



# MATERIAL SAFETY DATA SHEET

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JADEWIN

DATE PREPARED: August/04/2016  
DATE REVISED : June/01/2017

JADEWIN

PRODUCT NAME

N21

## 1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

**PRODUCT IDENTIFIER:** JADEWIN N21  
**GENERAL USE:** Nucleating agent  
**FORMULA:** Mixture

### MANUFACTURER:

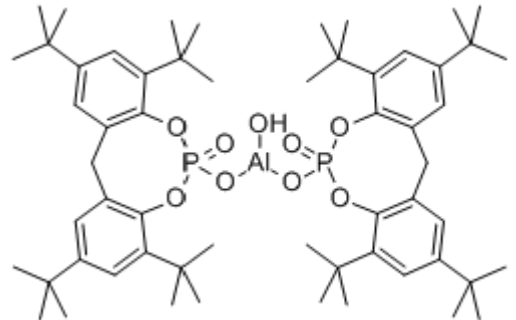
QINGDAO JADE NEW MATERIAL TECHNOLOGY CO.,LTD  
Room 411, Building2, No318 Longshui Road, Licang District,  
Qingdao, Shandong Province, China.  
TEL: 86-0532-68077006 FAX: 86-0532-68077006

### EMERGENCY TELEPHONE NUMBERS:

TEL: 86-0532-68077006

### CHEMICAL NAME & STRUCTURE:

Aluminium hydroxybis[2,2'-methylene-  
bis(4,6-di-tert-butylphenyl)phosphate]



## 2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	%	CAS No.	NOTE
(1) Aluminium hydroxybis[2,2'-methylene-bis(4,6-di-tert-butylphenyl)phosphate]	Trade secret	151841-65-5	None
(2) Organic compound	Trade secret	Trade secret	None

### EXPOSURE GUIDELINE

OSHA HAZARDS	OSHA		ACGIH TLV	
	PEL		TWA	STEL
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>

### OSHA HAZARDS

Not applicable



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### 3. HAZARDS IDENTIFICATION

\*\*\*\*\* EMERGENCY OVERVIEW \*\*\*\*\*

- \* White powder, odorless \*
- \* May cause very slight skin and eye irritation. \*
- \* \*
- \* \*
- \* \*

\*\*\*\*\*

#### POTENTIAL HEALTH EFFECTS

- SKIN CONTACT:** May cause very slight skin irritation.
- EYE CONTACT:** May cause very slight eye irritation.
- INHALATION:** No significant health hazards identified.
- INGESTION:** Subchronic oral exposure may cause damage to health.
- CHRONIC EFFECTS:** NTP: Not tested  
OSHA: Not regulated  
IARC: Not listed

### 4. FIRST AID MEASURES

- SKIN CONTACT:** Wash with plenty of soap and water. Do not use organic solvents.
- EYE CONTACT:** Flush immediately with large amount of water for at least 15 minutes.
- INHALATION:** Move affected person to fresh air and call a physician.
- INGESTION:** Don't induce vomiting because of risk of aspiration into the lungs.  
If aspiration is suspected, obtain immediate medical attention.
- NOTE TO PHYSICIAN:** None



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## 5. FIRE-FIGHTING MEASURES

### FLAMMABLE PROPERTIES:

**FLASHPOINT & METHOD °F (°C) :** Not applicable  
**FLAMMABLE LIMITS (% by volume):** LFL: 60 g/m<sup>3</sup><sup>1)</sup> UFL: No data available  
**AUTOIGNITION TEMPERATURE:** 752°F (400°C)(Melts)<sup>1)</sup>

**EXTINGUISHING MEDIA:** Water spray, foam, carbon dioxide or dry chemical agents.

**SPECIAL FIRE-FIGHTING PROCEDURES:** Do not use a straight stream of water.

### FIRE-FIGHTING INSTRUCTIONS:

Use self-contained breathing apparatus and full protective clothing for chemicals.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Smoke, fumes, oxides of carbon, oxides of phosphorus

**TO FIREMEN:** Use self-contained breathing apparatus and full protective clothing for chemicals.  
Explosive dust/air mixture may be formed.

## 6. ACCIDENTAL RELEASE MEASURES

**LARGE SPILL:** Clean up all spills immediately. Avoid inhalation of dust and contact with skin and eyes.  
Avoid generation of dust during clean up (use dustless methods such as vacuums.)  
Incinerate or place in a suitable container for disposal by a licensed contractor.  
(Follow all Federal, State and local regulations in your country.)

**SMALL SPILL:** Sweep up or vacuum and place into sealable container for disposal with wearing protective equipment. (See section 8.)

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid contact with skin and eyes. Keep container closed. Use with adequate ventilation. Do not eat, drink or smoke at the workplace. Prevent deposition of dust to avoid dust explosion. Employ grounding, venting and explosion relief provisions in accord with accepted engineering practices in process operations capable of generating dust and/or static electricity.

**STORAGE:** Keep away from food and drink. Store in the original container securely under cool and dry condition. Avoid contact with peroxides and oxidizing agents.



