







Safety Data Sheet ZLEY®BIOCARE-PHA

P-hydroxyacetophenone

Project number: RF-SDS400802

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Safety Data Sheet according to GB/T16483,GB/T17519 Standard requirements

Part 1: Chemicals and corporate identity

Product name

17 17	Name of the chemical	P-hydrox	xyacetopl	henone		4
	Alias	None	4	4		
. 4	Molecular formula	C ₈ H ₈ O ₂	. 😯		4,7	
Oti	her identification methods	None	Y	437	1)	
1, Y	CAS No.	99-93-4		1		.1

Manufacturer, importer or supplier

Corporate name	Zley Holdings (Suzhou) Co., Ltd.		
	10th Floor, Building 2, Yushan Square,		
Corporate address	High-tech Zone, Suzhou City, Jiangsu Province		
	Zip code: 215000		
Tel:	+86 512-87775990/18626205929		
Fax:	0512-87775990		
Website	http://www.zley.net/		
E-mail	Info@zleyholdings.com		

Emergency telephone

Emergency telephone	+86 4000928866











Part 2: Hazard overview

Classification of substances and mixtures Emergency overview.

Solid Non-combustible.

Irritant to eyes.

May cause respiratory irritation. Irritant to skin

	Skin corrosion/irritation category 2, severe			
	eye damage/eye irritation category 2A,			
Hazard category	specific target organ toxicity one time			
	exposure category 3			

Label Elements

A .	175	11.67	GHS pictogram	\$ 15°	! >	17
	Q, Y	\$	Signal word	warning	1.57	12 1

Hazard statement

H315	Cause skin irritation
H319	Cause severe eye irritation
H335	May cause respiratory irritation

Precautionary statement: preventive measures

P101	In case of medical treatment: please take with product container or label
P102	Keep out of reach of children
P103	Please read the label before use
P271	Can only be used outdoors or in a well-ventilated area

Precautionary statement: incident response

	In case of entering into the eyes: rinse cautiously
P305+P351+P338	with water for several minutes. If contact lenses
	are worn and can be removed easily, remove the
	contact lenses, and continue to rinse.
	In case you feel sick, call the detoxication
P312	center or call a doctor.
P337+P313	In case eye irritation persists: see a
	doctor/medical treatment
P307+p352	In case the skin is contaminated: wash with
	plenty of soap and water











P405	The depository must be locked.
	Store in a well-ventilated place, and keep the container closed.

Precautionary statement: disposal consideration

	The	dispose	of	contents/contain	er sho	ould be
P501	cond	lucted	in	accordance	with	local
1	regu	lations.				

Physical and chemical hazards Solid Non-combustible.

Health hazard	The substance can cause respiratory tract irritation to some people, and the human body's response to the irritation will cause further lung injury.
	In case people with respiratory dysfunction, respiratory diseases such as emphysema or chronic tracheitis inhale high concentrations of particles,
Inhalation	further loss of function may be caused. In case of previous circulatory or nervous system damage, or in case renal injury has been persistently existed, and excessive exposure is caused by treatment or use of the substance, those
	who may be exposed to greater risks should be screened appropriately.
1,20	The substance is not classified as "harmful if swallowed" according to EU directives or other classification systems, which is due to the lack of conclusive animal or human evidence. The ingestion of the substance can still cause harm to the health of individuals, especially to those with previous
12 1	obvious organic damage (such as liver and kidney). Currently, harmful or toxic substances are generally defined on the basis of the dose that causes death but not on the basis of the dose that causes illness (disease and
4	discomfort). Gastrointestinal tract discomfort may cause nausea and vomiting. However, the ingestion of trace of the substance in the workplace is not considered dangerous.
4	Some people's skin contact with this substance can lead to inflammation. The substance can exacerbate the original dermatitis disease. Skin contact is not considered to be able to cause effects harmful to health (classified in accordance with EU directive), but the substance may still cause health
	damage in case of entering the body through wounds, lesions or abrasions. Unhealed wounds, abraded or irritated skin should not be exposed to the substance.
4	The entry into the body through wounds, lesions or abrasions may cause harmful effects of systemic injury. The skin should be examined before using the substance, and the substance can only be used after ensuring that any











Eyes	The substance can irritate and damage the eyes of some people.				
	Long term exposure to respiratory irritants may lead to tracheal diseases,				
	including expiratory dyspnea and related systemic diseases.				
Chronic	Limited evidence suggests that repeated or long-term occupational exposur				
	may contribute to cumulative health effects in relation to organs or biochemical				
	systems.				

