

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Printing date 04/02/2015

Reviewed on 04/02/2015

**Product identifier****Trade name:** Fumi-Cel®, Fumi-Strip®; U.S. EPA Reg. No. 72959-6**Relevant identified uses of the substance or mixture and uses advised against****Product description** Fumigant for Insect Control**Application of the substance / the mixture**

Fumigants used to treat raw agricultural commodities, fresh commodities, processed foods and non-food commodities.

**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

DEGESCH America, Inc.

153 Triangle Dr.

P.O. Box 116

Weyers Cave, VA 24486 USA

Telephone: (540) 234-9281 / 800-330-2525

Telefax: (540) 234-8225

www.degeschamerica.com

degesch@degeschamerica.com

**Emergency telephone number:**

For human or animal emergencies: 1-800-308-4856 (Rocky Mountain Poison and Drug Center)

For all other chemical emergencies: 1-800-424-9300 (Chemtrec)

Emergency and Information - DEGESCH America, Inc.: (540) 234-9281 / 800-330-2525

**Classification of the substance or mixture**

GHS02 Flame

Water-react. 1 H260 In contact with water releases flammable gases which may ignite spontaneously.



GHS06 Skull and crossbones

Acute Tox. 2 H330 Fatal if inhaled.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS05 GHS06 GHS09

- **Signal word** Danger

- **Hazard statements**

In contact with water releases flammable gases which may ignite spontaneously.

Fatal if inhaled.

Causes skin irritation.

Causes serious eye damage.

Very toxic to aquatic life.

- **Precautionary statements**

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear respiratory protection.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

If swallowed: Immediately call a poison center/doctor.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing.

Specific treatment is urgent (see supplementary first aid instructions on this Safety Data Sheet).

Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use for extinguishing: CO<sub>2</sub>, sand, extinguishing powder. If on skin: Wash with plenty of water.

Collect spillage.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a dry place. Store in a closed container.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Unknown acute toxicity:**

26 percent of the mixture consists of ingredient(s) of unknown toxicity.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 4

Fire = 4

Reactivity = 2

The substance demonstrates unusual reactivity with water.

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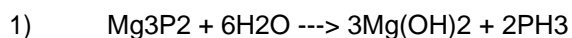
Reviewed on 04/02/2015

**Trade name: Fumi-Cel®, Fumi-Strip®; U.S. EPA Reg. No. 72959-6****· HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 4 | Health = 4     |
| FIRE       | 4 | Fire = 4       |
| REACTIVITY | 2 | Reactivity = 2 |

**· Other hazards** None known**\* 3 Composition/information on ingredients****· Chemical characterization: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous Components:**

|            |  |        |
|------------|--|--------|
| 12057-74-8 | Magnesium Phosphide<br>⚠ Water-react. 1, H260; ⚠ Acute Tox. 2, H300; ⚠ Aquatic Acute 1, H400 | 56%    |
|            | Proprietary<br>⚠ Eye Irrit. 2A, H319; STOT SE 3, H335  | 2-12%  |
|            | Proprietary<br>⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335                   | ≤ 2.5% |

**· Additional information:**Magtoxin Fumi-Cel & Fumi-Strip react with water to produce phosphine (hydrogen phosphide, PH<sub>3</sub>, CAS No. 7803-51-2) as shown in Equation 1.**\* 4 First-aid measures****· Description of first aid measures****· General information:**

Symptoms of overexposure are headache, dizziness, nausea, difficult breathing, vomiting, and diarrhea. In ALL cases of overexposure, get medical attention immediately. Take victim to a doctor or emergency treatment facility.

Have product container label or applicator's manual with you when calling a poison control center, doctor, or when going for treatment.

**· After inhalation:**

Get exposed 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. Contact a poison control center or doctor for treatment advice.

**· After skin contact:**

Take off contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**· After eye contact:**

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 eyes. Call a poison control center or doctor for treatment advice.

**· After swallowing:**

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless told to by a poison control center or doctor.

