

Version	111
Revision Date	06/21/2016
Print Date	10/23/2017
Country	US
Language:	EN

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

- Product code : 40000003475
- Chemical nature : Polymer stabilizer

Details of the supplier of the safety data sheet

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			
Restrictions on use	For professional and industrial installation and use only.		

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Solid form, powder
Colour	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.

OSHA Regulatory status

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

GHS Classification

Not a hazardous substance or mixture.

:

GHS Label element

Not a hazardous substance or mixture.

Potential Health Effects

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	: No information available.
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



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NTP

carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture
Chemical nature	:	Polymer stabilizer

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-	26741-53-7	>= 30 - < 50
tetraoxa-3,9-diphosphaspiro[5.5]undecane		
Benzene, C10-16-alkyl derivs.	68648-87-3	>= 0.1 - < 1
heptane	142-82-5	>= 0.1 - < 1
2,4-di-tert-butylphenol	96-76-4	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

If inhaled	Remove to fresh air. In case of irritation of respiratory system or mucous membranes of feeling unwell or after prolonged exposure get medical attention. Wear respiratory protection.	or if
	Remove to fresh air. In case of irritation of respiratory system or mucous membranes of feeling unwell or after prolonged exposure get medical attention. Wear respiratory protection.	or if
In case of skin contact	In case of contact, immediately flush skin with plenty of water for least 15 minutes while removing contaminated clothing and shoes Do not rinse with organic solvents in any case!	
	In case of contact, immediately flush skin with plenty of water for least 15 minutes while removing contaminated clothing and shoes Do not rinse with organic solvents in any case!	
In case of eye contact	In case of contact, immediately flush eyes with plenty of water fo least 15 minutes. In case of eye irritation seek medical attention.	r at
	In case of contact, immediately flush eyes with plenty of water fo least 15 minutes. In case of eye irritation seek medical attention.	r at



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If swallowed	:	Do NOT induce vomiting. Do NOT induce vomiting. Rinse mouth with water. Obtain medical attention.	
		Do NOT induce vomiting. Do NOT induce vomiting. Rinse mouth with water. Obtain medical attention.	
Most important symptoms and effects, both acute and delayed	:	No information available. No information available.	
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 BC powder
		Water mist Foam Carbon dioxide (CO2) Dry powder BC powder
Unsuitable extinguishing media	:	High volume water jet Caution Water reactive
		High volume water jet Caution Water reactive
Specific extinguishing methods	:	
Further information	:	Do not release chemically contaminated water into drains, soil or surface water.
		Do not release chemically contaminated water into drains, soil or surface water.
Special protective equipment for firefighters	:	Wear a positive-pressure supplied-air respirator with full facepiece.



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Wear a positive-pressure supplied-air respirator with full facepiece.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	 Do not breathe dust. Do not breathe dust. Remove all sources of ignition. Avoid contact with skin and eyes.
	 Do not breathe dust. Do not breathe dust. Remove all sources of ignition. Avoid contact with skin and eyes.
Environmental precautions	: Disposal: see section 13 Disposal: see section 13
	Prevent leaks and prevent soil / water pollution caused by leaks. Prevent leaks and prevent soil / water pollution caused by leaks.
Methods and materials for containment and cleaning up	: Shovel up and transfer to suitable, closable containers. Avoid dust formation.
	Shovel up and transfer to suitable, closable containers. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Use only with adequate ventilation.
		Use only with adequate ventilation.
Conditions for safe storage	:	Keep container tightly closed. Keep in a well-ventilated place.
		Keep container tightly closed. Keep in a well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment



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Hygiene measures	 Avoid dust formation. Keep away from sources of ignition - No smoking. 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. Take precautionary measures against static discharges. Avoid dust formation. Keep away from sources of ignition - No smoking. 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. Take precautionary measures against static
	Take precautionary measures against static discharges.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Solid form, powder
Colour	: white
Odour	: slight
Flash point	: Not available Not Available Not available
	Not available Not Available Not available
Density	: 1.1 g/cm3 (25 °C)

SECTION 10. STABILITY AND REACTIVITY

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:	
Acute oral toxicity	: LD50 : > 5,000 mg/kg
	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: Remarks: No data available
Acute dermal toxicity	: LD50 (Rabbit): > 2,000 mg/kg



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Components:

3,9-bis(2,4-di-tert-butylphenoxy Acute oral toxicity		2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane: LD50 (Rat): > 5,000 mg/kg
Acute dermal toxicity		LD50 (Rabbit): > 2,000 mg/kg GLP: yes
Benzene, C10-16-alkyl derivs.: Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg GLP: no
Acute inhalation toxicity	:	LC50 (Rat): > 1.82 mg/l Exposure time: 4 h GLP: yes
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg GLP: no
2,4-di-tert-butylphenol:		
Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg
Skin corrosion/irritation		
<u>Components:</u> Benzene, C10-16-alkyl derivs.: Species: Rabbit Method: Draize Test Result: Skin irritation		
2,4-di-tert-butylphenol: Species: Rabbit		
Result: Skin irritation		
Serious eye damage/eye irritatio	on	
<u>Components:</u> Benzene, C10-16-alkyl derivs.: Species: Rabbit Result: No eye irritation Method: Draize Test GLP: no		
2,4-di-tert-butylphenol:		



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Species: Rabbit Result: Eye irritation

Respiratory or skin sensitisation

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. Method: OECD Test Guideline 406 Result: negative GLP: yes

Benzene, C10-16-alkyl derivs.:

Test Type: Maximisation Test (GPMT) Species: Guinea pig Assessment: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 406 GLP: no

Species: Human Assessment: Does not cause skin sensitisation.

