

# BEYOND INDUSTRIES (CHINA) LIMITED

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## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name: C12-14 Alkyl Dimethyl Amine Oxide  
CAS NO: 308062-28-4  
Company: BEYOND INDUSTRIES (CHINA) LIMITED  
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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)**

Acute toxicity, Category 5	H303: May be harmful if swallowed.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

**GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)**

**Hazardous products which must be listed on the label:**

85408-49-7/1643-20-5

C12/14 Alkyl dimethyl amine oxide

Pictogram



Signal word : Danger

Hazard statements	: H303	May be harmful if swallowed.
	H315	Causes skin irritation.
	H318	Causes serious eye damage.
	H400	Very toxic to aquatic life.
	H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

: **General:**

None

**Prevention:**

P264

Wash skin thoroughly after handling.

P273

Avoid release to the environment.

P280

Wear eye protection/ face protection.

P280

Wear protective gloves.

**Response:**

P302 + P352

IF ON SKIN: Wash with plenty of water.

P305 + P351 +

IF IN EYES: Rinse cautiously with water for several minutes.

P338

Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER or doctor/ physician.

P332 + P313

If skin irritation occurs: Get medical advice/ attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

P391

Collect spillage.

**Storage:**

None

**Disposal:**

P501

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

**2.3 Other hazards which do not result in classification**

no data available

**SECTION 3: Composition/information on ingredients**

**3.1 Substance**

Not applicable, this product is a mixture.

**3.2 Mixture**

**Information on Components and Impurities**

Chemical Name	CAS-No.	Identification number	GHS Classification	Concentration [%]
C12/14 Alkyl dimethyl amine oxide	85408-49-7 1643-20-5	Not applicable	Acute toxicity , Category 4 ; H302 Skin irritation , Category 2 ; H315 Serious eye damage , Category 1 ; H318 Acute aquatic toxicity , Category 1 ; H400 Chronic aquatic toxicity , Category 2 ; H411	>= 28 - < 32
C12/14 Alkyl dimethyl amine	112-18-5	Not applicable	Flammable liquids , Category 4 ; H227 Acute toxicity , Category 4 ; H302 Skin corrosion , Category 1B ; H314 Serious eye damage , Category 1 ; H318 Acute aquatic toxicity , Category 1 ; H400 Chronic aquatic toxicity , Category 1 ; H410	>= 0.5 - < 1
hydrogen peroxide	7722-84-1	Not applicable	Oxidizing liquids , Category 1 ; H271 Acute toxicity , Category 4 ; H302 Acute toxicity , Category 4 ; H332 Skin corrosion , Category 1A ; H314 Serious eye damage , Category 1 ; H318	>= 0.1 - < 0.3

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice	: Show this safety data sheet to the doctor in attendance. First aider needs to protect himself. Place affected clothing in a sealed bag for subsequent decontamination. Plan first aid action before beginning work with this product.
If inhaled	: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician or poison control centre immediately.
Skin contact	: Take off contaminated clothing and shoes immediately. After contact with skin, first remove product with a dry cloth and then wash the skin with plenty of water. If symptoms persist, call a physician.
Eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/ attention.
Ingestion	: Do NOT induce vomiting. Rinse mouth with water. Give small amounts of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical advice/ attention.

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

Symptoms	: Skin contact may provoke the following symptoms: corrosive effects
Risks	: Skin contact may aggravate existing skin disease Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis

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

Notes to physician	: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. There is no specific antidote available.
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## SECTION 5: Firefighting measures

Flash point	: Not applicable (aqueous liquid).
Auto-ignition temperature	: no data available
Flammability/Explosive limit	: no data available

### 5.1 Extinguishing media

Suitable extinguishing media	: Water spray Foam Multi-purpose powders Carbon dioxide (CO <sub>2</sub> )
Unsuitable extinguishing media	: High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide Nitrogen oxides (NO <sub>x</sub> ) Corrosive or suffocating vapours are released. Highly irritating vapours are released. On combustion or on thermal decomposition (pyrolysis) releases: Nitrogen oxides (NO <sub>x</sub> ) Carbon oxides
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### 5.3 Advice for firefighters

- Special protective equipment for firefighters : Self-contained breathing apparatus (EN 133)  
Full protective suit
- Specific fire fighting methods : Cool down the containers/equipment exposed to heat with a water spray.  
Ensure that there is NO direct contact between the water and the product.  
Do not use a solid water stream as it may scatter and spread fire.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Further information : In the event of fire and/or explosion do not breathe fumes.  
Standard procedure for chemical fires.  
Use a water spray to cool fully closed containers.

## SECTION 6: Accidental release measures

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### 6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Avoid contact with the skin and the eyes.  
Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid.  
For accidental release measures for each mixture refer to attached material safety data sheets.

### 6.2 Environmental precautions

- Environmental precautions : Dam up.  
Prevent product from entering sewage system.  
Do not flush into surface water or sanitary sewer system.  
Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

### 6.3 Methods and materials for containment and cleaning up

- Methods for containment : Stop leak if safe to do so.  
Dam up with sand or inert earth (do not use combustible materials).
- Recovery : Absorb the product onto porous material.  
Shovel into suitable container for disposal.  
Non-sparking tools should be used.
- Decontamination/cleaning : Clean contaminated surface thoroughly.  
Recover the cleaning water for subsequent disposal.
- Disposal : Dispose of in accordance with local regulations.
- Additional advice : The product should not be allowed to enter drains, water courses or the soil.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Technical measures : Provide sufficient air exchange and/or exhaust in work rooms.  
Earth the equipment.
- Advice on safe handling and usage : Prevent the build-up of electrostatic charge.  
Avoid dust formation.  
Keep away from heat.  
Keep away from fire, sparks and heated surfaces.  
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.  
Handle in accordance with good industrial hygiene and safety practice.
- Hygiene measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Regular cleaning of equipment, work area and clothing.  
Use clean, well-maintained personal protection equipment.  
Wash hands before breaks and at the end of workday.

