Material Safety Data Sheet (MSDS)

Report No.:	SHA03-25096887-JC-01Cn
Sample name:	Sand consolidation agent, aluminum dihydrogen phosphate, high-temperature binder
Customer name:	Shijiazhuang City Xinsheng Chemical Co., Ltd.
Prepared according to:	GB/T 17519-2013、GB/T 16483-2008

Shanghai Weipu Testing Technology Group Co., Ltd.

Report Use Terms

1. Client information is the basis for this SDS; the lab is not liable for errors caused by incorrect information or any resulting consequences.
2. This report becomes invalid if submitted chemical information changes.
3. The results apply only to this sample.
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Approved by: 黄蕙

Issue date: 2025-09-23

Material Safety Data Sheet (MSDS)

Sand consolidation agent, aluminum dihydrogen phosphate, high-temperature binder

Version: V 1.0
Report No.: SHA 03-25096887-JC-01 Cn
Preparation date: 2025/09/23
Revision date: -

*Prepared according to GB/T 17519-2013 and GB/T 16483-2008

1 Chemical Product and Company Identification

| Product identifier

Chinese product name	Sand consolidation agent, aluminum dihydrogen phosphate, high-temperature binder
English product name	-
Product No.	-
CAS No.	Not applicable
EC No.	Not applicable
Molecular formula	Not applicable
Sample image	

Recommended and restricted uses

Recommended use	Please consult the manufacturer.
Restricted use	Please consult the manufacturer.

Company identification

Company name	Shijiazhuang City Xinsheng Chemical Co., Ltd.
Company address	No. 8 Changan Road, Xinle Economic Development Zone, Hebei Province, China
Postal code	050700
Tel	13292844379
Fax	——
Email	1521380894@qq.com

| Emergency telephone

Emergency telephone	15232160175

2 Hazards Identification

Emergency overview

Based on available data, no known hazard.

GHS hazard category

According to China's GB 30000 series, this product is classified as a non-hazardous chemical.

GHS label elements

Pictogram	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable

Precautionary statements

Prevention

Prevention	Not applicable

Response

Response	Not applicable

Storage

Storage	Not applicable

Disposal

Disposal	Not applicable

Hazard description

Physical and chemical hazards

None

Health hazards

Inhalation	Inhalation may cause harmful health effects or respiratory discomfort.
Ingestion	Accidental ingestion may be harmful to individual health.
Contact	Entry into blood through cuts, abrasions or lesions may cause systemic harmful effects.
Eyes	Direct eye contact may cause temporary discomfort.

Environmental hazards

See Section 12 of the SDS.

3 Composition/Information on Ingredients

Substance/Mixture

Mixture

Component	CAS No.	EC No.	Content range (mass fraction,%)
Lithium fatty acid soap	7620-77-1	-	20
PAO synthetic oil	25189-70-2	-	70
Polytetrafluoroethylene	9002-84-0	-	10

4 First-aid Measures

| First-aid Measures

General advice	First-aid Measures, SDS.
Eyes Contact	Rinse thoroughly with plenty of water for at least 15 minutes. Seek medical attention if unwell.
Contact	Remove contaminated clothing immediately. Wash skin with soap and water for at least 15 minutes. If unwell, seek medical attention.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician or poison center immediately.
Inhalation	Ingestion Inhalation ,... seek medical attention.
Protection of first-aiders	, .

| Most important symptoms and health effects

1	Contact.

| Advice for protecting rescuers

1	Remove all ignition sources and increase ventilation.
2	Contact Eyes.
3	Inhalation.
4	Use protective equipment, including respiratory protection.

| Special notes to physician

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting Measures

| Extinguishing media

Suitable extinguishing media	Extinguishing media.
Unsuitable extinguishing media	Extinguishing media.

| Special hazards arising from the substance or mixture

1	Fire may produce harmful combustible gases or vapors.
2	Heating or flame contact may cause expansion or explosive decomposition.

| Fire-fighting precautions and protective measures

1	, (MSHA/NIOSH).
2	Fight fire from a safe distance with adequate protection.
3	Prevent fire-fighting water from contaminating surface and groundwater systems.

6 Accidental Release Measures

| Personal precautions, protective equipment and emergency procedures

1	Use personal protective equipment and avoid inhaling gas/fumes/vapors/spray.
2	Ensure adequate ventilation. Remove all ignition sources. Take anti-static measures.
3	Evacuate personnel to a safe area, away from the spill and upwind.

| Environmental precautions

1	If safe, prevent further leakage or spillage.
2	Avoid release to the environment.

| Methods and materials for containment and cleaning up

1	Stop the source of leakage if possible.
2	Keep the spill area ventilated.
3	,,.
4	, Disposal Considerations.
5	,,.

| Measures to prevent secondary hazards

1	,.

