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

#### **Product identifiers**

Product name: PVP/ H<sub>2</sub>O<sub>2</sub> complex 30

Brand name: WhiVidone® 30 CAS-No.: 9003-39-8, 7722-84-1

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

Identified uses: Personal care

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@boai-nky.com
Emergency telephone number

Emergency Phone #: +86 22 58316066

## 2. Hazards Identification

#### **GHS Classification**

Self-heating substances and mixtures: Category

Acute toxicity (Inhalation): Category 5

Skin irritation : Category 2

Serious eye damage: Category 1

Short-term (acute) aquatic hazard: Category 3

#### **GHS** Label elements





Pictogram:

Signal word: Danger

Hazard statements: H252 Self-heating in large quantities; may catch fire.

H315 Causes skin irritation

H318 Causes serious eye damage H333 May be harmful if inhaled. H402 Harmful to aquatic life.

Precautionary statements: **Prevention:** 

P264 Wash skin thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye



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protection/ face protection.

Keep dust/air mixtures away from ignition sources.

## **Response:**

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P312 IF INHALED: Call a POISON CENTER/ doctor if you feel unwell.

 $P305 + P351 + P338 + P310 \; IF \; IN \; EYES: Rinse \; cautiously \; with \; water \; for \; several \; minutes. \; Remove \; contact \; lenses, \; if \; present \; and \; easy \; to \; do.$ 

Continue rinsing. Immediately call a POISON CENTER/ doctor.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

## Storage:

P407 Maintain air gap between stacks or pallets.

P403 + P235 Store in a well-ventilated place. Keep cool.

P420 Store separately.

## Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

## Other hazards which do not result in classification

None known.

# 3. Composition/Information on Ingredients

Substances / Mixture : Mixture Chemical nature : organic

#### **Hazardous components**

Chemical name	CAS-No.	Classification	Concentration (%)
HYDROGEN	7722-84-1	Ox. Liq. 1; H271	>= 10.00 - < 20.00
PEROXIDE		Acute Tox. 4; H302	
		Acute Tox. 4; H332	
		Skin Corr. 1A; H314	
		Eye Dam. 1; H318	
		STOT SE 3; H335	
		Aquatic Acute 2; H401	
		Aquatic Chronic 3;	
		H412	

## 4. First Aid Measures

General advice: Move out of dangerous area

Consult a physician



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Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended

If inhaled: Move to fresh air.

IF INHALED: Call a POISON CENTER/ doctor if you feel unwell.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical advice.

In case of skin contact: Remove contaminated clothing. If irritation develops, get medical attention.

If on skin, rinse well with water.

Wash contaminated clothing before re-use.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses.

Protect unharmed eye.

Obtain medical attention

If swallowed: Obtain medical attention.

Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important : Signs and symptoms of exposure to this material through breathing,

Symptoms and effects, swallowing, and/or passage of the material through the skin may include:

both acute and delayed irritation (nose, throat, airways)

Lung irritation bronchitis Headache

Dizziness lung edema (fluid buildup in the lung tissue)

seizures Convulsions

Causes skin irritation

Causes serious eye damage May be harmful if inhaled

Notes to physician: No hazards which require special first aid measures.

# 5. Firefighting Measures

## Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Water spray

Foam



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Alcohol-resistant foam

Carbon dioxide (CO2)

Dry chemica

#### Unsuitable extinguishing media:

High volume water jet

## Specific hazards during firefighting:

Organic dusts at sufficient concentration can form explosive mixtures in air.

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Do not allow run-off from fire fighting to enter drains or water courses.

## **Hazardous combustion products:**

Carbon dioxide (CO2)

Carbon monoxide

Nitrogen oxides (NOx)

Organic acids

#### **Specific extinguishing methods:**

Product is compatible with standard fire-fighting agents.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

## Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

## 6. Accidental Release Measures

## Personal precautions protective equipment and emergency procedures:

Evacuate personnel to safe areas.

Remove all sources of ignition.

Use personal protective equipment.

Ensure adequate ventilation.

Avoid dust formation.

Avoid breathing dust.

Material can create slippery conditions.

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Comply with all applicable federal, state, and local regulations.

#### **Environmental precautions:**

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respective authorities.