Environmental hazards: please refer to Part 12.

Other hazardous nature.

Part 3: Component / composition information

Material

CAS number	Concentration or concentration range (mass fraction%)	Component
99-93-4	100	P-hydroxyacetophenone

Part 4: First aid measures

First aid

	In case the eyes contact with this product:
	Rinse immediately with running water.
	Ensure that the eyes are thoroughly cleaned
	by lifting the upper and lower eyelids from
	time to time.
Eye contact	In case the pain persists or relapses, see
	medical advice immediately, Contact lenses
	should only be removed by trained personnel
	after eye injury
	In case of skin contact: Immediately remove
	all contaminated clothing, including shoes
	and socks; Rinse skin and hair with running
Skin contact	water (use soap if possible);
	In case of irritation, seek medical advice.











4 4 4 4	If smoke or combustion products are inhaled, remove the patient from the contaminated area.
	Keep the patient lying flat. Pay attention to
The transfer of the transfer o	keep warm and rest. Remove prostheses such
1 4 4 4	as dentures before starting first aid as far as
	possible to prevent from blocking the
47 47 47 4	respiratory tract.
Inhalation	In case of respirator arrest, artificial respiration
	should be carried out. It is better to use the
	artificial respirator with stop valve or bag
$A_{\lambda} = A_{\lambda} = A_{\lambda} = A_{\lambda}$	valve mask or pocket mask, and
4 4 4	cardiopulmonary resuscitation should be
	performed if necessary.
	Take the patient to hospital or seek medical
'V 'V V	service immediately.
4 4 4	Provide a glass of water immediately.
	First aid is usually not required. If there is any
Ingestion	doubt, contact the Poisons Information
1 1 4	Centre or contact a doctor.

Advice on protecting rescuers Special tips for doctors Symptomatic treatment.

Part 5: Fire protection measures

Fire extinguishing agent

There are no restrictions on the type of fire extinguishing agent. Use fire extinguishing media suitable for the surrounding environment.

Special hazard

Not data available
prot data available.

Matters needing attention and protective measures for fire extinction

	Notify the fire brigade, and inform it of the
	location and hazard characteristics of the
	accident. Wear respiratory equipment and
	protective gloves only in case of fire.
Fire-fighting measures	Take all possible measures to prevent spillage
	from entering sewers or water courses.
	Use fire-fighting procedures suitable for the
	surrounding environment.











	Non-combustible
Fire/Explosion hazards	There is no major fire risk, however, the
	container may burn. May release toxic fumes

Part 6: Accidental release measures

Protective measures for operators, protective equipment and emergency disposal procedures: Please refer to Part 8.

Preventive measures to prevent from secondary disasters: Please refer to the above parts.

Environmental protection measures: Please refer to Part 12.

Internment, removal methods and used disposal materials of leaked chemicals

	Clean up all leakages immediately.
A small amount of	Avoid inhalation of dust and avoid contact with skin and eyes.
leakage	Wear protective clothing, gloves, safety goggles and dust masks,
	Use dry cleaning procedures to avoid the generation of dust.
	Moderate level hazard.
A large amount of	Warning: notify all personnel in the area.
leakage	Report to the emergency departments and inform them of the accident
	location and hazard characteristics. Wear protective clothes.

The recommendations for personal protective equipment are shown in Part 8 of the SDS.











Part 7: Operation disposal and storage

Matters needing attention for operation disposal

	Prevent all contact, including inhalation.	
	Wear protective clothing in case of exposure to	
Safe operation	the hazard.	
	Use in a well-ventilated area. Prevent the product	
	from gathering in low-lying areas.	
	Store in the original container. Keep the	
	container safe and sealed. Store in a cool, dry and	
Other information	well ventilated place.	
	Store in a lace away from incompatible materials	
	and food containers.	