Germ cell mutagenicity

Components:

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



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Benzene, C10-16-alkyl derivs.: Genotoxicity in vitro	 Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative GLP: yes 	с
Genotoxicity in vivo	 Test Type: in vivo assay Test species: Rat Cell type: Bone marrow Result: negative GLP: yes 	
Germ cell mutagenicity- Assessment	: Animal testing did not show any mutagenic effects.	
2,4-di-tert-butylphenol:		
Genotoxicity in vitro	: Result: negative	
Genotoxicity in vivo	 Test Type: in vivo assay Cell type: Bone marrow Result: negative 	
Germ cell mutagenicity- Assessment	: Animal testing did not show any mutagenic effects.	
Carcinogenicity		
Reproductive toxicity		
Components:		
3,9-bis(2,4-di-tert-butylphenoxy	r)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane:	
Reproductive toxicity -	: No toxicity to reproduction No effects on or via lactation	
Assessment		
Benzene, C10-16-alkyl derivs.: Effects on foetal	: Species: Rat	
development	Application Route: Oral	
	125 mg/kg	
	125 mg/kg	
	GLP: yes	
Reproductive toxicity - Assessment	: No toxicity to reproduction No effects on or via lactation	
2,4-di-tert-butylphenol:		



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

Components:

$\label{eq:constraint} \textbf{3,9-bis} (2, \textbf{4-di-tert-butylphenoxy}) \textbf{-2,4,8,10-tetraoxa-3,9-diphosphaspiro} [5.5] undecane:$

Exposure routes: Oral Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Benzene, C10-16-alkyl derivs.:

Exposure routes: Inhalation Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

2,4-di-tert-butylphenol:

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-butylphenox) M-Factor (Chronic aquatic toxicity)	y)-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.
2,4-di-tert-butylphenol: Toxicity to fish	: LC50 (Leuciscus idus (Golden orfe)): 1.8 mg/l Exposure time: 48 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 1.1 mg/l Exposure time: 48 h
Toxicity to algae	: EC50 (Scenedesmus quadricauda (Green algae)): 0.12 mg/l Exposure time: 96 h GLP: no

Persistence and degradability

Components:	
Benzene, C10-16-alkyl derivs.:	
Biodegradability	: aerobic
	Inoculum: activated sludge



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Result: Readily biodegradable Biodegradation: 69 - 98 % Exposure time: 35 d

2,4-di-tert-butylphenol: Biodegradability	 aerobic Inoculum: activated sludge Result: According to the results of tests of biodegradability this product is not readily biodegradable. Biodegradation: 2 % Exposure time: 28 d GLP: no Remarks: Not readily biodegradable.
Bioaccumulative potential	
<u>Components:</u> 3,9-bis(2,4-di-tert-butylphenoxy) Partition coefficient: n- octanol/water	-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane: : log Pow: ca. 11.8 GLP: yes
Benzene, C10-16-alkyl derivs.: Bioaccumulation	: Bioconcentration factor (BCF): 35 - 444
Partition coefficient: n- octanol/water	: log Pow: 5.72 - 5.75 (27 °C)
heptane: Partition coefficient: n- octanol/water	: log Pow: 4.7
2,4-di-tert-butylphenol: Partition coefficient: n-octanol/water	: log Pow: 5.33 GLP: no
Mobility in soil No data available	
Other adverse effects No data available	
Product: Additional ecological information	: No data available



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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

SECTION 14. TRANSPORT INFORMATION

DOT

201	
UN number	: 3077
Description of the goods	Environmentally hazardous substances, 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
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

ΙΑΤΑ		
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
Packing instruction (cargo aircraft)	:	956
Packing instruction (passenger aircraft)	:	956
Packing instruction (passenger aircraft)	:	Y956
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 Description of the goods	-	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-



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	diphosphaspiro[5.5]undecane)
Class	: 9
Packing group	: 111
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

OSHA Hazards	: Combustible dust
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.
The components of this produ	ct are reported in the following inventories:
TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: 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

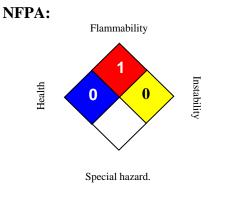
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)



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SECTION 16. OTHER INFORMATION

Further information



HMIS III:



0 = not significant, 1 =Slight,

2 = Moderate, 3 = High4 = Extreme, * = Chronic

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
	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



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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