



Safety Data Sheet

Preparation Date 20-May-2015

Revision date 04-Jun-2015

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Description: DUET (RiceOne)

Other means of identification

Item#: RC-9
Synonyms Not Available
Registration number(s) 71085-9

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Supplier Address

RiceCo LLC
5100 Poplar Avenue, Suite 2428
Memphis, Tennessee
38137

Emergency telephone number

Company Phone Number (888)835-1313
Emergency telephone number (504) 439-3140
(727) 374-5705

2. Hazards Identification

Classification

OSHA Regulatory Status

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

Acute toxicity - Oral	Category 5
Acute toxicity - Dermal	Category 5
Acute toxicity - Inhalation (Vapors)	Category 4

Label elements

EMERGENCY OVERVIEW

WARNING

hazard statements

MAY BE HARMFUL IF SWALLOWED
HARMFUL IF INHALED
May be harmful in contact with skin
Toxic to aquatic life



appearance light tan**Physical state** liquid**Odor** sweet**Precautionary Statements - Prevention**

Wash hands thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear eye/face protection
 Wear protective gloves

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

- Very toxic to aquatic life
- May cause long lasting harmful effects to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Propanil	709-98-8	41.2	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

Eye contact	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a physician or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
Protection of First-aiders	Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂).
 Use: Dry chemical. Water spray. alcohol-resistant foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion productsHydrogen chloride. Chlorine gas.

Explosion data

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with the skin and the eyes. Remove all sources of ignition. Wear protective gloves/clothing and eye/face protection.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Pick up and transfer to properly labelled containers. Ground and bond containers when transferring material. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. Handling and Storage

Precautions for safe handling

Handling Wear personal protective equipment. Avoid contact with skin and eyes. Remove all sources of ignition. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from light. Keep in properly labelled containers.

incompatible materials Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. If splashes are likely to occur, wear: Goggles.

Skin protection Wear protective gloves/clothing. Chemical resistant footwear plus socks. Long sleeved clothing.

Respiratory protection Select respirator with an organic vapor cartridge with prefilter approved for pesticides

(MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with organic vapor cartridge or canister with any N,P,R, or HE filter.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	liquid	Odor	sweet
appearance	light tan		
color	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	6	Approximately
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	Not Applicable	Seta Closed Cup
Evaporation Rate	No information available	
flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	4 X 10 ⁻⁵ mmHg @ 20 C/68 F (based on active ingredient)	
Vapor Density	>1	
Specific gravity	1.164	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
density	No information available
Bulk density	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under normal conditions. Hazardous polymerisation does not occur.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization	Hazardous polymerisation does not occur.
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Conditions to avoid

Strong acids. Strong bases. Strong oxidizing agents.

incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Hydrogen chloride. Organic acids. chloroanilines.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Duet
Oral LD50 (rat) = >3000 mg/kg
Dermal LD50 (rat) = >2000 mg/kg

Inhalation	May cause irritation of respiratory tract.
Eye contact	Moderately irritating to the eyes.
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	HARMFUL IF SWALLOWED.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propanil 709-98-8	-	= 4830 mg/kg (Rabbit)	= 2.8 mg/L (Rat) 4 h

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	The information below indicates whether any agency has listed any ingredient as a carcinogen. Bensulfuron methyl - Repeated and long term ingestion exposure with Bensulfuron methyl caused decreased body weight, increased liver weight, pathological changes in the liver and kidneys, anemia, and altered hematology and clinical chemistry. Single inhalation exposure caused decreased body weight with nasal and ocular discharge. In animal testing Bensulfuron methyl has not caused carcinogenicity or reproductive toxicity. Animal data show developmental effects only at exposure levels producing other toxic effects in the adult animal. No-observed-adverse-effect-level (NOAEL) for the development study was 300 mg/kg in rabbits. The NOAEL for maternal and fetal toxicity was 1320 mg/kg. Tests have shown that Bensulofuron methyl did not cause genetic damage in bacterial or mammalian cell cultures, or in animals.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Avoid repeated exposure.
Target organ effects	liver, kidney, Respiratory System, EYES, skin, Central Nervous System (CNS).
Aspiration hazard	No information available.

Numerical Measures of Toxicity - No information available

LD50 Oral > 3000 mg/kg (rat)
LD50 Dermal > 2000 mg/kg (rat)

12. Ecological Information

ecotoxicity

for active ingredient - Propanil

Bluegill sunfish 96 hr LC50 = 5.4 mg/L
 Rainbow trout 96 hr LC50 = 2.3 mg/L
 Quail Oral LD50 = 196 mg/kg
 Quail 8 day dietary LC50 = 2861 ppm
 Mallard duck 8 day dietary LC50 = 5627 ppm
 Daphnia magna 48 hr EC50 = 0.14 mg/L
 Estuarine and marine organism 48-96 hr EC50 = 0.4 - 5.8 mg/L

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Propanil 709-98-8	3.07

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods**Waste Disposal Method**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or 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.

Contaminated packaging

Refer to product label.

14. Transport Information

DOT

When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.

TDG

When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 4.22 and 1.45.1

IATA

UN-No	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (Propanil)
Hazard class	9
Packing group	PG III
Description	Marine Pollutant

IMDG/IMO

UN-No	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s (Propanil)
Hazard class	9
Packing group	PG III
Marine Pollutant	Marine Pollutant

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

Ventilation Control PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Keep out of Reach of Children. Toxic to fish and aquatic invertebrates. Harmful if swallowed. Harmful if absorbed through the skin. Do not store with food, feed, drugs, or clothing.

International Inventories

USINV	Not determined
DSL/NDSL	Not determined
EINECS/ ELINCS	Does not comply
ENCS	Does not comply
China	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply
TSCA	Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
Propanil - 709-98-8	1.0

SARA 311/312 Hazardous

Categorization

Acute health hazard	yes
Chronic health hazard	yes
Fire hazard	yes
Sudden release of pressure hazard	No
Reactive Hazard	yes

CERCLA

SARA Product RQ 0

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials

		Ingredients		
Propanil 709-98-8 (41.2)			X	Present

State Regulations**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Propanil		X			

International regulations**U.S. EPA Label information**

EPA Pesticide registration number 71085-9

16. Other Information

NFPA**HEALTH 2****flammability 1****Instability 0****Physical hazard -****Preparation Date**

20-May-2015

Revision date

04-Jun-2015

Revision Summary

Update section 14

End of MSDS