Matters needing attention for storage

Proper container	Polyethylene or polypropylene containers. Check all containers to ensure that the labels are clear and there is no leakage.
Storage prohibition	No data available.

Part 8: Contact control and individual protection

Control parameters Occupational contact limits Compositional data: None.

Emergency restrictions

Ingredient	Name of the	TEEL-1	TEEL-1	TEEL-1
	substance			
P-hydroxyacetophe	None	None	None	None
none				











Contact control

. 1	
	Use engineering control to eliminate hazards, set up a barrier between workers and hazards. Well-designed engineering control can effectively protect workers, and usually can improve the protection level without being affected by the interaction between workers.
	The basic types of engineering control include: Reduce risks through process control changing operation activities or process flow mode. Close and/or isolate emission source, so as to physically isolate the target
Engineering control	hazard and workers, as well as the ventilation system able to add a "add fresh air" and "get rid of dirty air" strategically in the workplace. In case the design is reasonable, the ventilation system can eliminate or reduce air pollution. The design of the ventilation system must be in accordance with the specific process
11	and the chemicals or contaminants used. Employers may need to use multiple types of control measures to prevent employees from overexposure.
Personal protective equipment	0000
13/	Safety glasses with side frame protection. Chemical goggle.
Eye and	Contact lenses may cause special hazards; soft contact lenses may absor and
face protection	enrich irritants. Each workplace or work platform should formulate a written
	policy document on contact lens wear or use restrictions
Skin protection	Please refer to hand protection: below.
17 1	Choose gloves tested according to relevant standards (such as European EN 374, US F739, AS/NZS2161.1 or national equivalent standards). In case of long-term contact or repeated contact, it is recommended to use gloves with IP grade of 5 or higher (the penetration time should be greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent
₹ , *	standards). If it is expected to contact for only a short time, it is recommended to
13 1	use gloves with IP grade of 3 or higher (penetration time should be greater than 60
Hand/foot	minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent
protection	standards). The contaminated gloves should be replaced.
1 × ×	Experience has shown that the following polymers as glove materials are suitable
1, 1	for the protection of undissolved, dry and abrasive free solids.
4	Chloroprene rubber Nitrile rubber Butyl rubber
*	Fluororubber
12 13	Polyvinyl chloride
	Gloves should frequently be checked for wear and degradation.











	Body	Please refer to other protection: below.
	protection	
Ī		Working clothes
	Other protection	PVC (polyvinyl chloride) apron Protective cream
		Skin cleaning cream
f	Thermal	None
	hazard	

Respiratory system protection

(AS/NZS year 1716 and 1715, ANSI Z88 EN 143:000 and 149:001, or equivalent to the

Respirators may be necessary to be used when engineering and management controls cannot effectively prevent exposure.

The use of respiratory protection should depend on professional advice and judgment, including the consideration of toxicological information, exposure measured data, frequency, and the possibility of worker exposure, so as to ensure that users are not subjected to high heat loads that may lead to heat stress or thermal fatigue as a result of personal protective equipment (a full filter with power assist and positive pressure can be selected).

Published occupational contact (exposure) limits, which may be mandatory by the government or recommended by the seller, will help to determine whether the selected respiratory protective equipment is effective enough.

When the part properly selected and as part of a complete respiratory protection measure system, certified respirators can effectively protect workers from inhalation of particulate

When there is a considerable amount of dust in the air, use an approved positive pressure breathing mask.

Try to avoid conditions producing dust.











Part 9: Physicochemical properties

Basic physicochemical properties

Appearance	White to off white power			
Physical state	Powder solid	Relative density (water=1)	None	
Odor	Special light fragrance	Partition coefficient n-octyl alcohol/ water	None	
Odor threshold	None	Autoignition temperature (vermin)	None	
pH (by supply)	None	Decomposition temperature	None	
Melting point/ freezing point ($^{\circ}$ C)	107-111	Viscosity (cSt)	Not applicable	
nitial boiling, point and point range ($^{\circ}$ C)	147-148	Molecular weight (g/mol)	136.15	
Flash point (°C)	166	Taste	None	
Evaporation rate	None	Explosive property	None	
Inflammability	None	Oxidation property	None	
Upper explosive limit (%)	None	Surface tension (dyn/cm ormN/m)	None	
Lower explosive limit (%)	None	Volatility composition (%volume)	None	
Vapor pressure (kPa)	None	Gas group	None	
Vapor density (air = 1)	Not applicable	The pH value of the solution (1%)	None	
Solubility in water (g / L)	None	VOC g/L	None	









