



<b>SAFETY DATA SHEET</b> (EC) regulation n°1907/2006 annex II modified	Date issued : <b>30/01/2012</b>
<b>FUMAGRI OPP</b>	Date of last revision : <b>30/01/2012</b>


## 1. IDENTIFICATION OF MIXTURE AND OF THE COMPANY

<b>Product identifier</b>	:	<b>FUMAGRI OPP</b>
<b>Relevant identified uses of the mixture</b>	:	Bactericidal and fungicidal powder for aerial disinfection of empty premises and equipment for the feed- processing area (biocidal product type 4) and incubators and breeding area (biocidal product type 03)
<b>Uses advised against</b>	:	UE : Don't use for plant protection uses covered by regulation (EC)1107/2009 Treat away from humans and animals Treat without food/feed present.
<b>Details of the supplier of the safety data sheet</b>	:	<u>Supplier:</u> LCB 71260 LA SALLE (F) Tél. :+33 (0)3.85.36.81.00 Fax.:+33 (0)3.85.36.01.28  <u>SDS Information</u> : fds@lcb.fr
<b>Emergency telephone number</b>	:	France : ORFILA (INRS) : +33 (0)1.45.42.59.59 Base Nationale des Produits et Compositions : +33 (0)3.83.32.36.36 (24h/24h)

## 2. HAZARD IDENTIFICATION

**2.1 Classification of the mixture** The product is classified according to the meaning of the directive 1999/45/CE:  
IRRITANT

### 2.2 Label elements

<b>Hazard symbol</b>	:	Xi : IRRITANT	
<b>Risk phrases</b>	:	R36/37/38 : Irritating to eyes, respiratory system and skin.	
<b>Safety phrases</b>	:	S23.4: Do not breathe fumes. S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S37: Wear suitable gloves.	

### 2.3 Others hazards

Release of nitrogen oxide, nitrogen dioxide, carbon monoxide, ammonia and hydrocyanic acid, during the smoke-generating reaction.  
The smoke-producing powder may stoke up combustion in a fire.  
In case of dispersion of the powder in an aquatic environment, risk of acute localized destruction of fauna.  
In case of treatment of premises containing an aquarium or uncovered fish farming basin, toxic risk for fish.  
In the presence of green plants, risk of phytotoxicity.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### Substances presenting a health or environmental hazard

substance	%	registration Nr Reg. EC 1907/2006	INDEX Nr	EC Nr	CAS Nr	Classification dir. 67/548/EEC	Classification Reg.(EC)1272/2008
2-phenylphenol	10-20	01-2119511183-53	604-020-00-6	201-993-5	90-43-7	Xi R36/37/38 N R50	skin irrit. 2 H315 Eye irrit. 2 H 319 STOT SE 3 H335 aquatic acute 1 H400
Ammonium nitrate	>20	01-2119490981-27	-	229-347-8	6484-52-2	Xi R36 O R8	ox. Solid 3 H272 eye irr. 2 H319



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<u>Substances with occupational exposure limit values</u>	:	none
<u>Substances PBT or vPvB</u>	:	none
<u>Substances included in the candidate list to annex XIV</u> (EC) reg.n°1907/2006)	:	none
<u>Complete R-phrases and H-phrases</u>	:	See section 16

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

Immediate treatment	:	If the person is unconscious, have a first-aid provider place the individual in a safe lateral position and monitor breathing
In case of inhalation of fumes	:	Wear IPE require paragraph 8 and remove the person from the smoke fumes and have him/her breath fresh air. In case of persistent respiratory track irritation, contact a physician or emergency medical technicians, who will decide what to do.
In case of skin contact	:	Wash the skin with water; remove the dirty clothing and wash it
In case of contact with eyes	:	Wash immediately and abundantly for 10 to15 minutes with the appropriate eye rinse product or, failing this with drinking water. If the symptoms of irritation appear and persist several hours, consult an ophthalmologist.
In case of ingestion	:	Do not have the patient drink, eat or vomit and contact a physician or emergency medical technicians, who will decide what to do.
In case of burning	:	In case of superficial burns (blotches), cool off the wound by indirectly running cold water on it for 15 minutes

### 4.2 Most important symptoms and effects, both acute and delayed

#### Symptoms and acute effects:

By inhalation	:	with smoke : In case of extended exposure and/or a large overdosing : irritation of respiratory mucous membrane, coughing, respiratory difficulties under stress, tachycardia ; vomiting ; dizziness with powder : Coughing and respiratory difficulties.
By eye contact	:	with smoke Irritation of the ocular mucous membranes, watering, and even conjunctiva with powder: Slight temporary irritation, watering
by massive ingestion	:	Irritation of the buccal mucous membrane, digestive tube, vomiting, diarrhea, abdominal pain, digestive troubles
By skin contact with powder	:	Emaciation and itching

Symptoms and delayed effects : Extended chronic exposure may lead to emphysema.

