

SAFETY FACT SHEET

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Prepared in accordance with 91/155/EEC and "Legislation on Preparation and Distribution of Safety Fact Sheet on Hazardous Substances and Products" (26.12.2008-27092 Mük)

% 57 FUMIPHOS

Issue No :2

Form No: 132001

Preparation Date: 14.06.2010

Revision and Issue Date: 14.06.2011

1. SUBSTANCE AND COMPANY IDENTIFICATION

1.1. Information About the Substance	
Commercial Name	%57 FUMIPHOS
Product Code/Number	132001
Chemical Name	Aluminium phosphite
CAS Number	20859-73—8
EINEC s Number	244-088-0
Molecule Formula	A/P
Structural Formula	
1.2 Usage / Application Field	
	Fumigant Plant protection product
1.3 Manufacturer / Importer / Deliverer	
1.3.1. Manufacturer	
Company Name	ZONE YONGFENG CHEMICAL PLANT www.yongfengcn.com
Address	191 Ji Da East Road Jining City 272025 Shandong, China
Telephone	86 537 2384567
Fax	86 537 2351666
E-mail	alplucy@public.qd.sd.cn
1.3.2. Deliverer	
Company Name	AGRİFUM TARIM VE SAN. ÜRÜN.TİC.LTD.ŞTİ. www.agrifum.com
Address	Cami şerif Mah. 105 Cad. Palmiye İş Hanı No: 9/A 33060/ MERSİN
Telephone	0 324 238 93 77
Fax	0 324 238 25 22
E-mail	info@agrifum.com
1.4. Instructor of safety fact sheet	
	Rıfat GÖZTAŞ info@agrifum.com 0 533 2762412
1.5. Contact in emergency cases	

Company emergency call	0 324 238 93 77
International emergency call	+86 537 2981688
Emergency First Aid Center	112
Poison Consultation Center	114
Fire Brigade	110

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2.COMPOSITION/INGREDIENTS

2.1. Chemical Description

2.1.1 Description %57 Aluminium Phosphite – Solid chemical substance

2.1.2 Hazardous substances in its content:

SUBSTANCE OR COMPOUND	EINECS NO	CAS NO	INGREDIENT %	CLASSIFICATION
Aluminium Phosphite	244-088-0	20859-73-8	57	F ⁺ ; R15/29 T ⁺ ; R28 R32 N;R50
Ammonium Carbamate	214-185-2	1111-78-0	43	Not classified as hazardous according to 67/548/EEC APPENDIX 1.

2.1.3 Additional Advice: All of the risk definiton sentences related to the issue are given in Section 16.

3. DEFINITON OF HAZARDS

3.1. Classification/ Hazard definiton:

Classified according to local legislations¹ and EU directives and 99/45/EEC²

3.1.1. Hazard Classification

- F⁺; R15/29
- T⁺; R28
- R32
- N;R50

3.1.2. Hazard Descriptions/warnings

F ⁺	Very easily flammable	
R15/29	Releases toxic and easily flammable gas when contacted with water.	
T ⁺	Highly toxic	
R28	Highly toxic if swallowed.	
R32	Releases much toxic gas in contact with acids.	
N	Hazardous for environment.	
R50	Highly toxic for aquatic organisms.	

3.2. Potential Acute Effects on Health

- Primary exposure path is eye, skin and respiratory system.

In the eye	It may cause slight irritation in eyes in direct contact. It must be kept in mind that tear will trigger the hazard that appears as a result of reaction of the substance with water.
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On the skin	It may cause slight irritation on the skin in direct contact. A negligible absorbtion occurs as a
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result of short contact of pellets and tablets but an undesirable high systemic absorption of Hydrogen occurring as a result of contact of wet hands with the substance is expected