**· Information for doctor:****· Most important symptoms and effects, both acute and delayed**Magnesium phosphide fumigant products react with moisture from the air, acids and many other liquids to release phosphine gas (hydrogen phosphide, PH<sub>3</sub>). Mild exposure by inhalation causes malaise (indefinite feeling of sickness), headache, ringing in the ears, fatigue, nausea and pressure in the chest which is relieved

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by removal to fresh air. Moderate poisoning causes weakness, vomiting, pain just above the stomach, chest pain, diarrhea and dyspnea (difficulty breathing). Symptoms of severe poisoning may occur within a few hours to several days resulting in pulmonary edema and may lead to dizziness, cyanosis, unconsciousness, and death.

• **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### \* 5 Fire-fighting measures

• **Extinguishing media**

• **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

• **For safety reasons unsuitable extinguishing agents:** Water

• **Special hazards arising from the substance or mixture**

Phosphine (hydrogen phosphide, PH<sub>3</sub>)-air mixtures at concentrations above the LEL of 1.8% v/v (18,000 ppm) may ignite spontaneously. Ignition of high concentrations of phosphine gas (hydrogen phosphide, PH<sub>3</sub>) can product a very energetic reaction. Explosions can occur under these conditions and may cause severe personal injury. Never allow the buildup of phosphine gas (hydrogen phosphide, PH<sub>3</sub>) to exceed explosive concentrations. Open containers of metal phosphides in open air only and never in a flammable atmosphere. Do not confine spent or partially spent dust from metal phosphide fumigants as the slow release of phosphine gas (hydrogen phosphide, PH<sub>3</sub>) from these materials may result in the formation of an explosive atmosphere. Spontaneous ignition may occur if large quantities of magnesium phosphide are piled in contact with liquid water. This is particularly true if quantities of these materials are placed in an environment which can provide partial confinement of the hydrogen phosphide gas liberated by hydrolysis.

If incinerated, product will release the following toxic materials: Oxides of magnesium, phosphorous, nitrogen (NO<sub>x</sub>), carbon, aluminum and silicon, phosphine gas (hydrogen phosphide, PH<sub>3</sub>) and phosphoric acid.

• **Advice for firefighters**

Magnesium phosphide is not flammable by itself. However, it reacts readily with water to produce phosphine gas (hydrogen phosphide, PH<sub>3</sub>) which may ignite spontaneously in air at concentrations above its LEL of 1.8% v/v (18,000 ppm). The UEL of phosphine gas (hydrogen phosphide, PH<sub>3</sub>) is unknown. The paper covering and polyethylene matrix of the products are flammable.

• **Protective equipment:**

Wear SCBA if there is danger of exposure.

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Wear a NIOSH/MSHA approved full-face gas mask – phosphine gas canister combination may be used at levels up to 15 ppm or following manufacturers' use conditions instructions for escape . Above 15 ppm or in situations where the phosphine gas concentration is unknown, a NIOSH/MSHA approved SCBA must be worn.

### \* 6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures**

Respiratory protection will most likely be required during cleanup of spilled magnesium phosphide fumigants. If the concentration of phosphine (hydrogen phosphide, PH<sub>3</sub>) is unknown, NIOSH/MSHA approved SCBA or its equivalent must be worn. Full-face gas mask canister combinations may only be worn at concentrations no higher than 15 ppm.

• **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

• **Methods and material for containment and cleaning up:**

If possible, dispose of spilled material by use according to label instructions. Freshly spilled material which has not been contaminated by water or foreign matter may be placed into original or other gas-tight containers. Punctured pouches or containers may be temporarily repaired using aluminum tape. If the age of the spill is unknown or if the product has been contaminated with soil, debris, water, etc., gather up the spillage in small open buckets having a capacity no larger than about 1 gallon. Do not add more than about

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0.5 kg (1 lb.) to a bucket. If on-site wet-deactivation is not feasible, transport the uncovered buckets in open vehicles to a suitable area.

Small amounts of spillage, from about 2 to 4 kg (4 to 9 lbs.) may be spread out over the ground in an open area to be deactivated by atmospheric moisture. Alternatively, spilled magnesium phosphide fumigants may be deactivated by the wet method as described in the following:

Wet Deactivation of Spilled Fumi-Cel and Fumi-Strip Products:

1. Spilled Fumi-Cel and Fumi-Strip may be deactivated with water. Do not use detergent for the deactivation of these products. Fill the container in which the deactivation is to be performed with water to within a few inches of the top.
2. The spilled material is added slowly to the water. Products may ignite during wet deactivation if they are allowed to float to the surface. Add weights or otherwise ensure that the materials stay submerged until deactivation is complete. At no time should the deactivation container be covered.
3. Due to the reactivity of magnesium phosphide, additions of spilled product to the water should be made slowly and carefully. This should be done in open air and respiratory protection will probably be required.
4. Allow the mixture to stand, with occasional stirring, for about six hours. Do not cover the container. The mixture will then be safe for disposal.
5. Dispose of the deactivated material, with or without preliminary decanting, at a sanitary landfill or other suitable site approved by local authorities. Where permissible, the deactivation water containing spent dust may be poured into a storm sewer or out onto the ground.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## \* 7 Handling and storage

- **Handling:**

- **Precautions for safe handling** Store in a cool, dry place in tightly closed containers.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

Keep protective respiratory device available.

- **Conditions for safe storage, including any incompatibilities**

Store away from water, acids, bases, strong oxidizing agents and strong reducing agents.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Store products in a locked, dry, well-ventilated area away from heat. Post as a pesticide storage area. Do not store in buildings inhabited by humans or domestic animals.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Protect from heat and direct sunlight.

- **Specific end use(s)** No further relevant information available.

## \* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

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**Trade name: Fumi-Cel®, Fumi-Strip®; U.S. EPA Reg. No. 72959-6****Control parameters**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

**Components with occupational exposure limits:****Proprietary**

PEL Long-term value: 15\* mg/m<sup>3</sup>  
fume; \*total particulate

TLV Long-term value: 10\* mg/m<sup>3</sup>  
\*as inhalable fraction

**7803-51-2 phosphine**

PEL Long-term value: 0.4 mg/m<sup>3</sup>, 0.3 ppm

REL Short-term value: 1 mg/m<sup>3</sup>, 1 ppm  
Long-term value: 0.4 mg/m<sup>3</sup>, 0.3 ppm

TLV Short-term value: (1.4) mg/m<sup>3</sup>, (1) ppm  
Long-term value: (0.42) mg/m<sup>3</sup>, (0.3) NIC-0.1 ppm  
Ceiling limit value: NIC-0.5 ppm

• **Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

**Breathing equipment:**

Respiratory protection will most likely be required while using magnesium phosphide fumigants. If the concentration of phosphine (hydrogen phosphide, PH<sub>3</sub>) is unknown, NIOSH/MSHA approved SCBA or its equivalent must be worn. Full-face gas mask canister combinations may only be worn at concentrations no higher than 15 ppm.

**Protection of hands:**

Protective gloves

Wear dry gloves of cotton or other material if contact with tablets, pellets, or dust is likely. Gloves should remain dry after use. Aerate gloves and other clothing that may be contaminated in a well-ventilated area prior to laundering.

• **Material of gloves** Dry gloves of cotton or other material.

**Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

• **Eye protection:** Not required.

