

according to Regulation (EC) No. 1907/2006 Version 01 Issuing Date: 2016-04-20

Print Date:

## 1. Identification of the Substance/Mixture and of the Company/Undertaking

## 1.1 Product identifiers

Product name: OraRez® AN-100P

Chemical name: Copolymers of methyl vinyl ether/maleic anhydride

CAS-No.: 9011-16-9

REACH Registration No.: A registration number is not available for this substance as polymers are

exempted from REACH registration.

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances.

## 1.3 Details of the supplier of the safety data sheet

Company: Boai NKY Pharmaceuticals Ltd.

Address: No.1888 East Wenhua Road, Boai, Jiaozuo, Henan Province, China 454450.

Tel.: +86 391 8696320 Fax: +86 391 8692950

Email address: sales@china-pvp.com

# 1.4 Emergency telephone number

Emergency Phone #: +86 22 58316066

## 2. Hazards Identification

## 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

#### 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

## 2.3 Other hazards-none

# 3. Composition/Information on Ingredients

3.1	Substances			
	Chemical nature: Alternating copolymer of Methyl Vinyl Ether and Maleic Anhydride, in the form			
	powder, high molecular weight polymer.			
	Components: Methyl Vinyl Ether, Maleic Anhydride			
	Synonyms: 2,5-Furandione, Polymer With Methoxyethene; Copolymer, Methyl Vinyl Ether/Maleic			
	Anhydride; Maleic Anhydride - Methylvinyl Ether Copolymer.			

#### 4. First Aid Measures

# 4.1 Description of first aid measures

If inhaled



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If breathed in, move person from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

#### In case of skin contact

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical aid.

# In case of eye contact

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

#### If swallowed

Never give anything by mouth to an unconscious person. Get medical aid. Do not induce vomiting. If conscious and alert, rinse mouth with water and drink 2-4 cupfuls of milk or water.

# 4.2 Most important symptoms and effects, both acute and delayed

Unexcreted particles may be phagocytized by cells of the reticuloendothelial system and deposited in storage sites in the liver, spleen, lung, and bone marrow resulting in the storage disease thesaurosis. Severity and symptoms depend on storage site and nature of the particle. Pathological changes are not necessarily attributed to the thesaurosis, but in some cases an inflammation or granulomatoma have occurred.

# 4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat symptomatically and supportively.

# 5. Firefighting Measures

# 5.1 Extinguishing media:

## Suitable extinguishing media

Use water spray, dry chemical, carbon dioxide or appropriate foam.

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides.

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

# **5.4** Further information

No data available.

# 6. Accidental Release Measures

## 6.1 Personal precautions protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. Use proper personal protective equipment as indicated in Section 8.

#### **6.2** Environmental precautions

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up



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Vacuum or sweep up and shovel. Keep in suitable, closed containers for disposal. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### 6.4 Reference to other sections

For disposal see section 13.

#### 7. Handling and Storage

# 7.1 Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid breathing dust, vapor or gas. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use only in a chemical fumehood.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place away from incompatible substances.

# 7.3 Specific end uses

No data available.

# 8. Exposure Controls/Personal Protection

#### 8.1 Control parameters

Components with workplace control parameters.

# 8.2 Exposure controls

# **Appropriate engineering controls**

General industrial hygiene practice. Facilities storing or utilizing this material should be equipped with eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

# Personal protective equipment

#### Eve/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

# Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the Standard EN374 derived from it.

#### **Body protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the



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concentration and amount of the dangerous substance at the specific workplace.

# **Respiratory protection**

Where protection from nuisance levels of dusts is desired, use Type N95 (US) or Type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (RU).

# 9. Physical and Chemical Properties

# 9.1 Information on basic physical and chemical properties

	F-V			
a)	Appearance	Form: free flowing powder		
		Color: white or off white		
b)	Odour	No data available		
c)	Odour threshold	No data available		
d)	pН	No data available		
e)	Melting point/freezing point	No data available		
f)	Initial boiling point and boiling			
	range	No data available		
g)	Flash point	No data available		
h)	Evaporation rate	No data available		
i)	Flammability (solid, gas)	No data available		
j)	Upper/lower flammability or			
	explosive limits	No data available		
k)	Vapour pressure	No data available		
1)	Vapour density	No data available		
m)	Relative density	No data available		
n)	Solubility	Insoluble in water. Soluble in acetone, THF.		
o)	Partition coefficient: n-octanol/water	No data available		
p)	Autoignition temperature	No data available		
q)	Decomposition temperature	140°C		
r)	Viscosity (1% wt/vol MEK)	2.5-5.0		
s)	Explosive properties	No data available		
t)	Oxidizing properties	No data available		
Other safety information				
No data available.				

# 10. Stability and Reactivity

# 10.1 Reactivity

9.2

No data available

# 10.2 Chemical stability



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Stable under normal temperatures and pressures.

## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Incompatible materials, dust generation, excess heat.

# 10.5 Incompatible materials

Strong oxidizing agents, reducing agents.

# 10.6 Hazardous decomposition products

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

# 11. Toxicological Information

# 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50/LC50: No data available.

## Skin corrosion/irritation

May cause skin irritation.

#### Serious eye damage/eye irritation

May cause eye irritation.

# Ingestion

May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

## Inhalation

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated

Chronic: No information found.

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, CA Prop 65, or EPA classification.

#### Reproductive toxicity

No data available

# Specific target organ toxicity – single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

## Signs and symptoms of exposure

Unexcreted particles may be phagocytized by cells of the reticuloendothelial system and deposited in

# UKY

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storage sites in the liver, spleen, lung, and bone marrow resulting in the storage disease thesaurosis. Severity and symptoms depend on storage site and nature of the particle. Pathological changes are not necessarily attributed to the thesaurosis, but in some cases an inflammation or granulomatoma have occurred.

# 12. Ecological Information

## 12.1 Toxicity

No data available

# 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulation potential

No data available

## 12.4 Mobility in soil

No data available

# 12.5 Results of PBT and vPvB assessment

No data available

## 12.6 Other adverse effects

No data available

## 13. Disposal Considerations

13.1	Waste treatment methods
	Product
	Offer surplus and non-recyclable solutions to a licensed disposal company.
	Contaminated packaging
	Dispose of as unused product.
	Dispose of as unused product.

## 14. Transport Information

# 14.1 UN number

ADR/RID: -- IMDG: -- IATA: --

# 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

# 14.3 Transport hazard class(es)

ADR/RID: -- IMDG: -- IATA: --

## 14.4 Transport group

ADR/RID: -- IMDG: -- IATA: --

#### 14.5 Environmental hazards



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ADR/RID: -- IMDG: Marine pollutant: no IATA: --

14.6 Special precautions for user

No data available

#### 15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- 15.1 Safety, health and environmental regulations/legislation specific for the substance of mixture
  No data available
- 15.2 Chemical safety assessment

No data available

# 16 Other Information

#### Further information

The above information is believed to be correct, but does not intend to be all-inclusive and shall be used only as a guide. This material safety data sheet is based on our current knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any assurances on product properties and does not constitute a contractual legal relationship.

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