



SAFETY DATA SHEET

Chlorothalonil 825 WDG

Revision Date 15-Jul-2018

Version 1

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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Chlorothalonil 825 WDG

Pure substance/mixture Mixture

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Fungicide
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address ADAMA Makhteshim Ltd
PO Box 60
Beer Sheva 8410001 Israel

For further information, please contact

Email address SDS@ADAMA.COM

Emergency Telephone

Emergency Telephone +972-03-6106666 Subscription no. 36789 (ADAMA Makhteshim Ltd.)

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute toxicity - Inhalation (Dusts/Mists) Category 3 - (H331)
Serious eye damage/eye irritation Category 2 - (H319)
Carcinogenicity Category 2 - (H351)
Specific target organ toxicity (single exposure) Category 3 - (H335)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

Label Elements

Hazard pictograms

**Signal word**

Danger

Hazard Statements

H319 - Causes serious eye irritation
 H331 - Toxic if inhaled
 H335 - May cause respiratory irritation
 H351 - Suspected of causing cancer
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

P102 - Keep out of reach of children
 P201 - Obtain special instructions before use
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	Weight-%	CAS No	EC No	GHS Classification	M-Factor
Chlorothalonil	78 - 87	1897-45-6	217-588-1	Acute Tox. 2 (H330) Eye Dam. 1 (H318) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Carc. 2 (H351)	M=10 M=10
Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	2 - 3	68425-94-5		Eye Irrit. 2 (H319)	
Reaction product of naphthalene, propan-2-ol, sulfonated and neutralized by caustic soda	1 - 2	N/A	939-368-0	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) STOT SE 3 (H335)	

Section 4: FIRST AID MEASURES

First aid measures**General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

Inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call

a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Ingestion

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms

None known

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Special hazards arising from the substance or mixture

No specific hazard known.

Advice for firefighters

Wear self-contained breathing apparatus and protective suit
Wear self contained breathing apparatus for fire fighting if necessary

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections

Other Information

See also section 8,13

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Chlorothalonil 1897-45-6					Skin

Exposure controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Hand Protection

Gloves made of plastic or rubber.

Body Protection

Suitable protective clothing, Gloves made of plastic or rubber, Suitable protective clothing, Apron, Rubber boots, Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

Use only with adequate ventilation.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Solid		
Color	: brown		
Odor	: Odorless		
Odor threshold	: No data available		
pH	: 6 - 9.5		
Melting point/freezing point °C	: No data available		
Boiling point/boiling range °C	: No data available		
Flash point °C	: No data available		Not Applicable
Evaporation rate	: Not Applicable		
Flammability (solid, gas)	: No data available		
Upper/lower flammability or explosive limits	: No data available		
Vapor pressure kPa	: No data available		
Vapor density	: No data available		
Relative density	: No data available		
Solubility(ies) mg/l	: No data available		
Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
Autoignition temperature °C	: No data available		
Decomposition temperature °C	: No data available		
Kinematic viscosity mm ² /s 40 °C	: Not Applicable		
Explosive properties	: Not an explosive		
Oxidizing properties	: No data available		
Other Information			
Bulk density g/ml	:		
Surface tension mN/m	: Not Applicable		

Section 10: STABILITY AND REACTIVITY

Reactivity

Not available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible Materials

No information available

Hazardous Decomposition Products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: >2000	Rat	OECD 423	
Dermal LD50 mg/kg	: >2000	Rat	OECD 402	
Inhalation LC50 mg/l/4h	: 0.53	Rat	OECD 403	
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitization	: Not a skin sensitizer	Guinea pig	OECD 406	

Chronic toxicity

Germ cell mutagenicity

Chemical Name
Chlorothalonil : Not classified

Carcinogenicity

Chemical Name
Chlorothalonil : Suspected of causing cancer

Reproductive toxicity

Chemical Name
Chlorothalonil : Not toxic for the reproductive system

STOT - single exposure

Chemical Name
Chlorothalonil : No data available

STOT - repeated exposure

Chemical Name
Chlorothalonil : No data available

Aspiration hazard

Chemical Name
Chlorothalonil : No data available

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Acute toxicity				
Fish 96-hour LC50 mg/l	: 0.052	Poecilia reticulata	OECD 203	
Crustacea 48-hour EC50 mg/l	: 0.28	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 0.52	Chlorella vulgaris	OECD 201	
Other plants EC50 mg/l	:			No data available

Terrestrial Toxicity

Birds Oral LD50 mg/kg

Bees Oral LD50 µg/bee

Persistence and degradability

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Abiotic Degradation			
Water DT50 days			

Soil DT50 days

Biodegradation

Bioaccumulative potential

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Partition Coefficient (n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow			

Bioconcentration factor (BCF)

Mobility in soil

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Adsorption/Desorption			

Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Improper disposal or reuse of this container may be dangerous and illegal.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

UN/ID No *	2588
Proper shipping name	PESTICIDE, SOLID, TOXIC, N.O.S. (Chlorothalonil)
Hazard Class	6.1
Packing Group	III
Marine pollutant	Yes
Special precautions for user	

RID/ADR

UN/ID No *	2588
Proper shipping name	PESTICIDE, SOLID, TOXIC, N.O.S. (Chlorothalonil)
Hazard Class	6.1
Packing Group	III
Environmental hazard	Yes
Special precautions for user	

ICAO/IATA

UN/ID No *	2588
Proper shipping name	PESTICIDE, SOLID, TOXIC, N.O.S. (Chlorothalonil)
Hazard Class	6.1
Packing Group	III

Environmental hazard	Yes
Special precautions for user	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable



* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

Section 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific to the substance or mixture

Section 16: OTHER INFORMATION

Revision Note Changes made to the last version are labeled with this sign ***.

List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet