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Print Date	08/03/2017
Country	US
Language:	EN

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product code : 40000003194

## Details of the supplier of the safety data sheet

Company:

Addivant USA, LLC 4 Mountainview Terrace Suite 200 Danbury, CT United States of America 06810 Telephone : 1-800-962-8641 (US) only

Prepared by

msdsrequest@addivant.com

Further information for the safety data sheet : msdsrequest@addivant.com

### **Emergency telephone number**

Emergency telephone number:	866-928-0789 For additional emergency telephone numbers see section 16 of the Safety Data Sheet.		
Disposal considerations	msdsrequest@addivant.com		
Recommended use of the chemical and restrictions on use         Recommended use       : Antioxidant         Mixture			
Restrictions on use	Reserved for industrial and professional use.		

### **SECTION 2. HAZARDS IDENTIFICATION**

### Emergency Overview

Appearance	powder, granules, or, flakes
Colour	white, to, off-white



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Odour	slight
Hazard Summary	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### **GHS Classification**

Not a hazardous substance or mixture.

### **GHS Label element**

Not a hazardous substance or mixture.

#### **Potential Health Effects**

Target Organs	: Eyes Skin
Skin	: As with any dust, mechanical irritation is possible.
Eyes	: Dust contact with the eyes can lead to mechanical irritation.
Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: irritant effects
Carcinogenicity: IARC	No se identifica ningún componente de este producto, que presente niveles mayores que o igual a 0,1% como agente carcinógeno humano probable, posible o confirmado por la (IARC) Agencia Internacional de Investigaciones sobre Carcinógenos.
	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
ΝΤΡ	No component of this product present at levels greater than or



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equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

: Mixture

Substance / Mixture

#### Hazardous components

Chemical Name	CAS-No.	Concentration (%)
3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-	26741-53-7	>= 90 - <= 100
tetraoxa-3,9-diphosphaspiro[5.5]undecane		

### **SECTION 4. FIRST AID MEASURES**

If inhaled	:	Remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
If swallowed	:	Rinse mouth, ingest activated charcoal. Give small amounts of water to drink. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	irritant effects irritant effects
Notes to physician	:	The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	:	Water mist Foam Carbon dioxide (CO2) Dry powder ABC powder
Unsuitable extinguishing media	:	High volume water jet



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Specific hazards during firefighting	No information available.	
Specific extinguishing methods		
Further information	Prevent fire extinguishing water from contaminating surface or the ground water system.	ce water
Special protective equipment for firefighters	Wear a positive-pressure supplied-air respirator with full f Use personal protective equipment.	acepiece.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Do not breathe dust. Avoid contact with skin and eyes.
Environmental precautions	: Should not be released into the environment. Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	: Remove all sources of ignition. Pick up and arrange disposal without creating dust.

### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling	<ul> <li>Handle in accordance with good industrial hygiene and safety practice.</li> <li>Avoid contact with skin, eyes and clothing.</li> <li>Avoid prolonged or repeated contact with skin.</li> <li>Use only with adequate ventilation.</li> <li>Avoid dust formation.</li> <li>Keep away from sources of ignition - No smoking.</li> <li>Electrically bond and ground all containers and equipment before transfer or use of material.</li> </ul>	e
Conditions for safe storage	: Keep tightly closed in a dry, cool and well-ventilated place. Protect from contamination.	

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : Use with adequate ventilation.



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Personal protective equipment	
Respiratory protection	<ul> <li>When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.</li> <li>In the case of dust or aerosol formation use respirator with an approved filter.</li> <li>Respirator with a dust filter</li> </ul>
Hand protection Remarks	: Gauntlets Nitrile rubber Impervious butyl rubber gloves
Eye protection	: Safety glasses with side-shields
Skin and body protection	: impervious clothing
Hygiene measures	<ul> <li>Avoid dust formation.</li> <li>Take precautionary measures against static discharges.</li> </ul>

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: powder, granules, or, flakes
Colour	: white, to, off-white
Odour	: slight
Melting point/range	: 160 °C
Boiling point/boiling range	: No data available
Flash point	: 168 °C
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: negligible
Relative density	: 1.0
Solubility(ies) Water solubility	: insoluble, hydrolyses
Auto-ignition temperature	: 371 °CAuto-flammability



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## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Exposure to moisture
Incompatible materials	: Oxidizing agents Acids and bases Water
Hazardous decomposition products	: Carbon oxides

## SECTION 11. TOXICOLOGICAL INFORMATION

# Acute toxicity **Product:** Acute oral toxicity : LD50 (Rat): > 5,000 mg/kgAcute inhalation toxicity : LC50 (Rat): > 2 mg/l **Components:** 3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane: Acute oral toxicity : LD50 (Rat): > 5,000 mg/kgAcute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg GLP: yes Skin corrosion/irritation Serious eye damage/eye irritation Respiratory or skin sensitisation **Product:**

Remarks: Not classified due to lack of data.

### **Components:**

**3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane:** Species: Guinea pig Assessment: Did not cause sensitisation on laboratory animals.



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Method: OECD Test Guideline Result: negative GLP: yes	e 406
Germ cell mutagenicity	
Product:	
	Remarks: In vitro tests did not show mutagenic effects
Germ cell mutagenicity- : Assessment	This material was negative in a mouse lymphoma mutagenicity assay.
	<b>2,4,8,10-tetraoxa-3,9-diphosphaspiro</b> [ <b>5.5]undecane:</b> Test Type: Chromosome aberration test in vitro Metabolic activation: with and without metabolic activation Result: negative GLP: yes
	Test Type: In Vitro mammalian Cell Gene Mutation Test Metabolic activation: with and without metabolic activation Result: negative GLP: yes
Genotoxicity in vivo :	Test Type: In vivo micronucleus test Test species: Mouse Result: negative GLP: yes
Germ cell mutagenicity- : Assessment	Animal testing did not show any mutagenic effects.
Carcinogenicity	
Product: Carcinogenicity - : Assessment	Not classified due to lack of data.
Reproductive toxicity	
Product: Reproductive toxicity - : Assessment	Not classified due to lack of data.



