

# Safety Data Sheet: DUO-SPLIT

Supersedes Date 08/10/2010

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## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** DUO-SPLIT  
**Recommended use** Water based degreaser  
**Information on Manufacturer**  
CHEMSEARCH FE DIV. OF NCH CORP.  
BOX 152170  
IRVING, TX 75015

**Product Code** 0230  
**Chemical nature** Aqueous solution  
**Emergency Telephone Number**  
CHEMTREC® 800-424-9300  
**Telephone inquiry**  
972-579-2477

## 2. HAZARD IDENTIFICATION

**Color** Green

**Physical State** Liquid

**Odor** Slight

### GHS

#### Classification

##### Physical Hazards

None

##### Health Hazard

Serious Eye Damage/Eye Irritation

Skin Sensitization

Reproductive Toxicity

Carcinogenicity

##### Other hazards

None

Category 2A

Category 1

Category 2

Category 2

### Labeling

#### Signal Word

**WARNING**



#### Hazard Statements

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation H351 - Suspected of causing cancer

H361 - Suspected of damaging fertility or the unborn child

#### Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P261 - Avoid breathing vapor or mist.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace

P302+ P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container to an approved waste disposal plant.

13 % of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Tallow alkylamine ethoxylate surfactant	61791-26-2	10-30
Polyethylene glycol phenyl ether phosphate	39464-70-5	10-30
Sodium tripolyphosphate	7758-29-4	1-5
Diethanolamine	111-42-2	1-5

## 4. FIRST AID MEASURES

### General advice

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

### Eye Contact

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation

<b>Skin Contact</b>	develops and persists. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
<b>Ingestion</b>	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.
<b>Notes to physician</b>	May cause sensitization of susceptible persons.

## 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	> 201 °F / > 94 °C	<b>Method</b>	Seta closed cup
<b>Upper</b>	No data available	<b>Lower</b>	No data available
<b>Suitable Extinguishing Media</b>			
Water spray. Foam. Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
<b>Specific hazards arising from the chemical</b>			
Material can create slippery conditions.			
<b>Protective Equipment and Precautions for Firefighters</b>			
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b>NFPA</b>	<b>Health 1</b>	<b>Flammability 1</b>	<b>Instability 0</b>
<b>HMIS</b>	<b>Health 1</b>	<b>Flammability 1</b>	<b>Instability 0</b>

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
<b>Methods for Cleaning Up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
<b>Neutralizing Agent</b>	Not applicable.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.		
<b>Storage</b>	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.		
<b>Storage Temperature</b>	<b>Minimum</b>	35 °F / 2 °C	<b>Maximum</b>
<b>Storage Conditions</b>	<b>Indoor</b>	X	<b>Outdoor</b>
			<b>Heated</b>
			120 °F / 49 °C
			<b>Refrigerated</b>

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Tallow alkylamine ethoxylate surfactant	No data available	No data available	No data available
Polyethylene glycol phenyl ether phosphate	No data available	No data available	No data available
Sodium tripolyphosphate	No data available	No data available	No data available
Diethanolamine	TWA: 1 mg/m <sup>3</sup> Skin	No data available	TWA: 3 ppm TWA: 15 mg/m <sup>3</sup>

<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin Protection</b>	Wear suitable protective clothing, Impervious gloves.
<b>Respiratory Protection</b>	In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>General Hygiene Considerations</b>	Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid	<b>Viscosity</b>	Non viscous
<b>Color</b>	Green	<b>Odor</b>	Slight
<b>Odor Threshold</b>	Not applicable	<b>Appearance</b>	Transparent
<b>pH</b>	7.5	<b>Specific Gravity</b>	1.075

<b>Evaporation Rate</b>	0.41 (Butyl acetate=1)	<b>Percent Volatile (Volume)</b>	71.1
<b>VOC Content (%)</b>	0	<b>VOC Content (g/L)</b>	0
<b>Vapor Pressure</b>	15.6 mmHg @ 70°F	<b>Vapor Density</b>	0.6 (Air = 1.0)
<b>Solubility</b>	Completely soluble	<b>n-Octanol/Water Partition</b>	No data available
<b>Melting Point/Range</b>	No data available	<b>Decomposition Temperature</b>	No data available
<b>Boiling Point/Range</b>	212 °F / 100 °C	<b>Flammability (solid, gas)</b>	No data available
<b>Flash Point</b>	> 201 °F / > 94 °C	<b>Method</b>	Seta closed cup
<b>Autoignition Temperature</b>	No information available.		
<b>Upper</b>	No data available	<b>Lower</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable. Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	None known
<b>Incompatible Products</b>	Strong oxidizing agents, Strong acids, Reducing agents.
<b>Hazardous Decomposition Products</b>	Carbon oxides, Nitrogen oxides (NOx), Oxides of phosphorus, Phosphorus compounds.
<b>Possibility of Hazardous Reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