### 4.3 Indication of any immediate medical attention and special treatment needed

Immediate treatment	:	symptomatic treatment
Contraindications	:	not available
Antidotes	:	not available
On-site equipment	:	eye wash and portative shower



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## 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media** : Water (with recommended retention of fire extinguishing water)  
ABC multi-purpose powder
- Unsuitable extinguishing media** : Emulsifying foams or organic stabilizers, sand
- Special hazards arising from the mixture:** : The smoke-generating reaction is exothermic  
possible release of toxic vapour  
Powder may stoke up combustion in a fire
- Advice for fire-fighter** : In case containers are extinguished or cooled with water, avoid discharging the water into the environment.  
Self-contained breathing equipment.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precaution, protective equipment and emergency procedures** : In case of important release,  
Aerate or ventilate to avoid dust formation  
Remove sources of ignition, sparks and any hot spot  
Wear gloves and an anti-dust mask or a nose/mouth half mask equipped with a P type filter (dust)  
Wear protective clothes.
- Environmental precautions** : Avoid spilling the product on the ground or pouring it in a stream or in a sink or in a sewer
- Methods and material for containment and cleaning up** : Containment techniques : not necessary  
  
Clean-up procedures : Collect the product by sucking up and then eliminating it in compliance with the regulations in force  
  
Never use : none
- Reference to other section** : Information about Individual Protective Equipment: see section 8  
Information about waste: see section 13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

- Safe handling** : Do not use the product directly to carpeting or linoleum, or in the immediate vicinity of cloth, curtains or other; keep any readily inflammable or combustible material outside a radius of 1.50 m from the product.  
In livestock rooms, keep the straw outside a radius of 1.50 m from the product; place the doses in a secure stainless steel container.  
Do not use in extremely dusty rooms (opaque dust cloud) or in the presence of inflammable vapour.  
If the room to be treated is in an EXAT- explosive atmosphere- zone, evaluate the reality of the room's EXAT character and, if necessary, temporarily suspend the EXAT character of the room by appropriate measure(s) during the usage time of the product.  
Do not enter the room while the treatment is being applied.
- Instruction of use** : Disconnect the smoke detectors and stop the ventilation  
Place the doses on a heat and fire resistant support (earthenware)  
In livestock rooms, keep the straw outside a radius of 1.50 m from the product; place the doses in a secure stainless steel container.  
Leave the room before the smoke spreads  
Close all the room's exits after starting of the treatment.  
Indicate at the accesses to the room that it is currently being treated and prohibit access.  
If it is absolutely necessary to enter the room during the treatment, the full individual protection equipment is required (see §8)  
If smoke is visible from the outside, inform the neighbours to avoid frightening them with the sight of the smoke. If necessary, particularly in a sensitive industrial or urban area, inform the fire department about the date and time of the treatment.  
Make sure that the doses used are cold before disposing of them.
- Hygiene measures** : Don't drink, eat or fume during utilisation  
Wash your hand after use  
Don't eat with work clothes



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### 7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage : Store in correctly ventilated and temperate rooms maintained at ambient temperature (optimum 15°C - 25°C) and protected from humidity and away from any ignition source  
If possible, store in an area fitted with a collection tank for fire extinguishing water.  
Store away from food and feedstuffs in the original packaging kept closed.  
Store away inflammable products

7.3 Specific end use(s) none

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Occupational exposure limits values: none

#### Exposure limit values of gas released:

mg/m <sup>3</sup>	United Kingdom		European union	
	8h	15 min	8h	15 min
ammonia	18	25	14	36
carbon monoxide	-	-	23	117
nitrogen dioxide	-	-	0.2ppm	-

Biological exposure indicators : none

Recommended monitoring procedures : Control of the work areas' atmosphere after treatment:  
After aeration/ventilation, the atmosphere of the rooms returns to normal  
In the case of confined rooms which cannot be sufficiently aired, control ammonia concentration with a DRAEGER type pump.

DNEL /PNEC ammonium nitrate : Workers :  
DNEL(long terme / oral): Non applicable  
DNEL(long terme / dermal) : 21.3 mg/kg/day  
DNEL(long terme / inhalation): 37.6 mg/m<sup>3</sup>  
Generale population:  
DNEL(long terme / oral) : 12.8 mg/kg/day  
DNEL(long terme / dermal) : 12.8 mg/kg/day  
DNEL(long terme / inhalation): 11.1 mg/m<sup>3</sup>

### 8.2 Exposure controls

Appropriate engineering controls : During the usage of the product, move all inflammable materials away.  
Indicate the treatment in progress at each entrance  
Prohibit access to the premises during treatment  
At the end of the application period, mechanically ventilate the work areas for a minimum of 1 hour in order to replenish the ambient air to 90%

#### Individual protection measures

Eyes/face protection : Wear protective glasses in case of dust (for example after a spreading)

Skin/hand protection : If direct contact with the fumigant powder with hands is necessary, wear non-pierced PVC gloves.  
(Use limit: occasional contact; after use, dispose of soiled gloves without rinsing them).  
Wear protective clothing if needed to enter the premises during treatment.