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	High dosage absorption of Hydrogen Phosphite [#7803-51-2] gas that occurs as a result of contact with moisture, water and acids causes oxidative stress and methaemoglobinemia ³ in mammalian cells.
If inhaled	High dosage absorption of Hydrogen Phosphite [#7803-51-2] gas that occurs as a result of contact with moisture, water and acids causes oxidative stress and methaemoglobinemia ³ in mammalian cells. It can result in headache, dizziness, nausea, feeling of confinement, coronary and kidney insufficiency, uremia, lung edema, liver damage, changes in EKG, difficulty in breathing and high death risk related to these factors.
If swallowed	Aluminium phosphite is a rodenticide. It is extremely toxic if swallowed. It has risks that may result in hyperemia, small perivascular cerebral hemorrhage, brain edema, liver and kidney damage if swallowed and death if swallowed in high quantities.
Long term effects	There is a risk of accumulation of poisoning amount in long term exposure. It causes oxidative stress and methaemoglobinemia. It may result in coronary and kidney insufficiency, uremia, lung edema, cerebral hemorrhage, liver and kidney damage, changes in EKG, difficulty in breathing and high death risk related to these factors.
3.3. Its effects on the Environment	
<ul style="list-style-type: none">It is highly toxic for aquatic organisms.	
In case of accident (spillage/leakage)	Take necessary action and behave in accordance with local directives if it spreads to the environment.
3.4 Classification System:	
Classification is in accordance with current EU and Turkey local directives related with hazardous substances and their preparation.	
3.5. Additional Information	
The product has been labeled according to the principles laid down on this document in accordance with local directives. See Section 15 for Label information. See Section 11 for toxicology information.	

4. FIRST AID ADVICE

4.1 Description of first aid measures

4.1.1. General warnings: If the patient is unconscious and has spasm, do not give water or force him/her to vomit. It inflames when contacted with moisture, water and acids. In order to do dust cleaning in the usage area, pressure adjusting air blowing compressor is recommended. Pressure of the device may not be suitable for dust inside eyes. This requires approval of an optician. High pressurized air may cause damage in the eyes.

4.1.2 Respiration Take the staff into fresh air. Take necessary measures in order for him/her to keep body temperature and rest.

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<p>Immediately apply medical therapy. Connect to a breathing device if breathing has stopped. Authorized medical staff must give oxygen to the patient in a controlled manner, accompany him until the patient breathes himself</p>
<p>4.1.3 Contact with the skin: Contact of this substance with wet skin causes highly toxic gases absorption through skin. Clear the substance-contaminated skin with a dry brush, clean with plenty of water after clearing process. Take off contaminated clothes and wash before wearing them again. Dirty clothes must be cleared off the substance by brushing before washing.</p>
<p>4.1.4. Contact with the eye: Eyes must be cleared from substance by wiping with a dry and clean cloth or sterile bandage if possible. If there is a lens, it must be removed and cleaning with cloth must be repeated. After being sure that there is no substance left, continue washing with plenty of water for minimum 15 minutes. Consult to an optician for medical assistance as soon as possible.</p>
<p>4.1.5 Swallowing: Do not give anything orally. Do not force him/her to vomit. Call a doctor immediately or take the patient to emergency unit. The doctor must make the decision to force to vomit.</p>
<p>4.16. Note for the doctor: Symptoms of Phosphin Poisoning;</p> <ul style="list-style-type: none">• Hyperemia may occur.• It may cause slight perivascular cerebral hemorrhage and brain edema.• Phosphin poisoning may cause lung edema, liver advanced serum GOT, LSH and alkaline phosphatase, reduces prothrombin, hemorrhage and jaundice and kidney hematuria and anuria. Pathology hypoxia feature.• Exposure to heavy substance over tolerable level for days and weeks may cause poisoning. <p>Therapy Suggestions;</p> <ul style="list-style-type: none">• Therapy is asymptomatic and covers those;• Keep the patient hot and calm and give 1-2 days rest.• If the patient complains vomiting and high blood sugar, suitable solutions must be applied.• In case of severe poisoning, oxygen and cardiac and circulatory stimulators are recommended. (Intensive Care). When lung edema is detected, steroid therapy must be considered and if necessary blood transfusion with close medical surveillance is recommended. In cases of remarkable lung edema, venesection must be performed under vein pressure control; in case of cardiac glycosides chemoconcentration, venesection may cause drowning;

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- **In cases of progressive edema of lungs**, edema liquid must be collected continuously and entubation must be done immediately with extreme pressure respiration with oxygen and all measures must be taken in drowning therapy. In case of kidney insufficiency, extracorporeal hemodialysis is required;
- **A specific antidote is not known**; After swallowing, make the patient vomit and empty his/her stomach, wash the stomach with diluted potassium permanganate solution or magnesium peroxide until the liquid extracted does not smell like garlic/carbide.

