

# MATERIAL SAFETY DATA SHEET

NAME OF MATERIAL/PREPARATION

**STORIONE**

Date of Preparation	27/07/2015
Date of Issue	27/07/2015
MSDS No	FORM_MSDS_R&D_213_00
Renewal Date/No	

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PREPARED BASED ON REGULATION ON PREPARATION AND DISTRIBUTION OF SAFETY DATA SHEETS ABOUT HAZARDOUS MATERIALS AND PREPARATIONS (O.G. issue no 27092 dated 26/12/2008).

## 1. MATERIAL/PREPARATION AND COMPANY/OWNER IDENTIFICATION:

### 1.1 Material/Preparation Identification:

**Product Name** : **STORIONE**  
**Product Content** : FENAMIPHOS 400 g/L  
**Formulation Form** : EC (Emulsion Concentrates)  
**Cas No** : 22224-92-6  
**EC No** : 244-848-1  
**IRAC Class** : 1B organophosphate

### 1.2 Usage of the Material/Preparation:

Insecticide

### 1.3 Company Identification:

#### Manufacturing and License Holding Company:

**Company Name** : AGRI SCIENCES TARIM VE ILAC UR. SAN. TIC. LTD. STI.  
**Address** : Bekir Saydam Caddesi Pancar No: 31 Torbali / IZMIR  
**Telephone** : +90 0232 864 13 33  
**Fax** : +90 0232 864 16 79

### 1.4 Emergency Contact Telephone:

In case of an emergency please call +90 0232 864 13 33

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## 2. COMPOSITION AND INFORMATION ON INGREDIENTS

Material	% w/v	CAS No	EINECS/ELINCS	Hazard	R <sup>1</sup>	Classification
Fenamiphos	40	22224-92-6	244-848-1	T+, N	R24, R28, R50/53	T+, N ;R24,R28, R50/53
Solvesso 100	25-35	918-668-5	-	Xn; Xi	R10, R20/21, R38	R10, Xn; R20/21, R38
Others *	Out of classification due to the fact that it does not include hazardous material.					

- <sup>1</sup> R explanations are under section 16.

## 3. HAZARD IDENTIFICATION



**T+: Very Toxic**



**N: DANGEROUS FOR THE ENVIRONMENT**

R10 - Flammable.

R 20/21 - Harmful by inhalation and in contact with skin.

R24 - Toxic in contact with skin.

R28 - Very toxic if swallowed.

R38 - Irritating to skin.

R 50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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## 4. FIRST AID MEASURES

**Poisoning Symptoms:** May cause over-sweating, headache, fatigue, dizziness, nausea, problem and vomiting. Strong poisoning may cause cyanosis, spasms, myosis, respiration paratysis.

**First Aid Measures:** Patient should be carried to out of the area and tilt laterally. Wash the contaminated parts of the body with plenty of water and soap. In case of poisoning, two 0.5 mg tablets of atropine sulphate are given and the patient is controlled for 14 hours.

**Information for doctor:** Fenamiphos is an anti- cholinesterase compound. Atropine by injection is the preferred antidote. In case of exposure, plasma and red blood cell cholinesterase tests are useful. Treatment should be directed and controlled by the patient 's clinical status . This product also can cause a chemical pneumonia, includes aromatic solvents, therefore, vomiting intubation is not recommended. Activated charcoal and cathartics will help relieving gastrointestinal tract.

**Antidote and Necessary Information:** 2-4 mg atropine sulphate should be injected intravenously. Specified dose of atropine should be given in every 10-15 min.

## 5. FIRE FIGHTING MEASURES

**Personal Protective Equipment for Fire-fighting:** Do not inhale the fumes occurred during the explosion and fire. If available, use self-contained respiratory device during the fire.

**Dangers:** Formation of hazardous gases as cyanide, carbon monoxide, phosphorus pentoxide, sulfur dioxide during the fire must be considered.

