



LUXEMBOURG

# SAFETY DATA SHEET

Issue date: 29/06/2015

## 1. Identification of the substance or mixture and of the supplier

Product: Potassium phosphonates (phosphites) + chlorothalonil SC  
Product name: Buggy 62.5 SC, Cosmos, Cosmos SC 62.5, Feniks 62.5 SC, LBG-31FCL  
Recommended use: Fungicide  
Supplier: Luxembourg Industries Ltd.  
27 Hamered St., Tel Aviv, 6812509  
ISRAEL  
Emergency phone number: +972 3 796 4300

## 2. Hazards identification

### Classification of the product according to the Global Harmonized System of Classification and Labelling of Chemicals (GHS).

**Hazard classification:** Carcinogenicity Category 2  
Eye damage/irritation Category 2B  
Sensitization-Skin Category 1  
Hazardous to the aquatic environment  
Acute hazard Category 1  
Long term hazard Category 1

### Label elements:

Pictograms:  Signal word: Warning

**Hazard statement(s):** H351 Suspected of causing cancer.  
H317 May cause an allergic skin reaction.  
H320 Causes eye irritation.  
H410 Very toxic to aquatic life with long lasting effects.

### Precautionary statement(s):

Prevention: P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P261 Avoid breathing mist/spray.  
P264 Wash hands and exposed skin thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves.  
P273 Avoid release to the environment.

PP + CLT SDS  
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# LUXEMBOURG INDUSTRIES LTD

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Response:	P308+P313	If exposed or concerned: Get medical advice/attention.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	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.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P362+P364	Take off contaminated clothing and wash it before reuse.
	P391	Collect spillage.
Storage:	P405	Store locked up.
Disposal:	P501	Dispose of contents/container in accordance with national/international regulations.

**Other hazards:** Not known

### 3. Information on ingredients contributing to hazard

Chemical name of the a.i.:	Potassium salts of phosphonic (phosphorous) acid	Tetrachloroisophthalonitrile
Common name of the a.i.:	Potassium phosphite	Chlorothalonil
Chemical formula:	$K_2HPO_3 + KH_2PO_3$	$C_8Cl_4N_2$
Structural formula:		
CAS No.:	13598-36-2 13977-65-6 + 13492-26-7	1897-45-6
Content:	375 g/L (phosphorous acid equivalent)	250 g/L

### 4. First-aid measures

<b>Ingestion:</b>	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.
<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
<b>Eyes:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin:</b>	Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

## **Most important symptoms and effects, both acute and delayed.**

Chlorothalonil was reported to cause irritation of skin and mucous membranes of the eye and respiratory tract on contact. Cases of allergic contact dermatitis have been reported. Occupational exposure to chlorothalonil was reported to induce asthma symptoms, which resolved cessation of exposure. No cases of systemic poisoning in humans have been reported in the published medical literature.

## **Indication of any immediate medical attention and special treatment needed.**

There is not specific antidote. Treat symptomatically.

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## **5. Fire-fighting measures**

<b>Suitable extinguishing media:</b>	Dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal; do not scatter the material.
<b>Specific hazards arising from the chemical:</b>	The product is not combustible. The substance itself does not burn but may decompose upon heating to produce irritating and possibly toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.
<b>Special protective equipment and precautions for fire-fighters:</b>	Wear chemical protective clothing and self-contained breathing apparatus (SCBA) with positive pressure.

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## **6. Accidental release measures**

<b>Personal precautions, protective equipment:</b>	Use personal protective equipment. Avoid breathing mist/vapours. Ensure adequate ventilation.
<b>Environmental precautions:</b>	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
<b>Methods and materials for containment and cleaning up:</b>	Stop leak. Contain product with an inert diking material. Vacuum up as much as possible. Place reclaimed product in a closed and properly labeled waste drum. Store drum in separate area until proper disposal. Wash thoroughly after handling.

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## **7. Handling and storage**

<b>Precautions for safe handling:</b>	Wear suitable protective clothing. Avoid contact with skin and eyes. Do not breathe mist/vapours. Ensure adequate ventilation. Wash hands and exposed skin thoroughly after handling.
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**Conditions for safe storage,  
including any incompatibilities:**

Store locked up. Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

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**8. Exposure controls / personal protection**

**Occupational exposure limits:**

Chlorothalonil:  
TLV (ACGIH): Not established  
TWA (8 hr): 0.1 mg/m<sup>3</sup>

**Appropriate engineering controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations low. Ensure that eyewash stations and safety showers are in proximity to the work-station location.

