



Safety Data Sheet (SDS) Report

Applicant: Qingdao Kaimosi Biochemical Technology Co.,Ltd Issue Date: July 15, 2018

Sample Description:

The sample information was submitted and identified on applicant's behalf to be:

Product Name : 1,8-Naphthalic Anhydride

Application Received : July 04, 2018

Application Reviewed : July 15, 2018

Service Requested:

As requested by the applicant, the Safety Data Sheet (SDS) was generated by the submitted information in accordance with Regulation (EC) No. 1907/2006, Regulation (EC) No 1272/2008, EU Commission Directive 67/548/EEC, 1999/45/EC, for details please refer to attached pages.

Authorized By:
Qingdao Kaimosi Biochemical Technology Co.,Ltd

Tel : +(86) 571 87191975

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

1.1. Product identifier

Trade name:	1,8-Naphthalic Anhydride
Proper shipping name:	None
Other identities:	No data available

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

1.2.1. Relevant identified uses

Intermediate for pigments, dyestuffs, agricultural, pesticides, resin and film.

1.2.2. Uses advised against

Advise against other uses.

1.3. Details of the supplier of the safety data sheet

Supplier:	Qingdao Kaimosi Biochemical Technology Co.,Ltd
Address:	808 Block B, Suning Life Plaza, No.1 Shu Yuan Road, Licang District, Qingdao
Telephone:	+(86) 571 87191975
Fax:	+(86) 571 87191975
E-mail:	Sales@kaimosi.com

Only representative company name:	REACH Only Representative Services GMBH
Address:	Paul-Gerhardt-Straße 1, D-52072, Aachen
Telephone:	+49 711 27311-170
Fax:	+49 711 27311-559
E-mail:	Wilhelm.Pfleger@intertek.com

1.4. Emergency telephone number

Country	Advisory body	Address	Emergency number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Not classified.

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified.

Other adverse physicochemical, human health and environmental effects

No reliable data available.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictogram: None

Signal word:	None
Hazard statements:	EUH208: Contains Maleic anhydride that is classified as Skin Sensitisation Category 1 and Respiratory Sensitisation Category 1. May produce an allergic reaction.
Precautionary statements:	None

2.3. Other hazards

No reliable data available.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Name	CAS No.	EC No.	Index No.	REACH No.	% wt/wt	Classification according to CLP	Classification according to DSD
1,8-Naphthalic Anhydride	81-84-5	201-380-2	-	01-21195933 69-21-× ×××	99.2	Not classified	Not classified
Water	7732-18-5	231-791-2	-	-	0.5	Not classified	Not classified
Acenaphthenequinone	82-86-0	201-441-3	-	-	0.1	Skin Irritation Category 2, H315; Eye Irritation Category 2, H319; Specific Target Organ Toxicity Category 3, H335	Xi; R36/37/38
Acenaphthylene	208-96-8	205-917-1	-	-	0.1	Acute Toxicity Category 4, H302; Skin Irritation Category 2, H315; Eye Irritation Category 2, H319; Specific Target Organ Toxicity Category 3, H335	Xn; R22 Xi; R36/37/38
Maleic anhydride	108-31-6	203-571-6	607-096-00-9	-	0.1	Acute Toxicity Category 4, H302; Skin Corrosive Category 1B, H314; Respiratory Sensitisation Category 1, H334; Skin Sensitisation Category 1, H317	Xn; R22 C; R34 R42/43

3.2. Mixtures

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

Ingestion: Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

Notes to physician: Symptomatic treatment.

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

May produce an allergic reaction.

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

No reliable data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Foam.

Dry chemical powder.

Carbon dioxide.

Water spray or fog - large fires only.

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5.2. Special hazards arising from the substance or mixture

Fire/explosion hazard: Emits toxic fumes under fire conditions.

Main combustion gas: Carbon monoxide, carbon dioxide gases.

5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water courses.

Use water delivered as a fine spray to control fire and cool adjacent area.

DO NOT approach containers suspected to be hot.

Cool fire exposed containers with water spray from a protected location.

Only when safe to do so, remove containers from path of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Wear suitable protective equipment.

6.1.2. For emergency responders

Remove ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in suitable container for recovery or disposal, avoid raising dust.