<b>Oral LD50</b>	No information available
<b>Dermal LD50</b>	No information available
<b>Inhalation LC50</b>	
<b>Gas</b>	No information available
<b>Mist</b>	No information available
<b>Vapor</b>	No information available

**Principle Route of Exposure** Skin contact, Eye contact, Inhalation.

**Primary Routes of Entry** Inhalation, Skin Absorption.

### Acute Effects

**Eyes** Causes eye irritation.

**Skin** May cause skin irritation. May cause allergic skin reaction.

**Inhalation** May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Toxicity** Liver and kidney injuries may occur. May cause sensitization by skin contact. Contains a known or suspected reproductive toxin. Contains a known or suspected carcinogen.

**Target Organ Effects** Respiratory system, Skin, Liver, Kidney, Central nervous system, Spleen, Testes, Immune system.

**Aggravated Medical Conditions** Respiratory disorders, Skin disorders, Liver disorders, Kidney disorders, Neurological disorders.

Component Information

### Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Tallow alkylamine ethoxylate surfactant	= 620 mg/kg ( Rat )	> 10 g/kg ( Rat )	no data available	no data available	no data available
Polyethylene glycol phenyl ether phosphate	no data available	no data available	no data available	no data available	no data available
Sodium tripolyphosphate	= 3100 mg/kg ( Rat )	> 7940 mg/kg ( Rabbit )	no data available	no data available	no data available
Diethanolamine	= 620 µL/kg ( Rat )	= 7640 µL/kg ( Rabbit )	no data available	no data available	no data available

### Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Tallow alkylamine ethoxylate surfactant	no data available	Skin sensitization	no data available	no data available	Immune system
Polyethylene glycol phenyl ether phosphate	no data available	no data available	no data available	no data available	no data available
Sodium tripolyphosphate	no data available	no data available	no data available	no data available	Spleen, kidneys
Diethanolamine	no data available	Skin sensitization	no data available	X	eyes, respiratory system, skin, CNS, liver, blood, testes, heart, kidney, immune system

### Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Tallow alkylamine ethoxylate surfactant	not applicable				

Polyethylene glycol phenyl ether phosphate	not applicable				
Sodium tripolyphosphate	not applicable				
Diethanolamine	A3	Group 2B	not applicable	X	not applicable

## 12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Tallow alkylamine ethoxylate surfactant	no data available	no data available	no data available	no data available	N/A
Polyethylene glycol phenyl ether phosphate	no data available	no data available	no data available	no data available	N/A
Sodium tripolyphosphate	no data available	LC50 = 1650 mg/L <i>Leuciscus idus</i> 48 h	no data available	no data available	N/A
Diethanolamine	EC50 = 7.8 mg/L <i>Desmodesmus subspicatus</i> 72 h EC50 2.1 - 2.3 mg/L <i>Pseudokirchneriella subcapitata</i> 96 h	LC50 4460 - 4980 mg/L <i>Pimephales promelas</i> 96 h LC50 1200 - 1580 mg/L <i>Pimephales promelas</i> 96 h LC50 600 - 1000 mg/L <i>Lepomis macrochirus</i> 96 h	EC50 = 73 mg/L 5 min EC50 > 16 mg/L 16 h	EC50= 55 mg/L 48 h	-2.18

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

## 13. DISPOSAL CONSIDERATIONS

Product Disposal

Dispose of in accordance with local regulations.

Container Disposal

Empty containers should be taken for local recycling, recovery, or waste disposal

## 14. TRANSPORT INFORMATION

DOT	Not regulated
TDG	Not regulated
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

## 15. REGULATORY INFORMATION

Inventories

TSCA

Complies

DSL

Complies

U.S. 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 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Diethanolamine	111-42-2	1-5	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Tallow alkylamine ethoxylate surfactant	Not applicable	Not applicable
Polyethylene glycol phenyl ether phosphate	Not applicable	Not applicable
Sodium tripolyphosphate	Not applicable	Not applicable

Diethanolamine

100 lb

Not applicable

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

D2B Toxic materials, D2A Very toxic materials.

**16. OTHER INFORMATION**

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<b>List of References.</b>	No information available.

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