5. FIRE FIGHTING MEASURES

5.1 General Information

The product releases toxic Phosphin gas when exposed to atmospheric moisture.
Avoid inhaling gases that are liberated during fire.
Move the staff to a location where fire cannot reach.

5.2. Suitable extinguishing media:

- Dry sand
- Dry chemical powder
- Carbon dioxide

5.3. Specific hazards of the substance during fire:

As a result of burning;

- Phosphoric acid aerosols
- Phosphor Pentoxide
- Azote oxides
- Carbon monoxide
- Carbon dioxide

5.4 Special protective equipment

Extinguishing staff must wear AS/NSZ 1715,1716 type full protective clothes with independent, mobile respiratory device.

5.5. Other information

Cool the packages in fire location with water.
Avoid polluting the environment by spending too much fire extinguisher.
Do not allow fire fighting remnants to reach sewage system and underground waters.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal safety measures/ Protection of the staff:

Apply exposure control and personal protective measures detailed in Section 8.

6.2. Environment protective measures:

Unsuitable discharging to the environment may cause soil and water pollution.
Prevent contamination to sewage system / surface water / underground water.
If it leaks into waters or sewage system, inform the official authorities immediately.

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6.3. Cleaning /Collection/ Disposal methods:

Collect by preventing powder formation mechanically, if possible by vacuuming.

Prevent its reaction with water and acids.
Obey local directives.
Place in a suitable container and dispose according to article 13.

6.4. Additional warnings:

Phosphin density over %30 may cause self inflammation.
Diphosphin pollutions in the released phosphin may trigger inflammation.
See Section 7 for information on safe usage.
See Section 8 for information on personal protective equipment.
See Section 13 for information on disposal.

7. USAGE / HANDLING/ STORAGE

7.1. Handling / Storage: In order to secure health, safety and environment, provisions of “Legislation on Health and Safety Measures in Works with Chemical Substances” related with measures to be taken in jobs and workplaces handling hazardous chemicals and that was enacted after being published on 26/12/2003 dated and 25328 numbered Official Gazette must be obeyed, attention must be paid on planning of working principles in the workplace and organizational measures.

Warning for safe usage:

Industrial hygiene standards must be obeyed to prevent swallowing, contact with eye and skin while using chemicals.
After working, clean your hands and clothes with a dry brush and then wash with plenty of water and dry well.
It inflammes easily as a result of contact with water, acid and moisture in the air and toxic gases occur.
It must be assured that there is proper ventilation in the workplace.
Smoking, eating and drinking in the application area must be forbidden.
Prevent powder formation and powder accumulation in the workplace against fire that may happen as a result of gas formation.
It is not used at homes.

Technical Measures

Check technical adequacy of the ventilation system and take necessary measures.

Environmental measures

Prevent contamination into sewage system/ surface waters/underground waters.
If it leaks into waters or sewage system, inform the official authorities immediately.

Rules for handling

Prevent direct contact with the substance.
Use personal protective equipment.
Assure that the working place is well ventilated.
Avoid eye and skin contact.
Do not approach places that may cause inflammation, do not smoke.

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Warnings for protection against fire and explosion:

Keep fire fighting equipment ready. Sparks that occur as a result of statical electric release may cause fire, be sure that earthing system of the workplace is reliable.

Additional Information

Take necessary measures to protect original packing against damage.