6.4. Reference to other sections

Refer to Section 8 for Personal Protective Equipment advice.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid ingestion, inhalation, skin and eye contact. Minimize dust generation and accumulation. Handle in accordance with good industrial hygiene practice and any legal requirements.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container: PP/PE. Check all containers are clearly labelled and free from leaks.

Storage incompatibility: Avoid reaction with strong acid, alkali and oxidizing agents.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

At this time no TLV of this mixture has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as practically possible and occupational exposure must be kept to a minimum.

Substance CAS No.	Maleic anhydride 108-31-6			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m ³	ppm	mg/m ³
Australia	0,25	1		
Austria	0,1	0,41	0,2	0,8
Belgium	0,1	0,41		
Canada - Ontario	0,1			
Canada - Québec	0,25	1,0		
Denmark	0,1	0,4	0,2	0,8
France				1

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Germany (AGS)	0,1	0,41	0,1 (1)	0,41 (1)
Germany (DFG)	0,1	0,41	0,1 (1)(2)	0,41
Hungary		0,4		0,4
Latvia		1		
New Zealand	0,25	1		
Poland		0,5		1
Singapore	0,25	1,0		
South Korea	0,1	0,4		
Spain	0,1	0,4		
Sweden	0,05	0,2	0,1 (1)	0,4 (1)
Switzerland	0,1	0,4	0,1	0,4
USA - NIOSH	0,25	1		
USA - OSHA	0,25	1		
United Kingdom		1		3
Remarks				
Germany (AGS)	(1) 15 minutes average value (2) Ceiling limit value			
Germany (DFG)	(1) STV 15 minutes average value (2) A momentary value of 0,2 ml/m ³ (0,81 mg/m ³) should not be exceeded.			
Spain	sen			
Sweden	(1) Ceiling limit value			

8.2. Exposure controls

Appropriate engineering controls: Process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

General Personal Protection: Safety goggles or face shield, protective chemical resistant gloves, protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	No data available
Odour:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapour pressure:	No data available
Relative density:	No data available
Water solubility:	No data available
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Flammability:	No data available
Upper/lower flammability limits:	No data available
Upper/lower explosive limits:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available
Dissociation constants:	No data available
Surface tension:	No data available
Viscosity:	No data available

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

May react with strong acid, alkali, oxidizing agents and incompatible materials.

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10.2. Chemical stability

Stable under normal condition.

10.3. Possibility of hazardous reactions

Hazardous reactions may occur if contact with incompatible material.

10.4. Conditions to avoid

High temperature, ignition sources (sparks, flames, static), incompatible materials.

10.5. Incompatible materials

Strong acid, alkali and oxidizing agents

10.6. Hazardous decomposition products

On combustion or thermal decomposition, may emit toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:	Maleic anhydride LD50(Oral, Rat) : 1090 mg/kg bw (OECD Guideline 401) LD50(Dermal, rabbit, female): 2620 mg/kg bw
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitisation:	Respiratory sensitisation Maleic anhydride: sensitising skin sensitisation Maleic anhydride: sensitising (OECD Guideline 406)
Germ cell mutagenicity:	Maleic anhydride: Negative (OECD Guideline 471) Negative (OECD Guideline 475)
Carcinogenicity:	Maleic anhydride: NOEL(carcinogenicity) >= 100 other: mg/kg/day (OECD Guideline 451)
Reproductive toxicity:	Maleic anhydride: NOAEL (fertility, P/F1)= 55mg/kg/day (OECD Guideline 416) LOAEL (systemic, P/F1) = 20mg/kg/day (OECD Guideline 416) LOEL (local, P) = 20mg/kg/day (OECD Guideline 416)
STOT-single exposure:	No data available
STOT-repeated exposure:	Oral: Maleic anhydride: NOEL(female)= 100 mg/kg bw/day (nominal); NOEL(male)= 40 mg/kg bw/day (nominal); LOAEL(female)= 250 mg/kg bw/day (nominal); LOAEL(male)= 100 mg/kg bw/day (nominal) Inhalation: Maleic anhydride: LOAEC (local)= 0.01 mg/L air (nominal) (OECD Guideline 412) LOAEC (systemic)= 0.01 mg/L air (nominal) (OECD Guideline 412)
Aspiration hazard:	No data available