**Extinguishers:** Foam, carbon dioxide, fire extinguishing powder.

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**Other Information:** Move the product away from the fire area and cool the containers with water.

### 6. ACCIDENTAL RELEASE MEASURES

**General Information:** Please use the personal protection equipment defined under Section 8.

**Personal Precautions:** Do not touch spilled product or contaminated surfaces. While handling with spilled product, do not eat, drink and smoke.

**Clean-up Methods:** Spilled material is collected with dust holder materials or suitable vacuum cleaner. Collect the material in tight plastic containers and keep safely until it is disposed.

**Additional Precautions:** Refer to Section 7 for safe handling instructions. Refer to Section 8 for personal protections equipment. Refer to Section 13 for disposal.

### 7. HANDLING AND STORAGE

**Handling:** Use the personal protective equipment stated in Section 8. Do not eat or drink while using. Prevent the contact with mouth, skin and eyes. Do not inhale. Wash your hands after using. Other security precautions are not required except of stated warnings during using the closed package. Use only in rooms, in which there is a locally aspirated device.

**Storage:** Store in the original container in dry, cool and well-ventilated places. Keep away from food, drink and animal feeds. Protect against direct sun light. Keep in the places where children cannot reach.

**Storage Temperature:** 0-35° C

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Precautions:** Ensure appropriate general or local ventilation to keep the product concentration under allowed limits.

TLV( respirable vapor and aerosol): 0.05 mg/m<sup>3</sup>

### Personal Protection Equipment:

**Eye** : Use eye protection equipment compliant with EN 166.

**Skin** : Use protective clothing and appropriate gloves. Use 2 layers of clothing, if possible. Use CE marked Nitrile Rubber (min. 0.40 mm thick). Contaminated gloves should be washed. Any gloves that cannot be cleaned inside and outside should be disposed.

**Respiratory** : Use respiratory apparatus compliant with EN 149:2001. Any respiratory protection apparatus should only be used for short term operations, as a part of risk minimization measures, e.g. in case of local ventilation. Comply with operation instructions and warnings of the manufacturer during use of respiratory protection apparatuses.

**Hygiene Measures:** Do not eat, drink or smoke while handling the product. Wash your hands each time before eating, drinking, smoking or going to the toilet

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form** : Liquid, clear  
**Color** : yellow-orange  
**Odour** :Aromatic scent  
**Density** : 1,00±0,05 g/cm<sup>3</sup> (20<sup>0</sup>C)  
**pH** : 5.0-9.0 1% (20<sup>0</sup>C)  
**Flash point** : 44±5 <sup>0</sup>C.

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## 10. STABILITY AND REACTIVITY

**Conditions to be avoided:** Extreme temperatures and direct sun light

**Materials to be avoided:** Strong alkaline and acidic materials

**Hazardous reactions :** When stored and handled appropriately no hazardous reactions are observed.

## 11. TOXICOLOGICAL INFORMATION

### Fenamiphos Technical Material:

**Oral** Acute oral LD<sub>50</sub> for male and female rats *c.* 6, mice, dogs and cats *c.* 10 mg/kg.

**Skin and eye** Acute percutaneous LD<sub>50</sub> for rats *c.* 80 mg/kg. Slightly irritant to skin and eyes (rabbits).

**Inhalation** LC<sub>50</sub> (4 h) for rats *c.* 0.12 mg/l air (aerosol).

## ECOLOGICAL INFORMATION

### Fenamiphos Technical Material:

**Birds** Acute oral LD<sub>50</sub> for bobwhite quail 0.7–1.6, mallard ducks 0.9–1.2 mg/kg. Dietary LC<sub>50</sub> (5 d) for mallard ducks 316, bobwhite quail 38 mg/kg diet.