**\* 9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:****Form:**

Solid

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|   |   |
|---|---|
| <b>Color:</b>                                     | Dark charcoal gray  |
| · <b>Odor:</b>                                    | Garlic, carbide or decaying fish  |
| · <b>Odor threshold:</b>                          | Not determined.   |
| · <b>pH-value:</b>                                | Not applicable.   |
| · <b>Change in condition</b>                      |   |
| <b>Melting point/Melting range:</b>               | Mg3P2 = > 1000 °C (= > 1832 °F) (PH3 = -133.5 °C)                             |
| <b>Boiling point/Boiling range:</b>               | Mg3P2 = > 1000 °C (= > 1832 °F) (PH3 = -87.7 °C)                              |
| · <b>Flash point:</b>                             | Not determined  |
| · <b>Flammability (solid, gaseous):</b>           | Contact with water or acids liberates flammable gases.                        |
| · <b>Ignition temperature:</b>                    | Not determined  |
| · <b>Decomposition temperature:</b>               | Decomposes at ambient conditions when moisture is present.                    |
| · <b>Auto igniting:</b>                           | Spontaneously flammable in air.   |
| · <b>Danger of explosion:</b>                     | Not determined.   |
| · <b>Explosion limits:</b>                        |   |
| <b>Lower:</b>                                     | 1.8 Vol % (for PH3)   |
| <b>Upper:</b>                                     | Not established Vol % (for PH3)   |
| · <b>Vapor pressure:</b>                          | Mg3P2 = 0 mm Hg<br>PH3 = 40 mm Hg @ -129.4 °C                                 |
| · <b>Density @ 20 °C (68 °F):</b>                 | Mg3P2 = 2.06 g/cm <sup>3</sup> (= 17. lb/gal) (PH3 = 1.17 g/cm <sup>3</sup> ) |
| · <b>Relative density</b>                         | Not determined.   |
| · <b>Vapor density</b>                            | Not applicable.   |
| · <b>Evaporation rate</b>                         | Not applicable.   |
| · <b>Solubility in / Miscibility with Water:</b>  | Mg3P2 = Insoluble, reacts<br>PH3 = 26 cc in 100 ml at 17 °C                   |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.   |
| · <b>Viscosity:</b>                               |   |
| <b>Dynamic:</b>                                   | Not applicable.   |
| <b>Kinematic:</b>                                 | Not applicable.   |
| · <b>Solvent content:</b>                         |   |
| <b>Organic solvents:</b>                          | 0.0 %   |
| <b>Solids content:</b>                            | 100 %   |
| · <b>Other information</b>                        | No further relevant information available.                                    |

**\* 10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**  
Products are stable to most chemical reactions, except for hydrolysis. Products will react with moist air, liquid water, acids and some other liquids to produce toxic and flammable phosphine (hydrogen phosphide, PH3) gas.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**  
Contact with water releases flammable gases.

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Contact with water releases toxic gases.

- **Conditions to avoid:** Avoid prolonged exposure to air.
- **Incompatible materials:** Water, acids, bases, strong oxidizing agents and strong reducing agents.
- **Hazardous decomposition products:**  
Oxides of magnesium, phosphorous, nitrogen (NOx), carbon, aluminum, silicon, phosphine gas (hydrogen phosphide, PH<sub>3</sub>) and phosphoric acid.
- **Additional information:**  
Phosphine (hydrogen phosphide, PH<sub>3</sub>) gas may react with certain metals and cause corrosion, especially at higher temperatures and relative humidity. Metals such as copper, brass and other copper alloys, and precious metals such as gold and silver are susceptible to corrosion by phosphine. Small electric motors, smoke detectors, brass sprinkler heads, batteries and battery chargers, fork lifts, temperature monitoring systems, switching gears, communication devices, computers, calculators and other electrical equipment may be damaged by this gas. Phosphine (hydrogen phosphide, PH<sub>3</sub>) will also react with certain metallic salts and, therefore, sensitive items such as photographic film, some inorganic pigments, etc., should not be exposed.

**\* 11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**7803-51-2 phosphine**

Inhalative LC50/1 h 180 ppm (rat)

**12057-74-8 Magnesium Phosphide**

Oral LD50 &gt; 5000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** May be irritating.
- **on the eye:** Direct contact may cause eye irritation.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Very toxic
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**  
None of the ingredients are listed.

Group 1 - Carcinogenic to humans  
Group 2A - Probably carcinogenic to humans  
Group 2B - Possibly carcinogenic to humans  
Group 3 - Not classifiable as to its carcinogenicity to humans  
Group 4 - Probably not carcinogenic to humans

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

**\* 12 Ecological information**

- **Toxicity** The hazards for the aquatic environment are unknown.
- **Aquatic toxicity:**  
Avoid release into the environment. Runoff from fire control n water may cause pollution.