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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Avoid generating and inhaling dusts. Local exhaust ventilation should be used.  
Keep container closed when not in used.

### PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY PROTECTION:** Wear suitable particle filter mask when exposed to dust.

**EYE PROTECTION:** Safety glasses or splash goggles. Contact lenses should not be worn.

**SKIN PROTECTION:** Chemical resistant gloves.

**BODY PROTECTION:** Protective clothing should cover the whole body.

**SPECIAL PROTECTION INFORMATION:** No specific health hazards under normal conditions.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** White powder

**ODOR:** Odorless

**BOILING POINT, °F (°C):** No data available

**MELTING POINT, °F (°C):** ≥410°F(≥210°C)

**VAPOR PRESSURE (Pa):** No data available

**SOLUBILITY IN WATER:** <0.1 g/l at 77°F(25°C) <sup>1)</sup>

**SPECIFIC GRAVITY:** 1.12 at 77°F(25°C) <sup>1)</sup>

**pH:** Not applicable

**VISCOSITY (mPa•s):** Not applicable

**VAPOR DENSITY (air=1):** No data available

**EVAPORATION RATE:** No data available  
(n-Butyl acetate=1)

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## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under recommended conditions of storage and handling.

**SUBSTANCES TO AVOID CONTAMINATION:** Oxidizing agents, peroxides and strong acid.

**HAZARDOUS REACTION AND FIRE DANGER:**

No risk of specific hazardous reactions or fire under normal conditions.

**PRODUCTS CAUSING HAZARDOUS DECOMPOSITION:**

Decomposition products may include oxides of carbon and oxides of phosphorus.

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## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** No data available, but may cause very slight eye irritation.

Reference: Component(1): Very slight irritant (rabbit)<sup>1)</sup>

**SKIN EFFECTS:** No data available, but may cause very slight skin irritation.

Reference: Component(1): Very slight irritant (rabbit)<sup>1)</sup> Dermal LD<sub>50</sub>(rat) >2000 mg/kg<sup>1)</sup>

Not sensitizing (guinea pig)<sup>1)</sup>

**ACUTE ORAL EFFECTS :** No significant health hazards identified.

Reference: Component(1): Oral LD<sub>50</sub>(rat) >5000 mg/kg<sup>1)</sup>

Component(2): Oral LD<sub>50</sub>(rat) >2000 mg/kg<sup>1)</sup>

**ACUTE INHALATION EFFECTS :** No data available

**CHRONIC EFFECTS/CARCINOGENICITY:** Not listed as a carcinogen by IARC, OSHA, NTP or EPA.

**MUTAGENICITY:** Component(1): Negative (Ames)<sup>1)</sup>

Component(2): Negative (Ames)<sup>1)</sup>

**OTHERS:**

**Subchronic toxicity:** Component(1): 90-day repeated oral toxicity study(rat): NOEL =50mg/kg/day<sup>1)</sup>

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### 12. ECOLOGICAL INFORMATION

**ECOTOXICITY:**

**ACUTE TOXICITY TO FISH (Rainbow trout):** Component(1): 96h LC<sub>50</sub> >10.1 mg/l <sup>1)</sup>

**ACUTE TOXICITY TO DAPHNIA (*Daphnia magna*):** Component(1): 48h EC<sub>50</sub> =8.62 mg/l <sup>1)</sup>

**ACUTE TOXICITY TO ALGAE (*Selenastrum sp.*):** Component(1): 72h EC<sub>50</sub> =7.84 mg/l <sup>1)</sup>

**ACUTE TOXICITY TO BACTERIA (Activated sludge):** Component(1): 3h IC<sub>50</sub> >100 mg/l <sup>1)</sup>

**BIODEGRADABILITY:** Component(1): Not readily biodegradable <sup>1)</sup>

**BIOACCUMULATIVE POTENTIAL:** Component(1): Bioconcentration factor (BCF) ≤20 in carp <sup>1)</sup>

### 13. DISPOSAL CONSIDERATION

**DISPOSAL INFORMATION:** Should be in accordance with local, state or national legislation.

### 14. TRANSPORTATION INFORMATION

**UN NO.:** Free

**IMDG CODE:** Free

**MARINE POLLUTANT:** Free

### 15. REGULATORY INFORMATION

**US FEDERAL REGULATION:**

**TSCA: TSCA INVENTORY**  registered  not registered

**SARA TITLE III**

**SECTION 313 TOXIC CHEMICALS:**

COMPONENT	CAS RN	Wt%
Not applicable		

**INTERNATIONAL INFORMATION:**

**CEPA: DSL**  registered  not registered

**REACH(EU):** If you require information, please contact us.



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## 16. OTHER INFORMATION

### RATING

#### HMIS:

HEALTH:	1
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTIVE EQUIPMENT	E

#### NFPA:

HEALTH HAZARD	1
FLAMMABILITY	1
REACTIVITY	1
SPECIFIC HAZARD	None

**REFERENCE:** 1) Our testing data

### OTHERS

**DATE REVISED:** November/30/2006 Essential changes are section 9 and 11.

**OTHERS:** Precautionary Labeling  
Signal word: Free  
Statement of hazard: Free