7.2 Storage

Features of stores and packages:

<p>Austenitic steel vessels are favourable. Store the substance in its original packing. It must not be exposed to direct sunlight. Take necessary measures to prevent boxes from collapsing. Smoking, eating and drinking must be forbidden in the place.</p>
<p>The store must be cool and dry. Provide good ventilation. Warning for shared stores Obey general rules of chemical storage. Keep away from eating, drinking and animal feeding sections. Keep away from open sources of flame, spark and heat. It must never contact with moisture, acid and water.</p>
<p>More information on storage conditions No change beyond tolerable limits occurs in physical, chemical and biological features for two years under normal storage conditions. Store must be cleaned regularly, ventilation system, heat and moisture control must be done regularly. All substances must be kept closed in their original packs when not used.</p>

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Occupational Exposure Limits:

Substance or Compound	EINECs ⁴ No	CAS ⁵ No	Ingredient %	Limit value				Upper Limit	Resource
				TWA ⁶ (8 hours)		STEL ⁷ (15 minutes)			
				mg/m ³ ⁸	ppm ⁹	mg/m ³	ppm		
Aluminium Phosphite	244-088-0	20859-73-8	57	-	3	-	-	-	OEL ¹⁰
Hydrogen Phosphite	232-260-8	7803-51-2	-	0,14	0,1	0,28	0,2	-	Turkey

8.2. Exposure Controls: Equipment and appropriate protection methods that will be used where personal protection is necessary have been defined according to the 9.2.2004 dated and 25368 numbered "Legislation on Personal Protective Equipment". Be sure that you are using the proper personal protective equipment according to the related legislation.

8.2.1 Information on Technical System Design:
In order to prevent the risk of exceeding occupational exposure limits of the product, assure that working place is properly ventilated and cleaned. Install air filtering systems according to NIOSH¹¹ and CEN¹² systems where necessary.

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Design the usage area in such a way to prevent the product from spreading around. See Section 7.
8.2.2. Personal protective equipment/gear
8.2.2.1. General protection and hygiene measures: Use only in well ventilated places. Keep away from food products, drinks and animal feed. Take off contaminated and dirty clothes immediately.
Wash your hands after cleaning with a dry brush or cloth in breaks and after work. Avoid direct contact with eye and skin. Do not eat or drink anything while using this substance. Do not smoke. Neglecting recommended personal protection measures increases the risk of severe poisoning.

<p>8.2.2.2. Measures related to respiration If air oriented exposure guide data and/or comfort level has been exceeded, use an approved respiratory device with air cleaner filter. Use an approved self positive pressurized breathing mask for emergency cases.</p>
<p>8.2.2.3 Hand protection: Use chemical substance and water tight gloves classified under EN-3734-2 and EN374-3 standart. Glove must be made of latex. In long and frequent contact; Physical life of the selected gloves must be longer than the planned usage time.</p>
<p>8.2.2.4. Eye protection: Use protective glasses covering the whole face and preventing contact of powder with eyes.</p>
<p>8.2.2.5 Protection of the body: Use chemical substance and water tight protective cloth covering the whole body.</p>
<p>8.2.3. Environmental Exposure Controls: Work according to the instructions in order to prevent its effects on people and environment.</p>

9. PHYSICAL AND CHEMICAL FEATURES

9.1.General Information	
Appearance (Atmospher Temperature)	Solid
Colour	Green
Odour	Smell of intense garlic or fish
9.2 Important Health Safety and Environment Information	
Ph (%10)	Not identified.
Boiling point °C	>982
Inflammation temperature	>100 (Phosphadin)
Sparkling Point (PM Closed Vessel) °C	Not identified.

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Self inflammation temperature °C	>400
Lowest Sparkling Limit %	1.8 (Phosphadin)
Highest Sparkling Limit (g/m ³)	Not identified.
Thermic degradation temperature °C	>500
Density g/cm ³ @20 °C	Not identified.
Steam Pressure @25 °C Pa	<10 ⁻⁵
Explosiveness	Not explosive.
Oxidization	Oxidative.
Solubility	
In water	Reacts in contact with water. (See Section 10.6)
9.3 Other information	
Distribution Coefficient log Pow	It is impossible to detect because of hydrolysis.
<p><small>Note: Features above have been detected according to appendix-3 Section A of Legislation on Classification, Packaging and Labeling of Hazardous Substances and Products or another comparable method.</small></p>	