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- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even extremely small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**\* 13 Disposal considerations**

- **Waste treatment methods**
  - **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
When being disposed of, spilled or partially reacted Fumi-Cel and Fumi-Strip fumigants are considered hazardous wastes under existing Federal Regulations. If properly exposed, the grayish-white residual dust from these products will not be a hazardous waste and normally contain only a very small amount of unreacted magnesium phosphide. This waste will be safe for disposal. Properly exposed material is not a hazardous waste. However, the residuals from incompletely exposed Fumi-Cel or Fumi-Strip fumigants may require special care.
- Some local and state waste disposal regulations may vary from the following recommendations. Disposal procedures should be reviewed with appropriate authorities to ensure compliance with local regulations. Contact your State Pesticide or Environmental Control Agency or Hazardous Waste Specialist at the nearest EPA Regional Office for guidance.
1. Confinement of partially spent fumigant or residual dust, as in a closed container, or collection and storage of large quantities of fumigant may result in a fire or explosion hazard. Small amounts of phosphine (hydrogen phosphide, PH<sub>3</sub>) may be given off from unreacted magnesium phosphide, and confinement of the gas may result in a flash.
  2. In open areas, small amounts of spent residual dust may be disposed of on site by burial or by spreading over the land surface away from inhabited buildings.
  3. Residuals from Fumi-Cel and Fumi-Strip fumigants may also be collected and disposed of at a sanitary landfill, incinerator or other approved sites or by other procedures approved by Federal, State or Local authorities.
  4. From 1 to 2 kg (2 to 4 lbs.) of spent fumigant may be collected for disposal in an open 1-gallon bucket. Caution: Do not collect dust in large drum, dumpsters, plastic bags or other containers where confinement may occur. Transport the uncovered buckets in an open vehicle for disposal or deactivation.
- **Uncleaned packagings:**
  - **Recommendation:**  
Triple rinse containers with water and then offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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- **UN-Number**
- **DOT, ADR, IMDG, IATA**
- **UN proper shipping name**
- **DOT**
- **ADR**
- **IMDG**
- **IATA**
- **Transport hazard class(es)**

UN2011

Magnesium phosphide  
 UN2011 Magnesium phosphide, ENVIRONMENTALLY  
 HAZARDOUS  
 MAGNESIUM PHOSPHIDE, MARINE POLLUTANT  
 MAGNESIUM PHOSPHIDE

- **DOT**



- **Class**

4.3 Substances which, in contact with water, emit flammable gases

- **Label**

4.3, 6.1

- **ADR**



- **Class**

4.3 (WT2) Substances which, in contact with water, emit flammable gases

- **Label**

4.3, 6.1

- **IMDG**



- **Class**

4.3 Substances which, in contact with water, emit flammable gases

- **Label**

4.3/6.1

- **IATA**



- **Class**

4.3 Substances which, in contact with water, emit flammable gases

- **Label**

4.3 (6.1)

- **Packing group**

- **DOT, ADR, IMDG, IATA**

I

- **Environmental hazards:**

Product contains environmentally hazardous substances:  
 Magnesium Phosphide

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|  |  |
|--|--|
| · <b>Special marking (ADR):</b>  | Symbol (fish and tree)   |
| · <b>Special precautions for user</b>  | Warning: Substances which, in contact with water, emit flammable gases |
| · <b>Danger code (Kemler):</b>   | 462  |
| · <b>EMS Number:</b>   | F-G,S-N  |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       |  |
| · <b>DOT</b>   |  |
| · <b>Quantity limitations</b>  | On passenger aircraft/rail: Forbidden<br>On cargo aircraft only: 15 kg |
| <hr/>  |  |
| · <b>ADR</b>   |  |
| · <b>Excepted quantities (EQ)</b>  | Code: E0<br>Not permitted as Excepted Quantity                         |
| <hr/>  |  |
| · <b>IMDG</b>  |  |
| · <b>Limited quantities (LQ)</b>   | 0  |
| · <b>Excepted quantities (EQ)</b>  | Code: E0<br>Not permitted as Excepted Quantity                         |
| · <b>UN "Model Regulation":</b>  | UN2011, Magnesium phosphide, ENVIRONMENTALLY HAZARDOUS, 4.3, 6.1, I    |

