may cause drying, scaling and even blistering of the skin. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include fatigue, concentration difficulties, anxiety, depression, rapid mood swings and short-term memory loss. The reports are not clear with regard to the types of solvents that may cause these symptoms, and there is controversy among scientists to whether the condition exists or is caused by this type of product. Since many other diseases cause some or all of these conditions, a doctor should be consulted if any appear. Trimethyl benzene may effect the liver and may cause changes in the blood cells and affect the blood's clotting ability. Trimethyl benzene can irritate the lungs. Repeated exposures may cause bronchitis to develop with cough, phlegm, and/or shortness breath.

**Carcinogenicity (clethodim):** Similar effects as seen in subchronic. No treatment related increases in neoplasms were observed in any study.

ACGIH: Not listed





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IARC: This product contains naphthalene which has been listed by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B).

USEPA: This product contains naphthalene which is classified as a possible human carcinogen (Group C) by the USEPA.

NTP: Not listed

OSHA: Not listed

**Teratogenicity (clethodim):** Not known to cause reproductive or birth defects at normal exposure levels. Some teratogenic (birth defect) effects were noted in rats tested at elevated doses of 700mg/kg/day.

Teratology (Birth Defects) Information: Clethodim Technical produced developmental toxicity only at maternally toxic dose levels. It is not expected to present a hazard under normal use conditions. There is limited evidence of fetal and maternal toxicity from exposure to naphthalene.

**Reproduction (clethodim):** No reproductive toxicity was observed in a study with rats exposed for two generations.

**Mutagenicity (clethodim):** Negative in the following genotoxicity assays: microbial reverse mutation (Ames Assay), **in vitro** chromosome aberration assay in Chinese Hamster Ovary Cells, **in vivo** chromosome aberration assay in Rat Bone Marrow Cells and **in vivo** Unscheduled DNA Synthesis Assay. Clethodim does not present a genetic hazard to intact animal systems.

**Potentially Aggravated Condition:** Individuals with preexisting diseases of the liver, red blood cell and central nervous system may have increased susceptibility to the toxicity of excessive exposures.

**Toxicity of other ingredients:** This product contains a solvent mixture. Solvents, when inhaled, can cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, nausea, headache, and possibly unconsciousness and even death. Ingestion of solvents can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Prolonged or repeated dermal exposures may cause drying, scaling, and even blistering of the skin. Aspiration of low viscosity products can cause chemical, which can be fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include fatigue, concentration difficulties, anxiety, depression, rapid mood swings and short-term memory loss. The reports are not clear with regard to the types of solvents that may cause these symptoms, and there is controversy among scientists to whether the condition exists or is caused by this type of product. Since many other diseases cause some or all of these conditions, a doctor should be consulted if any appear.

Acute exposure to naphthalene by inhalation, ingestion, and dermal contact has been associated with hemolytic anemia, damage to the kidneys, cataracts, and in infants, brain damage. There is limited evidence of fetal and maternal toxicity from exposure to naphthalene.

Chronic (long-term) exposure of workers and rodents to naphthalene has been reported to cause cataracts and damage to the retina. Lesions in the kidneys and thymus, signs of anemia, and reduced spleen weights have been observed in rats and mice chronically exposed via gavage.



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Trimethyl benzene may effect the liver and may cause changes in the blood cells and affect the blood's clotting ability. Trimethyl benzene can irritate the lungs. Repeated exposures may cause bronchitis to develop with cough, phlegm, and/or shortness breath.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 3. For information regarding regulations pertaining to this product, refer to Section 15.

## Section 12 - Ecological Information

**The following information is for the active ingredient, Clethodim:**

### **Ecotoxicity:**

Avoid contamination of any water supply with chemical or empty container.

**Avian toxicity:** The acute toxicity of Clethodim Technical to birds is very low.

Bobwhite quail oral LD<sub>50</sub> greater than 2 g/kg

Bobwhite quail dietary LC<sub>50</sub> greater than 6000 ppm

Mallard duck dietary LC<sub>50</sub> greater than 6000 ppm

No reproductive effects were observed in mallard ducks exposed to 100 ppm of Clethodim Technical. In Bobwhite quail, a slight decrease in viability of embryos of eggs from females exposed to 1000 ppm was observed. A NOEL was established at 300 ppm for this study.

**Aquatic organism toxicity:** Clethodim Technical is only slightly toxic to freshwater fish and practically nontoxic to daphnia.

Rainbow Trout 96-hour LC<sub>50</sub> = 67 mg/l

Bluegill Sunfish 96-hour LC<sub>50</sub> = 120 mg/l

Daphnia magna 48-hour LC<sub>50</sub> greater than 120 mg/l

**Other non-target organism toxicity:** Clethodim Technical was found to be nontoxic to adult worker bees at the highest dose tested, 100 micrograms/bee.

**Persistence/Degradability:** Clethodim is of low persistent in most soils with T<sub>1/2</sub> 3 days. Breakdown is mainly by aerobic processes and photolysis is accepted as making a contribution to breakdown. In water, clethodim is highly persistent with half-life's of 128 days in the aqueous phase and 214 days in the sediment. The reported hydrolysis half life at pH 7-9 is 300 days. Clethodim is rapidly degraded on the leaf surfaces by an acid-catalysed reaction and photolysis. The remaining clethodim will rapidly penetrate the cuticle and enter the plant.

**Bioaccumulative potential:** Not bioaccumulative (clethodim)

**Mobility in soil:** Clethodim is soluble in water and can be expected to adhere poorly to all soil types. The hazard for clethodim to move off the site of application with rain or irrigation water is rated high.

**Other adverse effects:** In animals, clethodim metabolises to the sulphoxide and sulfone. In plants, clethodim metabolises to the sulphoxide, sulfone and S (methyl sulfoxide).

## Section 13 - Disposal Considerations



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

**Product disposal methods:** Wastes resulting from the use of this product must be disposed of on-site or at an approved waste disposal facility. 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. Offer for recycling, if available. Clean container 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. Turn the container over onto its other 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.

## Section 14 - Transport Information

D.O.T. SHIPPING NAME: Compounds, weed killing, liquid, non-regulated.

TECHNICAL SHIPPING NAME: Clethodim 2EC Solution

D.O.T. HAZARD CLASS: NA

U.N./N.A. NUMBER: NA

REMARKS: Regulated when shipping in bulk (> 119 gal).

If in bulk: NA1993, Compounds, Weed Killing, Liquid (contains naphthalene), 3, PG III

EXCEPTION REQUIREMENT: 49CFR 173.150(f)(3)

## 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 irritation. Avoid contact with skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Prolonged or frequently repeated skin 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



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the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate.

The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist:

Solano Grass: Solano County, California: the vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south, and Travis Air Force Base to the west.

Wild Rice: Hays County, Texas.

## PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## US Federal Regulations

### SARA Title III – Section 302 Extremely Hazardous Substances

Not Listed

### SARA Title III – Section 311/312 Hazard Categories

Immediate, Delayed, Fire

### SARA Title III – Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

### SARA Title III – Section 313 Reportable Ingredients

Naphthalene (< 6%) – CAS No. 91-20-3

### CERCLA –

Reportable Quantity: Naphthalene (CAS 91-20-3) – 100 pounds

Calcium dodecylbenzenesulfonate (CAS 26264-06-2) 1000 pounds

### CALIFORNIA PROP 65 STATUS –

This product contains a chemical (naphthalene) known to the state of California to cause cancer.

## Section 16 - Other Information

SDS# TIC-HER8422921

Created date: 01/21/2015

Update date:

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 this data.*