10. STABILITY AND REACTIVITY

10.1 Chemical Stability : It preserves its stability if properly used and stored.	
10.2 Thermic decomposition / cases to avoid (Under temperature, pressure, light, shock and similar conditions that may cause hazardous reactions and that must be avoided): Thermic composition happens over 400 °C.	
10.3 Hazardous reactions/materials to avoid (With water, air, acids, bases, oxidizers or any other specific substance that may caused hazardous reaction): Highly toxic and inflammable Hydrogen Phosphit occurs as a result of extremely severe reaction when contacted ith moisture, water and acids.	
10.4. Hazardous decomposition substances:	
Probability of turning into unstable products by decomposition	There is no such probablity şb normal storage conditions.
Need for stabilizors and existence of stabilizors	No data
Probablity of hazardous exothermic reaction	No data
If any, importance of change in physical appearance on safety	No data
If any, hazardous decomposition type in contact with water	Extremely inflammable gases occur in its contact with water or moisture in the air.
Hazardous Decomposition Products	<ul style="list-style-type: none"> Hydrogen Phosphite Phosphor penta oxide Phosphoric acid Ammonia Azote oxides Carbonmonoxide Carbondioxide
Hazardous Polymerization Products	Hazardous polymerization does not happen.

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10.5 Inconsistencies : Water, acids, moisture
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11. INFORMATION ON TOXICOLOGY

11.1 General				
Primary exposure in normal using conditions happens through skin,eye contact and respiration.				
11.2 Acute toxicity				
Substance or Compound	INGREDIENT %	LD50 Oral (From the mouth)	LD50 Dermal (With skin)	LC50 Inhalation (through breathing)
Aluminium Phosphit [#20859-73-8]	57	8,7 mg/kg	-	-
Hydrogen Phosphit [#7803-51-2]	-	-	-	0,015 mg/l/4 sa
11.3. Corrosiveness and Irrigation effect				
In the eye	Not corrosive. It may cause slight irritation in the eye in direct contact.			
On the skin	Not corrosive. It may cause slight irritation on the skin in direct contact.			
11.4 Chronic Toxicity (Cancerogenic, Mutagenic and Toxic Effect on Reproduction):				

Cancerogenic Effect	No cancerogenic finding was detected.
Mutageniz effect	No mutageniz finding was detected
Toxicity on Reproduction	No toxic effect on reproduction was detected.
11.5 Other Toxicologic Effects:	
Allergic effect	There is no known allergic effect.
Effect in Repeated Doses	In repeated exposure there is the risk of accumulation of poisoning quantity. It causes oxidative stres and methaemoglobinemia.. It may result in coronary and kidney insufficiency, uremia, lung edema, cerebral hemorrhage, liver damage, changes in EKG, difficulty in breathing and high death risk related to these factors.
Narcotic Effect	Inhaling high doses of Hydrogen Phosphite [#7803-51-2] that occurs as a result of contact with moisture, water and acids may cause sudden loss of consciousness, fainting, coma.
Sensitization	It has no sensitivizor effect.
Developmental Toxicologic Effects	It has no teratogenic effect.
Fertility	It has no known effect.
11.6 Effects on Health:	
In the eye	It may cause slight irritation in eyes in direct contact. It must be kept in mind that tear will trigger the hazard that occurs as a result of reaction of the substance with water.
On the skin	It may cause slight irritation on the skin in direct contact. A negligible absorbtion occurs as a result of short contact of pellets and tablets but an undesirable high systemic absorbtion of Hydrogen occurring as a result of contact of wet hands with the substance is expected

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	High dosage absorbtion of Hydrogen Phosphite [#7803-51-2] gas that occurs as a result of contact with moisture, water and acids causes oxidative stress and methaemoglobinemia ³ in mammalian cells.
If inhaled	High dosage absorbtion of Hydrogen Phosphite [#7803-51-2] gas that occurs as a result of contact with moisture, water and acids causes oxidative stress and methaemoglobinemia ³ in mammalian cells. It can result in headache, dizziness, nausea, feeling of confinement, coronary and kidney insufficiency, uremia, lung edema, liver damage, changes in EKG, difficulty in breathing and high death risk related to these factors.
If swallowed	Aluminium phosphite is a rodentisitis. It is extremely toxic if swallowed. It has risks that may result in hypermia, small perivascular cerebral hemorrhage, brain edema, liver and kidney damage if swallowed and death if swallowed in high quantities.
Target organs	Lungs, Livers, Heart and Kidneys
Medical Symptoms	It may caused coordination disorder, lacrimation, bradycardia, hypotension, salivation, bronch stroke, respiratory depression, spasm, sweating, diarrhoea, vomitting, sleepiness, muscular fasciculation, death.
Medical Warnings	Serious poisoning cases that may end up with death in uncontrolled contact with this substance have been recorded.
11.7. Additional Toxicologic Warnings:	
Swallowing plenty of the substnace inhaling high concentration of gases that occur as a result of its	