Part 10: Stability and reactivity

Reactivity	Please refer to part 7	
	Existence of incompatible substances.	
Stability	The substance is considered to be stable.	
	Polymerization without the occurrence of	
	hazards.	
Hazardous reaction	Please refer to part 7	
Conditions that should be avoided	Please refer to part 7	
Prohibited substances	Please refer to part 7	
Hazardous decomposition products	Please refer to part 5	

Part 11: Toxicological information

A A	Toxicity	
P-hydroxyacetophenone	Dermal (Rabbit)	
1, A. A.	LD50: $> 2000 \text{ mg / kg}$	4

Part 12: Ecological information

Ecotoxicity

Components	Destination	Test duration (hours)	Туре	Value	Source
P-hydroxyacet ophenone	LC50	A 96	Fish	25mg/L	3
P-hydroxyacet ophenone	N/A	N/A	N/A	N/A	N/A

It is prohibited to be discharged into sewers or water bodies.

Persistence and degradability

Component	Bioaccumulation
P-hydroxyacetophenone	Low











Potential bioaccumulation

Component	Persistence: water/soil	Persistence: air
P-hydroxyacetophenone	Low	Low

Mobility in soil

Component	Mobility
P-hydroxyacetophenone	Low

Other adverse effects: No data available

Part 13: Disposal considerations

Disposal considerations

Waste chemicals:	Recycle as far as possible, or consult manufacturer about the
. 1	relevant recyclable methods.
	Consult local waste management department about relevant disposal
	considerations methods.
1 1 1 1	Bury the residues in the approved landfill.
4 4	If possible, recycle the containers, or dispose wastes in the approved landfill.
Contaminated	Please refer to the above parts.
packaging:	1 1 1 1
Transportation	Please refer to the above parts.
precautions:	

Part 14: Transport information

Packaging mark

Marine pollutants	None

Land transport (UN): not regulated as dangerous goods for transportation.

Air transport (ICAO-IATA /DG, 61th edition): not regulated as dangerous goods for transportation.

Maritime transport (IMDG-Code / GGVSee, 39-18): not regulated as dangerous goods for transportation.

Conduct bulk transportation according to Appendix 1 and IBC code of











MARPOL: N/A.

Precautions for transportation: None. Packing method: Please refer to Part 7.

Part 15: Regulatory information

OSHA: Process Safety Management: Material is not listed in appendix A of 29 CFR 1910.119 as highly hazardous chemical.

Safety, health and environmental regulations specific for the product in question

INCI	Chemical names	CAS No.	EC No.	
P-hydroxyacetophenone	202-802-8			
European Inventory of Existing Commercial Substances (EINECS)			Listed	
United States Toxic Substances Control Act (TSCA) Inventory			Listed	
Inventory of Existing Chemical Substances in China (China IECSC)			Listed	

Part 16: Other Information

Other information

(material) safety data sheet (SDS) is used as the communication tool of hazardous information, which should be used to assist in risk assessment. Many factors can be used to determine whether a hazard in the workplace or in other locations should be reported as dangerous. Risk can be determind by reference to exposure. The scale of use, frequency of use and existing.

Abbreviations and acronyms

PC-TWA: Permissible Concentration-Time Weighted Average refers to the average permissible exposure concentration of 8-hour working days and 40-hour working weeks regulated with the time as the weight.

PC-STEL: Permissible Concentration Short Term Exposure Limit refers to the concentration allowed to be exposed for a short time (15 min) under the premise of complying with PC-TWA.

IARC: International Agency for Research on Cancer.

ACGIH: American Conference of Government Industrial Hygienists

STEL: Short Term Exposure Limi.t

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Heath Concentrations.

OSF: Odor Safety Factor.











NOAEL: No Observed Adverse Effect Level. LOAEL: Lowest Observed Adverse Effect Level.

TLV: Threshold Limit Value LOD: Limit of Detection. OTV: Odour Threshold Value.