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## Methods and materials for containment and cleaning up:

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Keep in suitable, closed containers for disposal.

## 7. Handling and Storage

## Advice on protection against fire and explosion:

Avoid dust formation.

Take measures to prevent the build up of electrostatic charge.

Keep away from combustible material.

Keep away from open flames, hot surfaces and sources of ignition.

Provide appropriate exhaust ventilation at places where dust is formed.

## Advice on safe handling:

Open drum carefully as content may be under pressure.

Avoid dust formation.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Ensure all equipment is electrically grounded and bonded before beginning transfer operations.

The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres.

Container hazardous when empty.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national regulations.

Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards.

#### **Conditions for safe storage:**

Keep container tightly closed in a dry and well-ventilated place.

Store in cool place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Observe label precautions.

No smoking.

#### Further information on storage stability:

Keep in a dry place.

#### 8. Exposure Controls/Personal Protection

## Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis	



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		(Form of exposure)	parameters / Permissible concentration	
HYDROGEN PEROXIDE	7722-84-1	CMP	1 ppm	AR OE
		TWA	1 ppm	ACGIH

#### **Engineering measures:**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Provide appropriate exhaust ventilation at places where dust is formed.

## Personal protective equipment

## **Respiratory protection:**

In the case of dust or aerosol formation use respirator with an approved filter within the capabilities of the respirator/filter combination.

Where concentrations are above recommended limits or are unknown, or a cartridge type respirator is not adequate, wear a positive-pressure supplied-air respirator.

## **Hand protection Material:**

butyl-rubber

## **Break through time:**

480 min

## Glove thickness:

> 0.5 mm

#### Remarks:

The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

#### **Eye protection:**

Wear chemical splash goggles and face shield to protect eyes and skin from airborne dust.

Maintain eye wash station in immediate work area.

#### Skin and body protection:

Wear as appropriate:

Safety shoes

Dust impervious protective suit

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Discard gloves that show tears, pinholes, or signs of wear.



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## 9. Physical and Chemical Properties

## Information on basic physical and chemical properties

Appearance powder

Color No data available

Odour No information available.

Odour threshold No data available

pH 6.0 - 7.0

Melting point/freezing point not determined
Boiling point/boiling range not determined
Flash point Not applicable
Evaporation rate Not applicable
Flammability (solid, gas) not determined
Self-ignition not determined

Upper explosion limit / Upper flammability

limit

Upper explosion limit not determined

Lower explosion limit / Lower flammability

limit

Lower explosion limit not determined

Not applicable Vapour pressure Relative vapour density Not applicable Relative density No data available 1 g/cm3 (20 °C) Density Water solubility not determined Solubility in other solvents No data available Partition coefficient: n-octanol/water not determined No data available Decomposition temperature Viscosity, dynamic Not applicable Viscosity, kinematic Not applicable

Oxidizing properties The substance or mixture is not classified as oxidizing.

The substance or mixture is classified as self heating with

the category 2.

## 10. Stability and Reactivity

#### Reactivity:

No decomposition if stored and applied as directed.

## Chemical stability:

Self-heating substances

Stable under recommended storage conditions.

#### Possibility of hazardous reactions:

Dust may form explosive mixture in air.

Conditions to avoid:



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Keep away from heat, flame, sparks and other ignition sources.

Avoid heat, open flame, and prolonged storage at elevated temperatures.

## Incompatible materials:

Combustible material

Copper

Cyanides

Metals

metal salts

Organic materials

Reducing agents

Strong oxidizing agents

## Hazardous decomposition products:

Carbon monoxide

Carbon dioxide (CO2)

Nitrogen oxides (NOx

## 11. Toxicological Information

#### **Acute toxicity**

May be harmful if inhaled.

#### **Product:**

Acute oral toxicity:

LD50 (Rat): > 5,000 mg/kg

Remarks: Based on similar product.

Remarks: Hydrogen peroxide ingestion can cause irritation of the gastrointestinal system with possible abdominal pain, nausea, vomiting and diarrhea. Large ingestions can cause rapid release of oxygen which may expand the esophagus or stomach resulting in severe damage (bleeding, ulceration or perforation).