contact with moisture, water and acids may cause severe poisoning.
 Inhaling Hydrogen Phosphite in [#7803-51-2]:400/600 mg/m³=290-430 ppm for ½ and 1 hour.
 IDLH¹⁴ (Hydrogen Phosphit): 282 mg/m³=200 ppm(US EPA,1985)¹⁵
 Toxicologic classification has been done accprding to ingredients data and other available data.
 Toxicologic hazard classification according to EC and local legislation:

- T⁺ - Higly toxic
- R32 : It releases a lot of toxic gas in contact with acids.

12. INFORMATION ON ECOLOGY

12.1 Ecotoxicity: It is highly toxic for aquatic organisms.

12.1.1. Acute toxicity:

- Acute Fish Toxicity (LC50 96 hours):9,7x10⁻³ (Rainbow trout)
- Acute Daphnia Toxicity (EC50 24 hours): 0,20 mg/l

12.2 Mobility:

Solid

Inflammable gases occur in its contact with water and moisture.

Take chemical and physical features of the product while determinin environmental mobility.
 (See Section 9)

Surface Tension	No data
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Water threat Category	WGK =2 (too hazardous for water)
Effect on Drinking Water	No data
Known or estimated environmental distribution	No data
12.3 Degradability in Nature:	
• <u>Aluminium Phosphite</u> [#20859-73-8]: Degrades in atmosphere in 5-28 days.	
12.4 Permanence and Biodegradability:	
Biological degradation potential in related environment	No data
Degradation potential in Oxidation or Hydrolysis etc.	No data
Half life of degradation	No data
Effects on waste water refinement facilities	As there is no data whether the product has dominance effect on activities of microorganisms, its probable effects on waste water refinement facilities are unknown.
12.5. Bioaccumulation Potential	
Accumulation potential of the product in biological environment	No bioaccumulation happens.
Potential of the product to pass by means of food	No data
Log Pow or BCF value	No data
12.6 Other Adverse Effects	
Ozon Layer Thinning (Reducing) Potential	No data
Photochemical Ozone Production	No data

Potential	
Global Warming (Greenhouse Effect) Potential	No data
Other unfavourable effects on the Environment	No data
12.7. Additional Information:	
Do not allow it to spread to the environment, see Section 6,7,13,14 and 15 for measures to prevent accidental leakage to the environment and information on transportation and waste disposal.	

13. ELIMINATION/DISPOSAL
13.1. General Information on Disposal of the Product
<ul style="list-style-type: none"> • Dispose of this substance and its container as hazardous waste. • Dispose of absorbed material by burning in a licensed and proper facility. • Waste and used packages must be eliminated according to the formal regulations. • Prevent its leakage into surface and underground waters, still and running waters, sewage system.

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13.2. Safe Disposal:
<ul style="list-style-type: none"> • The product must be disposed according to the formal regulations. • Do not permit disposal of the product with domestic rubbish. • Contamination of the product into ewage system and underground waters is strictly forbidden. • Inform public authorities immediately in such cases.
13.3 European Waste Catalogue and Hazardous Waste List Number:
<ul style="list-style-type: none"> • Waste code: 061301 • 061301: Inorganic plant protection products, wooden agents and other biocides. • Waste identification numbers/waste descriptions must be assigned specifically for industry and other processes according to EWC¹⁶.
13.4 Uncleaned Packages:
<ul style="list-style-type: none"> • SUGGESTION: Disposal according to the formal regulations is suggested.
13.5 Suggested Cleaning Material:
<ul style="list-style-type: none"> • Deliver the used packages to institutions and organizations that professionally give waste disposal service.
13.6 Additional Information:
<ul style="list-style-type: none"> • Check national and international legislations on wastes. • Do not dispose of products before checking disposal legislations of the product. • See Section 7 for safe handling.