Respiratory protection : No individual protection equipment is required to apply the product under normal conditions.  
If it is absolutely necessary to enter the room during the treatment, wear a face mask equipped with an ABEK (class 2) + P (class 3) type filter.  
Stay in the room only for a very short time (1 minute maximum).  
In case there is a risk of inhaling the powder, for example, after an accidental spreading, wear an anti-dust mask or a half mask equipped with a P type class 2 "dust" filter  
(filter usage limit : breakdown time ; consult the filter supplier ; see also the standard EN 141)

Thermal hazard : To remove doses after utilization, wear thermal gloves.

Environmental exposure controls : Not available



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	:	Fine and fluid powder (floury aspect)
<b>Color</b>	:	white slightly iridescent
<b>Odour</b>	:	irritating odour
<b>Odour threshold</b>	:	Not available
<b>pH (1% in water 20°C)</b>	:	6.3 ± 0.2
	:	
<b>Melting point/freezing point</b>	:	non applicable
<b>Flash point</b>	:	Non applicable
<b>Evaporation rate</b>	:	Non applicable
<b>Flammability</b>	:	Non- inflammable (EEC A10)
<b>Upper explosive limits</b>	:	Not available
<b>Lower explosive limits</b>	:	Not available
<b>Vapour pressure (2-phenylphenol)</b>	:	0.0007mbar at 20°C 1 mbar at 100°C
<b>Vapour density</b>	:	Non applicable
<b>Relative density</b>	:	
<b>Pour density</b>	:	0.71 - 0.87 g/mL
<b>Tap density</b>	:	0.52 - 0.70 g/mL
<b>Solubility</b>	:	
<b>In water</b>	:	Partial (water-soluble components)
<b>In other solvents</b>	:	Not available
<b>Partition Coefficient n-octanol/eau</b>	:	3.18
<b>2-phenylphenol</b>	:	
<b>Auto-ignition temperature</b>	:	246°C (EEC A16)
<b>Decomposition temperature</b>	:	Not available
<b>Viscosity</b>	:	Not applicable
<b>Explosive properties</b>	:	Non- explosive (EEC A14)
<b>Oxidising properties</b>	:	Non-oxidising (EEC A17)
<b>9.2 <u>Others informations</u></b>	:	Class of dust explosion : St1



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## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	:	No risk of dangerous reactivity of the product in its original packaging and in normal storage conditions and handling. The principle of the implementation of the product is based on an exothermic reaction
<b>Chemical stability</b>	:	Product stable under normal handling and storage conditions
<b>Possibility of hazardous reaction</b>	:	No known hazardous reactions known under normal handling and storage conditions
<b>Conditions to avoid</b>	:	Product stable under normal handling and storage conditions.
<b>Incompatible materials</b>	:	No known incompatible materials with the powder During treatment: in rare cases, in presence of moisture or in interaction with other chemicals, 2-phenylphenol may cause a yellow or pink coloration on the surfaces, especially on polymer materials.
<b>Hazardous decomposition products</b>	:	Release of nitrogen oxide, nitrogen dioxide, carbon monoxide, ammonia and hydrocyanic acid, during the smoke-generating reaction.

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	:	No experimental data available.
2-phenylphenol	:	LD50 (oral) rat : 2980 mg/kg LD50 (cutaneous) rat : >2000 mg/kg
Ammonium nitrate	:	DL50 (oral) rat : 2950mg/kg DL50 (cut) rat : >5000 mg/kg CL50 (inhalation) rat : > 88.8 mg/l
<b>Irritation</b>	:	The powder is irritating for eyes
<b>Corrosivity</b>	:	The product is not corrosive for skin
<b>Sensitisation</b>	:	The product does not include any sensitizing ingredient
<b>Repeated dose toxicity</b>	:	No experimental data available In case of chronic exposure to the smoke, emphysema may appear.
<b>CMR effects</b>	:	The product does not include any CMR- ingredient known