7 Handling and Storage

| Handling

1	Handle in a well-ventilated area.
2	Wear suitable personal protective equipment.
3	Avoid skin and eye contact.
4	Keep away from heat, sparks, open flames and hot surfaces.

| Storage

1	Keep container tightly closed.
2	Store in a dry, cool and well-ventilated place.
3	Keep away from heat, sparks, open flames and hot surfaces.
4	Store away from incompatible materials and food containers.

8 Exposure Controls and Personal Protection

| Control parameters

· Occupational exposure limits

Occupational exposure limits	None

· Biological limit values

Biological limit values	None

· Monitoring methods

1	EN 14042.

2	GBZ/T 300 GBZ/T 160 Standard Substance.

| Engineering controls

1	,.
2	.
3	,,.
4	.

| Personal protective equipment

General requirements	,.
Eye protection	Eye protection, Contact/, .
Hand protection	Hand protection.
Respiratory protection	/Occupational exposure limits ,.
Skin and body protection	Skin and body protection.

9 Physical and Chemical Properties

Physical and Chemical Properties

Appearance and physical state	Liquid
Odor	Colorless and odorless
Odor threshold	None
p H value	None
Melting point/freezing point	None(°C)
Initial boiling point and boiling range	None(°C)
Flash point(, °C)	Not applicable
Evaporation rate	Not applicable
Flammability	None
Upper/lower explosive limits[%(v/v)]	None
Vapor pressure	Not applicable
()Density(=1)	Not applicable
Relative density(=1)	None
Solubility	None
Octanol/water partition coefficient	None
Auto-ignition temperature	None(°C)
Decomposition temperature	None(°C)
Kinematic viscosity	Not applicable

10 Stability and Reactivity

Stability and Reactivity

Reactivity	Contact with incompatible materials may cause decomposition or other chemical reactions.
Chemical stability	Stable under proper use and storage conditions.
Possibility of hazardous reactions	None
Conditions to avoid	Incompatible materials, heat, flames and sparks.
Incompatible materials	None
Hazardous decomposition products	No hazardous decomposition products under normal storage and use conditions.

11 Toxicological Information

| Acute toxicity

Acute toxicity	None

| Carcinogenicity

Component	IARC	NTP
Lithium fatty acid soap	Not listed	Not listed
PAO synthetic oil	Not listed	Not listed
Polytetrafluoroethylene	3	Not listed

Other Information

	Sand consolidation agent, aluminum dihydrogen phosphate, high-temperature binder
Skin corrosion/irritation	Based on available data, classification criteria are not met
Serious eye damage/irritation	Based on available data, classification criteria are not met
Skin sensitization	Based on available data, classification criteria are not met
Respiratory sensitization	Based on available data, classification criteria are not met
Reproductive toxicity	Based on available data, classification criteria are not met
-	Based on available data, classification criteria are not met
Contact	
Aspiration hazard	Based on available data, classification criteria are not met
Germ cell mutagenicity	Based on available data, classification criteria are not met

12 Ecological Information

| Acute aquatic toxicity

Acute aquatic toxicity	None

| Chronic aquatic toxicity

Chronic aquatic toxicity	None

| Persistence and degradability

Component	(/)	()
Polytetrafluoroethylene	High	High

| Bioaccumulative potential

Component	Bioaccumulation	Remarks
Polytetrafluoroethylene	Low	Log Kow=1.2142

| Mobility in soil

Component	**log Koc**	Remarks
Polytetrafluoroethylene	2.029	

| PBT and v Pv B assessment

Component	PBT/v Pv B assessment result [(EC) No 1907/2006]
Lithium fatty acid soap	PBT/v Pv B
PAO synthetic oil	Insufficient data for assessment
Polytetrafluoroethylene	Insufficient data for assessment

13 Disposal

| Disposal

Waste chemicals	Consult national and local regulations before disposal. Incineration is recommended.
Contaminated packaging	Recycle if possible.
Disposal precautions	See waste chemicals and contaminated packaging.

14 Transport Information

| Labels and marks

Transport label	Not applicable

| (IMDG-CODE)

IMDG-CODE	Not regulated as dangerous goods for transport

| (IATA-DGR)

IATA-DGR	Not regulated as dangerous goods for transport

| (JT/T 617-2018)

UN-ADR	Not regulated as dangerous goods for transport

Other Information

Packing method	Pack according to the manufacturer's recommended method.
Transport precautions	Accidental Release Measures. No,., .