14. INFORMATION ON TRANSPORTATION

UN3048, ALUMINIUM PHOSPHIT PESTICIDE
CLASS 6.1,1

	ADR ¹⁷ / RID ¹⁸	ADNR ¹⁹	IMDG ²⁰	ICAO ²¹ / IATA ²²
TRANSPORTATION TYPE	HIGHWAY	RIVER CHANNEL	SEAWAY	AIRWAY
SHIPPING NAME FOR THE	UN3048, ALUMINIUM PHOSPHIT PESTICIDE CLASS 6.1,1			

SYSTEM				
UN/ID No	3048	3048	3048	3048
HAZARD CATEGORY	6.1	6.1	6.1	6.1
PACKING GROUP	I	I	I	I
CLASSIFICATION CODE	17			
LABELING NO	6.1	6.1	6.1	6.1
HAZARD IDENT. NO (HIN)	642			
EmS			F-A; S-A	
SEA POLLUTING			NO	
Transportation/Additional Information: Transportation legislation includes a specific provision for hazardous substances in specific categories packed in limited quantities. Regulations regarding disposal/pouring of small quantities must be considered.				
Note: Sending by mail as sample is not recommended.				

15. INFORMATION ON LABELING/REGULATION

15.1 Labeling:

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The product has been classified and labeled according to "Legislation on Classification, Packaging and Labeling of Hazardous Substances and Products" and provisions and principles laid down in EU legislation.

15.2 Compounds determinin the danger for labeling

- Aluminium Phosphit

15.3 Hazard Symbol and Definiton:

- F⁺ - Very easily inflammable
- T⁺ - Highly toxic.
- N – Hazardous fort he environment

15.4 Risk Signs

- R15/29** Releases toxic and easily inflammable gas in its contact with water.
R28 Highly toxic if swallowed.
R32 Releases a lot of toxic gas in contact with acids.
R50 Highly toxic for aquatic organisms.

15.5 Security Warnings:

- S1/2** Keep locked where children cannot reach.
S3/9/14/49 Keep in a cool, well ventilated place away from moisture, water and acids.
S30 Never ever add water to this product.
S36/37 Wear proper protective clothes and gloves.
S43 Use dry sand, powder, carbondioxide in case of inflammation.
"Never ever use water"
S45 Consult a doctor in case of accident or if you are not feeling well. (Show the label if possible)
S60 Dispose/Have this substance and its container disposed as hazardous waste.
S61 Avoid releasing into the environment. Apply to Specific Usage Directive/Sfaety Fact Sheet.

15.6 Additional Information:

See the regulations below for legislation anf other national measure in order to apply the provisions of this safety data sheet.

- Legislation on Preparation and Distribution of Safety Data Sheet Related with Hazardous Substances and Products

- Legislation on Classification, Packaging and Labeling of Hazardous Substances and Products
- Legislation of Restrictions on Production, Marketing and Usage of Specific Hazardous Substances, Products and Goods Legislation on Work Health and Safety
- Legislation on Health and Safety Measures in Works with Cancerogen and Mutagen Substances
- Legislation on Health and Safety Measures in Works with Chemical Substances
- Legislation on Using Personal Protective Equipment in Workplaces
- Legislation on Handling
- Legislation on Control of Hazardous Waste

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16. OTHER INFORMATION

16.1 Legal Instruments:

This document has been prepared in accordance with 91/155/EEC, 2001/58/EC, ISO 11014-1 within the framework of December 26th, 2008 dated abd 27092 Mük. Numbered "Legislation on Preparation and Distribution of Safety Data Sheet Related with Hazardous Substances" and confirmed by accredited staff foreseen by the regulation.