**Fish** LC<sub>50</sub> (96 h) for bluegill sunfish 0.0096, rainbow trout 0.0721 mg/l.

**Daphnia** LC<sub>50</sub> (48 h) 0.0019 mg/l.

**Algae** E<sub>r</sub>C<sub>50</sub> for *Scenedesmus subspicatus* 11 mg/l.

**Other aquatic spp.** Very toxic to fish and aquatic invertebrates. **Bees** Acute LD<sub>50</sub> (oral) 0.45 µg/bee; (contact) 0.28 µg/bee (*EFSA Sci. Rep.*).

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**Worms** LC<sub>50</sub> for *Eisenia foetida* 795 mg/kg dry soil (400 EC).

**Other beneficial spp.** The risk to bees and other non-target arthropods is considered to be low from the representative uses evaluated (*EFSA Sci. Rep.*).

## 12. DISPOSAL INFORMATION

**Product** : Do not dispose of the wastes with household wastes. Do not pour the remaining wastes to the sewage system. Dispose of them according to the Directive of Hazardous Waste Control.

**Contaminated Materials:** Do not use the empty packages for other products. Dispose the fully-discharged and shook packages in due form. Dispose of the non-cleaned packages as hazardous waste.

## 13. TRANSPORTATION INFORMATION

### ADR/RID/ADNR

**UN-No.** : 3017

**Hazard Mark** : 6.1

**Packing Group** : II

**Product type** : UN 3017 Organophosphorus pesticides, liquid, toxic, flammable.  
Flash point 23°C or more (CONTAINS FENAMIPHOS VE SOLVESSO 100).



### IMDG

**UN-No.** : 3017

**Class** : 6.1

**Packing Group** : II

**Marine Pollutant** : Yes

**Product type** : UN 3017 Organophosphorus pesticides, liquid, toxic, flammable.  
Flash point 23°C or more (CONTAINS FENAMIPHOS VE SOLVESSO 100).

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## IATA

**UN-No.** : 3017

**Class** : 6.1

**Packing Group** : II

**Product type** : UN 3017 Organophosphorus pesticides, liquid, toxic, flammable.

Flash point 23°C or more (CONTAINS FENAMIPHOS VE SOLVESSO 100).

## 14. REGULATORY INFORMATION

This data sheet is prepared based on regulation on preparation and distribution of safety data sheets about hazardous materials and preparations (O.G. issue no 27092 dated 26/12/2008).

### Hazard Marks and Symbols:



**T+:Very Toxic**



**N: Dangerous For The Environment**

### Hazardous Materials Listed on the Label:

Includes Fenamiphos ve Solvesso 100.

### Risk Phrases:

#### Physicochemical:

R10 - Flammable.



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## Health:

R 20/21 - Harmful by inhalation and in contact with skin.

R24 - Toxic in contact with skin.

R28 - Very toxic if swallowed.

R38 - Irritating to skin.

R 50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## Safety Phrases:

S1/2 - Lock it up and keep out of the reach of children.

S 13 - Keep away from food, drink and animal feedingstuffs

S 20/21 - When using do not eat, drink or smoke.

S 23 - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer)

S 24/25 - Avoid contact with skin and eyes.

S 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 - After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer)

S29 - Do not empty into drains

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

S45 - In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

S 46 - If swallowed, seek medical advice immediately and show this container or label

S56 - Dispose of this material and its container at hazardous or special waste collection point

## 15. OTHER INFORMATION

N: Dangerous For The Environment

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**T+:** Very Toxic

### All Risk Phrases under Section 2:

R10 - Flammable.

R 20/21 - Harmful by inhalation and in contact with skin.

R24 - Toxic in contact with skin.

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**Prepared By** : Remzican KARAN

This material safety data sheet is provided as a supplement to instructions of manufacturer; however it does not replace instructions of manufacturer. The information provided in this sheet only conforms to the regulatory criteria known at the time of the preparation of Safety Data Sheet. Required data are gathered in accord with "Regulation on Preparation and Distribution of Safety Data Sheets about Hazardous Materials and preparations (O.G. issue no 27092 dated 26/12/2008)". Concerned organizations and persons are invited to comply with the abovementioned regulation.