## **Components:**

## HYDROGEN PEROXIDE:

Acute oral toxicity:

LD50 (Rat, male): 1,026 mg/kg LD50 (Rat, female): 694 mg/kg

Acute inhalation toxicity: LC50 (Rat): > 1 - < 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal absorption under GHS.



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Remarks: No mortality observed at this dose.

#### Skin corrosion/irritation

Causes skin irritation.

**Product:** 

Species: Rabbit

Result: Irritating to skin.

Remarks: May cause skin irritation and/or dermatitis.

**Components:** 

HYDROGEN PEROXIDE:

Result: Corrosive after 3 minutes or less of exposure

Serious eye damage/eye irritation

Causes serious eye damage.

**Product:** 

Species: Rabbit Result: Corrosive

Remarks: May cause irreversible eye damage., Eye effects may be delayed.

**Components:** 

HYDROGEN PEROXIDE:

Result: Corrosive

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

HYDROGEN PEROXIDE:

Genotoxicity in vitro:

Test Type: Ames test

Result: Positive results were obtained in some in vitro tests.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

**Components:** 

HYDROGEN PEROXIDE:

Target Organs: Respiratory Tract



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Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

## STOT - repeated exposure

Not classified based on available information.

#### **Aspiration toxicity**

Not classified based on available information.

#### **Product:**

No aspiration toxicity classification

## **Further information**

**Product:** 

Remarks: No data available

## 12. Ecological Information

## **Ecotoxicity**

## **Components:**

HYDROGEN PEROXIDE:

Toxicity to fish:

LC50 (Pimephales promelas (fathead minnow)): 16.4 mg/l

Exposure time: 96 h Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates:

LC50 (Daphnia magna (Water flea)): 2.4 mg/l

Exposure time: 48 h
Test Type: semi-static test

Toxicity to algae:

EC50 (Skeletonema costatum (marine diatom)): 1.38 mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

NOEC (Skeletonema costatum (marine diatom)): 0.63 mg/l

End point: Growth inhibition

Exposure time: 72 h Test Type: static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC (Daphnia magna (Water flea)): 0.63 mg/l

Exposure time: 21 d

Test Type: flow-through test

No data available

## Persistence and degradability



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## **Product:**

Biodegradability:

Result: Not readily biodegradable.

## **Components:**

HYDROGEN PEROXIDE:

Biodegradability:

Result: The methods for determining biodegradability are not applicable to inorganic substances.

No data available

#### Bioaccumulative potential

## **Components:**

No data available

## Mobility in soil

## **Components:**

No data available

#### Other adverse effects

No data available

## **Product:**

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

#### **Components:**

## 13. Disposal Considerations

#### **Disposal methods**

General advice:

The product should not be allowed to enter drains, water courses or the soil.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to a licensed waste management company.

## Contaminated packaging

Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

## 14. Transport Information

## **International transport regulations**

## REGULATION

ID NUMBER	PROPER	*HAZARD	SUBSIDIARY	PACKING	MARINE
	SHIPPING	CLASS	HAZARDS	GROUP	POLLUTANT



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JN	3088	SELF-HEATI	4.2	II	
		NG SOLID,			
		ORGANIC,			
		N.O.S.			
		(HYDROGEN			
		PEROXIDE)			

## INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	3088	Self-heating	4.2	II
		solid, organic,		
		n.o.s.		
		(HYDROGEN		
		PEROXIDE)		

#### NTERNATIONAL MARITIME DANGEROUS GOODS

solid, organic,

(HYDROGEN PEROXIDE)

n.o.s.

	111110111		Din (GEROES GOODS	
UN	3088	SELF-HEATI	4.2	II
		NG SOLID,		
		ORGANIC,		
		N.O.S.		
		(HYDROGEN		
		PEROXIDE)		

## \*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
Marine ponatant	110

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.



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## 15. Regulatory Information

## Safety, health and environmental regulations/legislation specific for the substance or mixture

Control of precursors and essential chemicals for the preparation of drugs:

Not applicable

## The components of this product are reported in the following inventories:

DSL: All components of this product are on the Canadian DSL

AICS: 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

TCSI: On the inventory, or in compliance with the inventory

TSCA: On or in compliance with the active portion of the TSCA inventory

#### **Inventories**

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

#### 16 Other Information

#### Full text of H-Statements

H271 May cause fire or explosion; strong oxidizer.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

## 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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