**Personal protective equipment:**

Long sleeve shirt, long pants, boots, chemical resistant gloves, dust or mist respirator, and protective eyewear.

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**9. Physical and chemical properties**

<b>Appearance:</b>	Off with to light brown, liquid
<b>Odour:</b>	Characteristic odor
<b>pH:</b>	6.0-7.0
<b>Melting point/freezing point:</b>	Not available
<b>Boiling point:</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Flash point:</b>	> 100°C
<b>Flammability:</b>	Not flammable
<b>Vapour pressure (25°C):</b>	Not available
<b>Vapour density:</b>	Not available
<b>Bulk density (20°C):</b>	1.5-1.6 g/mL
<b>Solubility in water (20°C):</b>	Suspension
<b>Partition coefficient n-octanol/water (25°C):</b>	Chlorothalonil Kow logP = 2.92 Potassium phosphite Not applicable
<b>Ignition temperature:</b>	Not applicable
<b>Decomposition temperature:</b>	Not available
<b>Viscosity (20°C):</b>	370 Cp, 3.70 poise

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**10. Stability and reactivity**

<b>Reactivity:</b>	Not corrosive to aluminum, copper and polyethylene. Slightly corrosive to zinc.
<b>Chemical stability:</b>	Stable under normal temperatures and pressure.
<b>Possibility of hazardous reactions:</b>	Not available.
<b>Conditions to avoid:</b>	Not available.

<b>Incompatible materials:</b>	The product is incompatible with strong acids, strong bases and oxidizing materials.
<b>Hazardous decomposition products:</b>	Not available.

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## 11. Toxicological information

### Acute toxicity

Oral LD <sub>50</sub> (rat, female):	>5000 mg/kg
Dermal LD <sub>50</sub> (rabbit):	>5000 mg/kg
Inhalation (rat):	>5.09 mg/L

### Skin corrosion/irritation

Skin irritation (rabbit):	Slightly irritant
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### Serious eye damage/irritation

Eye irritation (rabbit):	Mildly irritant
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### Respiratory or skin sensitization

Skin sensitizer

### Germ cell mutagenicity:

Not available

### Carcinogenicity:

Chlorothalonil: Limited evidence for carcinogenicity from animal's studies. Classified by IARC in group 2B, possibly carcinogenic to humans.  
PP: No carcinogenic potential

### Reproductive toxicity:

Not available

### STOT\* single exposure:

Not available

### STOT repeated exposure:

Not available

### Aspiration hazard:

Not available

## 12. Ecological information

### Ecotoxicity:

Birds LD <sub>50</sub> :	
Quail, <i>Coturnix Japonica</i> :	>2000 mg/Kg
Fish LC <sub>50</sub> (96 h):	
<i>Poecilia reticulata</i> :	0.307 mg/L
Bees LD <sub>50</sub> (48 h, oral):	
<i>Apis mellifera</i>	>100 µg/bee

### Persistence and degradability:

Chlorothalonil: Readily biodegradable  
PP: Not readily biodegradable

### Bioaccumulative potential:

Chlorothalonil: No bio-accumulative potential  
PP: Not available

### Mobility in soil:

Chlorothalonil: Low mobility to immobile.  
PP: Low mobility

### Other adverse effects:

Not available

\*Specific Target Organ Toxicity

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### 13. Disposal considerations

Dispose of in accordance with local regulations.

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### 14. Transport information

**UN No.:** 3082  
**Proper shipping name:** Environmentally hazardous substance, Liquid, N.O.S. (chlorothalonil)  
**Transport hazard class:** 9  
**Packaging group:** III  
**Marine pollutant:** Yes

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### 15. Regulatory information

This data sheet complies with the requirements of the Global Harmonized System of Classification and Labelling of chemicals (GHS).

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### 16. Other information

*The information contained herein is applicable solely to the indicated product, and does not relate to any other use of this product as described. Its use is intended by persons having technical skill and at their own discretion and risk. The information has been developed from sources reliable. This information is furnished without warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose is made with respect to the information contained herein.*

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