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### **Components:**

3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane:

Reproductive toxicity -Assessment : No toxicity to reproduction No effects on or via lactation

## **Components:**

**3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane:** Exposure routes: Oral Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## **SECTION 12. ECOLOGICAL INFORMATION**

### Ecotoxicity

<u>Components:</u> 3,9-bis(2,4-di-tert-butylphenoxy M-Factor (Chronic aquatic toxicity)	7)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane: : 1
Ecotoxicology Assessment Chronic aquatic toxicity	: Very toxic to aquatic life with long lasting effects., Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence and degradabili	ty
Product:	
Biodegradability	: Remarks: No data available
Bioaccumulative potential	
Product:	
Bioaccumulation	: Remarks: No data available
<u>Components:</u>	
	7)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane:
Partition coefficient: n- octanol/water	: log Pow: ca. 11.8 GLP: yes
Mobility in soil	
Product:	
Mobility	: Remarks: No data available



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#### Other adverse effects

Product:	
Results of PBT and vPvB assessment	: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
Additional ecological information	: There is no data available for this product.
	The evaluation was performed following the calculation procedure of the preparation directive. The product itself has not been tested.

### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal	methods	
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Waste from residues	Waste	from	residues
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: In accordance with local and national regulations.

### **SECTION 14. TRANSPORT INFORMATION**

DOT	
UN number	: 3077
Description of the goods	<ul> <li>Environmentally hazardous substances, solid, n.o.s.</li> <li>(3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane)</li> </ul>
Class	: 9
Packing group	: III
Labels	: 9
Emergency Response	: 171
Guidebook Number	
Environmentally	: yes
hazardous	3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane

 3077
 Environmentally hazardous substance, solid, n.o.s. (3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9diphosphaspiro[5.5]undecane)



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Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft) Packing instruction (passenger	: 9 : III : 9 : 956 : 956 : Y956
aircraft)	. 1000
Marine pollutant	: yes 3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane
IMDG	
UN number	: 3077
Description of the goods	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane)
Class	: 9
Packing group	: III
Labels	: 9
EmS Number 1	: F-A
EmS Number 2	: S-F
Marine pollutant	: yes 3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9- diphosphaspiro[5.5]undecane

Not regulated by DOT and TDG if shipped or transported in packaging less than 400KG by road and/or rail.

### **SECTION 15. REGULATORY INFORMATION**

TSCA list	:	Not relevant
		Not relevant
OSHA Hazards	:	Combustible dust

### EPCRA - Emergency Planning and Community Right-to-Know Act

### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

## SARA 311/312 Hazards : Acute Health Hazard



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SARA 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
		No chemicals in this materia requirements of SARA Title	al are subject to the reporting III, Section 302.
SARA 313	:	known CAS numbers that ex	ain any chemical components with xceed the threshold (De Minimis) by SARA Title III, Section 313.
		known CAS numbers that ex	ain any chemical components with xceed the threshold (De Minimis) by SARA Title III, Section 313.
US State Regul	ations		
Massachusetts	Right To Know		
	5	No components are subject Know Act.	to the Massachusetts Right to
Pennsylvania R	light To Know		
·	[carbonato(2- )]hexadecahydro esium	xybis(aluminium)hexamagn	11097-59-9
	3,9-bis(2,4-di-tert	t-butylphenoxy)-2,4,8,10- osphaspiro[5.5]undecane	26741-53-7
New Jersey Rig	ht To Know		
	[carbonato(2- )]hexadecahydro esium	xybis(aluminium)hexamagn	11097-59-9
		butylphenoxy)-2,4,8,10- osphaspiro[5.5]undecane	26741-53-7
California Prop 65		This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
•	•	t are reported in the follow	ing inventories:
TSCA	:	On TSCA Inventory	
DSL	:		llowing components listed on the omponents are on the Canadian
AICS	:	On the inventory, or in comp	pliance with the inventory
NZIoC	:	On the inventory, or in comp	pliance with the inventory
ENCS	:	On the inventory, or in comp	pliance with the inventory



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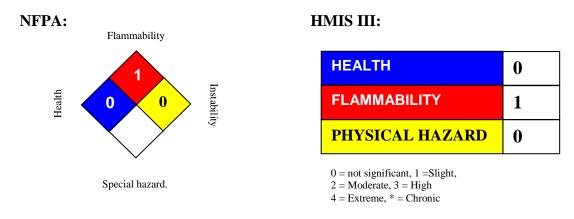
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TSCA (USA)

### **SECTION 16. OTHER INFORMATION**

### **Further information**



The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## Carechem24 International Worldwide Coverage - Addivant

### **Emergency Phone Numbers:**

Europe:	All European Countries	+44 (0) 1235 239 670
Asia Pacific:	East / South East Asia	Regional Number : +65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341



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	Indonesia	00780 3011 0293
	:Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285
	Vietnam	+65 3158 1255
	India	+65 3158 1198
	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Bangladesh	+65 3158 1200
Middle East / Africa:	Arabic speaking countries	+44 (0) 1235 239 671
	All other countries	+44 (0) 1235 239 670
America	United States / Canada	001866 928 0789
Latin America:	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
	Mexico	+52 555 004 8763