15 Regulatory Information

| International chemical inventories

Component	A	B	C	D	E	F	G	H	I	J	K	L	M
Lithium fatty acid soap	√	√	√	√	√	√	√	√	√	√	√	√	√
PAO synthetic oil	√	×	√	√	√	√	√	√	×	√	×	√	√
Polytetrafluoroethylene	√	×	√	√	√	√	√	√	√	√	√	√	√

【A】 China Inventory of Existing Chemical Substances(IECSC)
【B】 (EC inventory)
【C】 Substance(TSCA)
【D】 Substance(DSL)
【E】 (NZIo C)
【F】 Philippine Inventory of Chemicals and Chemical Substances(PICCS)
【G】 Korea Existing Chemicals List(KECL)
【H】 (AIIC)
【I】 Substance(ENCS)
【J】 Substance(TECI)
【K】 (INSQ)
【L】 Substance(DRAFT)
【M】 Substance(TCSI)

| International convention controlled substance lists

Component	A	B	C
Lithium fatty acid soap	×	×	×
PAO synthetic oil	×	×	×
Polytetrafluoroethylene	×	×	×

【A】 ·Substance·
【B】 · (POPs) ·
【C】 ·Danger·

| China chemical management inventories

Component	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Lithium fatty acid soap	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
PAO synthetic oil	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Polytetrafluoroethylene	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

【A】 ·Danger(2015)·, [2015] 5
【B】 ··,,, [2023] 32
【C】 ·Substance·(2021), 2021 50
【D】 ·Danger(1 2)·,, [2011] 95 [2013] 12
【E】 ·Danger·,, [2014] 33
【F】 ··, [2020] 52
【G】 ··(),,, [2017] 83
【H】 ·Danger()·,,,, [2020]
【I】 ··(), [2019] 28 [2025] 15
【J】 ·High·, [2003] 142
【K】 ·Danger(2017)·, 2017 5 11
【L】 ··, 2025 55
【M】 ··, 2005 445
【N】 ··, [2006] 7
【O】 ··,, [2006] 8

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"√" Indicates the substance is listed in the regulation
"×" Indicates no data available or not listed in the regulation

16 Other Information

| Revision information

Preparation date	2025/09/23
Revision date	-
Revision reason	-

| References

【1】 International Programme on Chemical Safety: International Chemical Safety Cards(ICSC),: http://www.ilo.org/dyn/icsc/showcard.home.
【2】 International Agency for Research on Cancer,: http://www.iarc.fr/.
【3】 OECD global chemicals information platform,: https://www.echemportal.org/echemportal/.
【4】 U.S. CAMEO chemicals database,: http://cameochemicals.noaa.gov/search/simple.
【5】 U.S. National Library of Medicine:Chemical identification database,: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
【6】 U.S. Environmental Protection Agency: Integrated Risk Information System,: http://cfpub.epa.gov/iris/.
【7】 U.S. Department of Transportation: Emergency Response Guidebook,: http://www.phmsa.dot.gov/hazmat/library/erg.
【8】 German GESTIS hazardous substances database,: http://gestis-en.itrust.de/.

| Abbreviations

CAS	CAS number	UN	United Nations
PC-STEL	Short-term exposure limit	OECD	Organisation for Economic Co-operation and Development
PC-TWA	Time-weighted average exposure limit	IMDG-CODE	International Maritime Dangerous Goods Code
MAC	Maximum allowable concentration	IARC	International Agency for Research on Cancer
DNEL	Derived no-effect level	ICAO	International Civil Aviation Organization
PNEC	Predicted no-effect concentration	IATA	International Air Transport Association
NOEC	No observed effect concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC_{50}	Median lethal concentration	NFPA	National Fire Protection Association
LD_{50}	Median lethal dose	NTP	National Toxicology Program
EC_{50}	Effective concentration causing 50% response	PBT	Persistent, bioaccumulative and toxic substance
EC_X	Concentration causing x% response	vPvB	Very persistent and very bioaccumulative substance
P_{OW}	Octanol/water partition coefficient	CMR	Carcinogenic, teratogenic and reproductive toxic chemical
BCF	Bioconcentration factor	RPE	Respiratory protective equipment
ED	Endocrine disruptor		

| Disclaimer

GB/T 16483-2008 GB/T 17519-2013,

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