**\* 15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

|  |
|--|
| · <b>Section 355 (extremely hazardous substances):</b> |
|--|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|  |
|--|
| · <b>Section 313 (Specific toxic chemical listings):</b> |
|--|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|   |
|---|
| · <b>TSCA (Toxic Substances Control Act):</b> |
|---|

|            |                     |
|------------|---------------------|
| 12057-74-8 | Magnesium Phosphide |
|------------|---------------------|

|  |             |
|--|-------------|
|  | Proprietary |
|--|-------------|

|  |             |
|--|-------------|
|  | Proprietary |
|--|-------------|

|  |             |
|--|-------------|
|  | Proprietary |
|--|-------------|

|  |             |
|--|-------------|
|  | Proprietary |
|--|-------------|

|  |             |
|--|-------------|
|  | Proprietary |
|--|-------------|

|  |             |
|--|-------------|
|  | Proprietary |
|--|-------------|

|                         |
|-------------------------|
| · <b>Proposition 65</b> |
|-------------------------|

|   |
|---|
| · <b>Chemicals known to cause cancer:</b> |
|---|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|  |
|--|
| · <b>Chemicals known to cause reproductive toxicity for females:</b> |
|--|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

|  |
|--|
| · <b>Chemicals known to cause reproductive toxicity for males:</b> |
|--|

|                                     |
|-------------------------------------|
| None of the ingredients are listed. |
|-------------------------------------|

(Cont. on page 12)

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Printing date 04/02/2015

Reviewed on 04/02/2015

**Trade name: Fumi-Cel®, Fumi-Strip®; U.S. EPA Reg. No. 72959-6**

|   |    |
|---|----|
| · <b>Chemicals known to cause developmental toxicity:</b>                 |    |
| None of the ingredients are listed.                                       |    |
| · <b>Carcinogenic categories</b>  |    |
| · <b>EPA (Environmental Protection Agency)</b>                            |    |
| None of the ingredients are listed.                                       |    |
| · <b>TLV (Threshold Limit Value established by ACGIH)</b>                 |    |
| Proprietary   | A4 |
| · <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b> |    |
| None of the ingredients are listed.                                       |    |

· **GHS label elements**

This product is labeled according to FIFRA.

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS02 GHS05 GHS06 GHS09

· **Signal word** Danger· **Hazard statements**

In contact with water releases flammable gases which may ignite spontaneously.

Fatal if inhaled.

Causes skin irritation.

Causes serious eye damage.

Very toxic to aquatic life.

· **Precautionary statements**

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear respiratory protection.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

If swallowed: Immediately call a poison center/doctor.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing.

Specific treatment is urgent (see supplementary first aid instructions on this Safety Data Sheet).

Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use for extinguishing: CO<sub>2</sub>, sand, extinguishing powder. If on skin: Wash with plenty of water.

Collect spillage.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a dry place. Store in a closed container.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Cont. on page 13)

**Safety Data Sheet (SDS)**

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Printing date 04/02/2015

Reviewed on 04/02/2015

**Trade name: Fumi-Cel®, Fumi-Strip®; U.S. EPA Reg. No. 72959-6**

|  |   |              |
|--|---|--------------|
| <ul style="list-style-type: none"> <li>• <b>National regulations:</b></li> </ul>                                       |   |              |
| The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances. |   |              |
| <ul style="list-style-type: none"> <li>• <b>State Right to Know</b></li> </ul>   |   |              |
| 12057-74-8   | Magnesium Phosphide   | 56%          |
|  | ⚠ Water-react. 1, H260; ⚠ Acute Tox. 2, H300; ⚠ Aquatic Acute 1, H400 |              |
|  | Proprietary   | Proprietary% |
|  | Proprietary   | 2-12%        |
|  | Proprietary   | 2-12%        |
|  | ⚠ Eye Irrit. 2A, H319; STOT SE 3, H335                                |              |
|  | Proprietary   | 2-12%        |
|  | Proprietary   | ≤2.5%        |
| All ingredients are listed.  |   |              |

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision** 04/02/2015 / -

- **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 Water-react. 1: Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 1

Acute Tox. 2: Acute toxicity, Hazard Category 2  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  
 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
 Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

- **\* Data compared to the previous version altered.**

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