16.2 Safety Data Sheet Prepared / Issued by:

DorukKimyasal Yönetim Sistemleri San. ve Tic. Ltd. Şti
 Expert: Chemistry Engineer Selçuk Bilgin (sbilgin@doruksistem.com.tr)
Expert Accreditation No: TSE GBF-0348 25.5.2009
www.MsdsMarket.com ; info@doruksistem.com.tr; 02165180945
 on behalf of **Agrifum Tarım ve San. Ürün. Tic. Ltd. Şti**

16.2.1 Contact Person:

- Rıfat GÖZTAŞ - Agrifum Tarım ve San. Ürün. Tic. Ltd. Şti

16.3 Date of Issue:

- 14.06.2011

16.4 Issue No

- 2

16.5. Arrangement/Interpretations:

- It has been translated into Turkish and arranged according to 27th Decemver 2008 and 27092 numbered legislation.

16.6. Safety Data Sheet No:

- 132001

16.7 R-Risk arrangements (Risk Definition Sentences of the Raw Materials Listed in Section 2)

R15/29	Releases toxic and easily inflammable gas in contact with water.
R21	Hazardous in contact with skin.
R28	Highly toxic if swallowed.
R32	Releases toxic gas in contact with acids.
R50	Highly toxic for aquatic organisms.

16.8. Other Issues:

- Contact our sales department for our training suggestions for safe usage of product.
- Contact our sales department for restrictions suggested fort he usage of product and legally

non-binding advice.

- Key information sources in preparation of this safety data sheet
Safety data sheet of the product prepared by ZONE YONGFENG CHEMICAL PLANT
- “Legislation on Preparation and Distribution of Safety Data Sheet Related with Hazardous Substances and Products” and its appendix, “Legislation on Health and Safety Measures in Works with Cancerogen and Mutagen Substances” and its appendix,

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- UN, ADR, IMDG, IATA lists, ECHA and related EU directives,
Other helping resources.

16.9 Additional Information:

- Information provided on this Safety Fact Sheet was prepared on basis of our best experience, knowledge and beliefs as of the date of preparation. Information given was designed in order to be a guide for safe handling, usage, processing, storage, transportation, disposal and elimination.
- This information is valid only for the specific substance unless otherwise expressed in the document and may not be valid if it is used with other substances or in any other process.
- Pay attention to the information on Safety Fact Sheet.
- This information is based on our current knowledge.
- This Safety Fact Sheet defines the product according to the suitable safety regulations however does not guarantee product features.
- It does not constitute any warranty and a legally valid contractual affair in terms of product features.

¹ Within the framework of December 26th, 2008 dated and 27092 Mük. Numbered “Legislation on Preparation and Distribution of Safety Data Sheet Related with Hazardous Substances”

² 99/45/EC –European Union Hazardous Compound products directive

³ METHEMOGLOBINEMIA: The state when the amount of metho-moglobin in blood is more than normal. Oxygen and carbondioxide attached to hemoglobin does not easily separate.

⁴EINECS : European Inventory of Chemical Substances

⁵ CAS : Service registry number of chemical substances

⁶TWA: Time average measured or calculated for reference time of 8 hours

⁷ STEL: Unless another time period stated, upper exposure limit that must not be exceeded for 15 minutes

⁸ Mg/m³ : Amount of substance in 1m³ of air in 20 °C temperature and 101,3 KPa. (760 mm mercury pressure) expressed in miligram

⁹ ppm: Amount of substance in 1m³ of air in mililitre (ml/m³)

¹⁰ OEL: Occupational Exposure Limits

¹¹ NIOSH: The National Institute for Occupational Safety and Health

¹² CEN: European Standardization Committee

¹³ METHEMOGLOBINEMIA: The state when the amount of metho-moglobin in blood is more than normal. Oxygen and carbondioxide attached to hemoglobin does not easily separate.

¹⁴ IDLH: (Immediately Dangerous to Life and Health)

¹⁵ US EPA: United States Environmental Protection Agency

¹⁶ EWC: European Waste Catalogue

¹⁷ ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

¹⁸ RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

¹⁹ ADNR: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

²⁰ IMDG: International Maritime Code for Dangerous Goods

²¹ ICAO : International Civil Aviation Organization

²² IATA: International Air Transport Association