## **7.2 Conditions for safe storage, including any incompatibilities**

Technical Measures for storage : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

### **Storage conditions**

Recommended : Stable under normal conditions.  
Keep in a dry, cool and well-ventilated place.  
Store in original container.  
Keep tightly closed.

To be avoided : Keep away from open flames, hot surfaces and sources of ignition.  
Keep away from combustible material.  
Keep away from incompatible materials to be indicated by the manufacturer

Incompatible products : Do not mix with incompatible materials (See list section 10).

### **Packaging Measures**

Packaging materials - Recommended : Plastic drum

### **Storage stability**

Storage temperature : no data available

## **7.3 Specific end use(s)**

no data available

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Components	Value type	Value	Basis
hydrogen peroxide	PC-TWA	1.5 mg/m <sup>3</sup>	Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

#### **Components with other occupational exposure limits**

Components	Value type	Value	Basis
hydrogen peroxide	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)

Upper Respiratory Tract irritation, Eye irritation, Skin irritation, Confirmed animal carcinogen with unknown relevance to humans

### **8.2 Exposure controls**

#### **Control measures**

Engineering measures : Effective exhaust ventilation system

## Personal protective equipment

- Respiratory protection : Use a respirator with an approved filter if a risk assessment indicates this is necessary.
- Hand protection : Impervious gloves  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.  
Gloves must be inspected prior to use.
- Eye protection : Tightly fitting safety goggles  
Safety glasses with side-shields
- Skin and body protection : impervious clothing  
Safety shoes  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Remove and wash contaminated clothing before re-use.
- Hygiene measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Regular cleaning of equipment, work area and clothing.  
Use clean, well-maintained personal protection equipment.  
Wash hands before breaks and at the end of workday.  
When using do not eat, drink or smoke.
- Protective measures : The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment.  
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.

## Environmental exposure controls

- General advice : Dam up.  
Prevent product from entering sewage system.  
Do not flush into surface water or sanitary sewer system.  
Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : Form : liquid  
Physical state: liquid (25 °C)  
Colour: colourless to pale yellow.
- Odour : no data available
- Odour Threshold : no data available
- pH : 6.0 - 8.0 ( 1 %)
- Boiling point/boiling range : > 100 °C ( 1.013 hPa)  
Method: according to a standardised method
- Flash point : Not applicable (aqueous liquid).
- Evaporation rate (Butylacetate = 1) : no data available
- Flammability (solid, gas) : no data available
- Flammability (liquids) : no data available

Flammability/Explosive limit	: no data available
Auto-ignition temperature	: no data available
Vapour pressure	: no data available
Vapour density	: no data available
Density	: ca. 0.96 g/cm <sup>3</sup> ( 25 °C) Method: according to a standardised method
Solubility	: no data available
Partition coefficient: n-octanol/water	: no data available
Thermal decomposition	: no data available
Viscosity	: no data available
Explosive properties	: no data available
Oxidizing properties	: no data available

## 9.2 Other information

no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Reactivity : Stable at normal ambient temperature and pressure.

### 10.2 Chemical stability

Chemical stability : Stable under normal conditions.  
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.  
Heat, flames and sparks.  
Prevent the build-up of electrostatic charge.  
Keep away from heat and sources of ignition.

### 10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents  
Strong reducing agents  
Strong acids and strong bases

### 10.6 Hazardous decomposition products

Decomposition products : On combustion or on thermal decomposition (pyrolysis) releases:  
(Carbon oxides (CO + CO<sub>2</sub>)).  
Nitrogen oxides (NO<sub>x</sub>)

## SECTION 11: Toxicological information

### 11.1 Acute toxicity

ND

### 11.2 Skin irritation or corrosion

A slight irritation to the skin

### 11.3 Eye irritation or corrosion

A slight irritation to eyes

### 11.4 Carcinogenicity

No relevant literature was reported.

### 11.5 Other information

This toxicity statement has been issued by other products with similar structures and components and has not been fully tested.

## SECTION 12: Ecological information

12.1 Acute aquatic toxicity	ND
12.2 Biodegradability	ND
12.3 Bioaccumulation	ND

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product Disposal

Prohibition	: Avoid release to the environment. The product should not be allowed to enter drains, water courses or the soil.
Advice on Disposal	: Dispose of as hazardous waste in compliance with local and national regulations. Do not dispose of with domestic refuse.

#### Advice on cleaning and disposal of packaging

Measures for waste avoidance.	: Do not dispose of the product at a rubbish tip.
Advice	: Empty the packaging completely prior to disposal.
Reason for waste disposal	: Dispose of contents/ container to an approved waste disposal plant.
Other data	: Dispose of as hazardous waste in compliance with local and national regulations.

## SECTION 14: Transport information

14.1 UN number	UN 3082
14. 2 Dangerous Good Description	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dodecyldimethylamine Oxide Solution), 9, III
14. 3 Transport hazard class	9
14. 4 Packing group	
Packing group	III
Label(s):	9
14.5 Environmental hazards	YES
14.6 Special precautions for user	
For personal protection see section 8.	

## SECTION 15: Regulatory information

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

Following last version of regulations are applicable for the chemical classification, SDS and label:

- General Rule for classification and hazard communication of chemicals, GB 13690
- Series standards of Safety rules for classification, precautionary labeling and precautionary statements of chemicals, GB 30000.2~GB 30000.29
- General rules for preparation of precautionary label for chemicals, GB 15258
- Safety data sheet for chemical products—Content and order of sections, GB/T 16483

## SECTION 16: Other 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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in an other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.