SECTION 12: Ecological information

12.1. Aquatic toxicity

Acute (short-term) toxicity:	No data available
Chronic (long-term) toxicity:	Maleic anhydride: Crustaceans (Daphnia Magna, 21d): EC50=77 mg/L; NOEC=10 mg/L

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12.2. Persistence and degradability

Biodegradation:	No data available
Abiotic degradation:	No data available

12.3. Bioaccumulative potential

Bioconcentration factor (BCF):	No data available
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12.4. Mobility in soil

Known or predicted distribution to environmental compartments:	No data available
Adsorption/Desorption:	No data available

12.5. Results of PBT and vPvB assessment

Maleic anhydride:
The substance is not PBT / vPvB

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: refer to specific national regulation.
Contaminated packaging: contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information

Based on available information, the product is not considered as dangerous goods and the UN recommendation on the transport of dangerous goods does not necessarily apply, however, it is highly recommended to get professional advice for appropriate transport.

Label required: None

Land transport (ADR / RID / GGVSE)

None

14.1 UN number	None	14.4 Packing group	None	
14.2 UN proper shipping name	None	14.5 Environmental hazards	14.6 Special precautions for user	
			Hazard identification (Kemler)	None
14.3 Transport hazard class(es)	None	14.6 Special precautions for user	Classification Code	None
			Hazard Label	None
			Special provisions	None
			Add limited quantity	None

Air transport (ICAO-IATA / DGR)

None

14.1 UN number	None	14.4 Packing group	None	
14.2 UN proper shipping name	None	14.5 Environmental hazards	14.6 Special precautions for user	
			Special provisions	None
14.3 Transport hazard class(es)	None	14.6 Special precautions for user	Cargo Only Packing Instructions	None
			Cargo Only Maximum Qty / Pack	None
			Passenger and Cargo Packing Instructions	None
			Passenger and Cargo Maximum Qty / Pack	None
			Passenger and Cargo	None

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			Limited Quantity Packing Instructions	
			Passenger and Cargo Maximum Qty / Pack	None

Sea transport (IMDG-Code / GGVSee)

None

14.1 UN number	None	14.4 Packing group	None	
14.2 UN proper shipping name	None	14.5 Environmental hazards	None	
		14.6 Special precautions for user	EMS number	None
Special provisions	None			
Limited quantities	None			
14.3 Transport hazard class(es)	None			

Inland waterways transport (ADNR / River Rhine)

None

14.1 UN number	None	14.4 Packing group	None	
14.2 UN proper shipping name	None	14.5 Environmental hazards	None	
		14.6 Special precautions for user	Classification code	None
Limited quantity	None			
Equipment required	None			
Fire cones number	None			
14.3 Transport hazard class(es)	None			

14.7. Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC Code

No data available.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - 67/548/EEC, 1999/45/EC, Regulation (EC) No 1272/2008, Regulation (EC) No 1907/2006, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC and 1999/13/EC.

15.1.2. International/national regulations

None

15.2. Chemical safety assessment

No chemical safety assessment report was provided for this safety data sheet compilation.

SECTION 16: Other information

16.1 Indication of changes

Version No.	Change date	Change description
No data available	No data available	No data available

16.2 Key literature references and sources for data

- ESIS (European chemical Substances Information System), <http://esis.jrc.ec.europa.eu/>
- Information on Chemicals in ECHA website, <http://echa.europa.eu/information-on-chemicals>
- IFA GESTIS - International limit values for chemical agents - Occupational exposure limits (OELs), http://www.dguv.de/ifa/en/gestis/limit_values/index.jsp

16.3 List of relevant hazard statements and risk phrases

H code	H315: Causes skin irritation. H319: Causes serious eye irritation.
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	H335: May cause respiratory irritation. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317: May cause an allergic skin reaction.
R phrase	R36/37/38: Irritating to eyes, respiratory system and skin. R22: Harmful if swallowed. R34: Causes burns. R42/43: May cause sensitization by inhalation and skin contact.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

The information presented in this SDS is based on our current knowledge and available data as of the issue date, and is only intended to describe the product for the purposes of protecting human health and environment from potential hazard. It should not therefore be construed as guaranteeing any specific property of the product.