## 12. ECOLOGICAL INFORMATION

<b>Toxicity</b>	:	No experimental data available.
2-phenylphenol	:	CL0 (Brachydanio rerio) : 2.3 mg/l (96 hours) CL100 (Brachydanio rerio) : 9 mg/l (96 hours) CE50 (daphnia magna) : 1.5 mg/l (24 hours) CI50 (Desmodesmus subspicatus) : 0.85 mg/l (72 hours)
Ammonium nitrate	:	CL50 poisson/48h: 74-102 mg/l CE50 Daphnia magna: 555 mg/l CE50 Algae: 83 mg/l
<b>Persistence and degradability</b>	:	
2-phenylphenol	:	Persistence: complete elimination in 2 days in sewage plant Biodegradability: > 75% (closed bottle method)
<b>Bioaccumulative Potential</b>	:	
2-phenylphenol	:	LogPow : 3,18 BCF : 70 – 100 (QSAR method)
<b>Mobility in soil</b>	:	not available
<b>Results of PBT and vPvB assessment</b>	:	not available
<b>Other adverse effects</b>	:	none



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### 13. DISPOSAL CONSIDERATIONS

<b>Waste treatment methods</b>	:	The powder is classified as hazardous waste. Dispose in accordance with national regulations or Community legislation, by a certified company The combustion residues are not classified as hazardous waste classification. Rinsed packaging can be recycled.
<b>Particular precautions</b>	:	Powder may stoke up the combustion during elimination by incineration
<b>EC regulatory provisions</b>	:	European commission Decision 2000/532/EC of 03 May 2000 establishing a list of wastes

### 14. TRANSPORT INFORMATION

Maximum quantity allowed for transport with full exemption

Inner packaging: ≤ 5 kg

Package: 30 kg gross

Label:



#### ADR/RID

UN Nr	Designation	Transport hazard class	packing group	Environmental hazards	Special precautions for user
UN 1479	oxidizing solid n.s.o (ammonium nitrate)	5.1	III	none	none

#### IMDG

UN Nr	Designation	Transport hazard class	packing group	Marine pollutant	FS/Ems	Special precautions for user
UN 1479	oxidizing solid n.s.o (ammonium nitrate)	5.1	III	non	F-A, S-Q	none

not concerned by transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

### 15. REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the mixture European regulatory

Biocidal product according council directive 98/8/CE

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.

Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work

Regulation (EC) No 396/2005 modified by Regulation (EC) No 304/2010 of 9 April 2010 including 2-phenylphenol to annex II from 01 January 2011.

regulation (EC) n°2037/2000 on substances that deplete the ozone layer : not concerned

regulation (EC) n°850/2004 on persistent organic pollutants : not concerned

regulation (EC) n°689/2008 concerning the export and import of dangerous chemicals : not concerned

Directive 96/82/CEE (SEVESO II) : not concerned

regulation (EC) n°1907/2006 (REACH) :

• Authorisation (title VII regulation (EC) n°1907/2006) : not concerned

• Restriction (title VIII regulation (EC) n°1907/2006) : not concerned

15.2 Chemical safety assessment : not available



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## 16. OTHER INFORMATION

<b>Last revision</b>	:	1 <sup>st</sup> version
<b>Legend to abbreviations and acronyms</b>	:	LD: Lethal dose C <sub>L</sub> : Lethal concentration C <sub>E</sub> : Efficacy concentration PNEC: Predicted No Effect Concentration DNEL: derived no-effect level PBT: Persistent Bioaccumulative Toxic vPvB: very Persistent and very bioaccumulative
<b>Literature reference</b>	:	Physicochemical trials and the exposure risk study conducted on the product safety data sheets on the ingredients the INRS material safety data sheet ED 98 INRS documentary notes ED 984 - ND 2113 - ND 2065 - ND 2245
<b>List of relevant R phrases and H phrases describe in section 3</b>	:	R8 : Contact with combustible material may cause fire. R36 : Irritating to eyes R36/37/38: Irritating to eyes, respiratory system and skin. R50 : very toxic to aquatic organisms H272: May intensify fire; oxidiser. H315: causes skin irritation H319: causes serious eye irritation H335: may cause respiratory irritation H400: very toxic to aquatic life
<b>Advice on training appropriate for workers</b>	:	Safety training for biocidal chemical products
<b>Classification according UE regulation n° 1272/2008</b>	:	not available

"IMPORTANT: This safety data sheet is additional to the technical operating instructions but does not replace them. All the information and recommendations are given in good faith and accurately represent the current state of knowledge. Users are responsible for verifying and validating beforehand the use of the product under the required conditions and for reporting any observations. Users are further alerted to the potential risks incurred if a product is used for purposes other than those for which it is intended. This sheet does not in any way exempt the user from knowing and applying all the texts regulating his activity. He will be solely responsible for taking the necessary precautions when using the product. The statutory regulations mentioned are simply intended to assist the user in fulfilling his obligations with regard to the use of a dangerous product. This list must not be regarded as exhaustive. It does not exempt the user from ensuring that he is not subject to other obligations because of texts not mentioned, which govern storage and use of the product for which he solely is responsible."