

SAFETY DATA SHEET
ASM-1, MAT-130

Version 03 Date of revision: 27 October 2023

SECTION 1. IDENTIFICATION

Product name : ASM-1
 MAT-130

Product use description : Catalyst

Manufacturer or supplier's details

Company name of supplier : Perma Pure LLC
 Address : 1001 New Hampshire Avenue
 Lakewood, NJ 08701
 United States of America (USA)

Telephone : 1-732-244-0100, 1-800-337-3762

EMERGENCY TELEPHONE : INFOTRAC Account Number 115419
 (InfoTrac) North America: 1-800-535-5053
 International: +1-352-323-3500

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

Health Hazard, Category 1, Eye Effects

GHS label elements

Symbol(s) :

Signal Word : Danger

Statement(s) : Causes Serious Eye Damage

Precautionary Statement(s) : **Prevention:**
 Wear protective gloves/ eye protection/ face protection.
Response:
 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
 and doctor/physician.

Carcinogenicity : No component of this product present at levels greater than
 or equal to 0.1% is identified as a known or anticipated
 carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Nature : Mixture

Substance name	CAS No.	Concentration
Silicon ortho phosphate	12037-47-7	>99.00%
Silica (amorphous)	7631-86-9	<1.00%

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Special Note

: *As made, there is no Phosphoric acid present. If the material comes into contact with water, up to 65 wt% Phosphoric acid can be generated.*

SECTION 4. FIRST AID MEASURES

- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms persist.
- In case of skin contact : Wash with plenty of water and soap.
Get medical attention if skin irritation persists.
- In case of eye contact : Immediately flush eyes with plenty of water for at least 15 minutes.
Get medical attention if eye irritation persists.
- If swallowed : If swallowed, DO NOT induce vomiting.
Call a physician immediately.
- Notes to physician** : *When the catalyst or catalyst dust contacts water, corrosive phosphoric acid will form.*

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Not combustible
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire fighting : The product itself does not burn.
The used product can retain material of a hazardous nature.
Identify that material and inform the firefighters.
- Special protective equipment for fire-fighters : Wear suitable protective clothing.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : For personal protection, see section 8.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Sweep, shovel, or vacuum spilled product into suitable container for disposal (Do not use vacuum).
Pick up and arrange disposal without creating dust. Never return spills to original containers for reuse. Keep material dry as contact with water will release phosphoric acid. The acidic runoff can be neutralized with lime. Spilled product should be disposed of in accordance with all applicable governmental regulations.

SECTION 7. HANDLING AND STORAGE

- Handling : Handle and open container with care.

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Avoid dust formation
 Avoid contact with skin and eyes.
 Provide an electrical ground connection during loading and transfer operations to avoid static discharge in an explosive atmosphere and to prevent persons handling the product from receiving static shocks.

Conditions for safe storage : Store in original container.
 Keep containers dry and tightly closed to avoid moisture absorption and contamination.
 Store in cool dry area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Measures : Handle in accordance with good industrial hygiene and safety practices.

Engineering Measures : Ensure adequate ventilation, especially in confined areas.

Eye Protection : Safety Glasses / Safety Goggles

Hand Protection : Protective gloves

Skin and Body Protection : Lightweight protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory Equipment.
 Breathing apparatus with filter: NIOSH classification N-100 or if oil/liquid aerosols are present P-100 (42 CFR 84).

Exposure Guidelines

Contains no substances with occupational exposure limits.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State/ Appearance : pellets

Color : White

Odor : none

Odor Threshold : No data available

pH : Not applicable

Melting point/freezing point : >400 °C

Boiling point/boiling range : Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Not applicable

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

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Vapor pressure	:	Not applicable
Relative vapor density	:	Not applicable
Water Solubility	:	Soluble
Solubility in other solvents	:	No data available
Partition coefficient n-octanol/water	:	No data available
Ignition temperature	:	Not applicable
Decomposition temperature	:	Stable under normal conditions. Heating can release hazardous gases, Phosphorus oxides (eg Phosphorus pentoxide)
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable
Incompatible materials	:	Moisture or water contact, temperatures in excess of 750°F (400°C).
Possible hazardous reactions	:	Stable
Hazardous decomposition Products	:	No decomposition if stored normally. Phosphoric acid upon contact with water or moisture, Pox at temperatures above 750°F (400°C).

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50: >5,000 mg/kg Species: Rat
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	LD50: >2,000 mg/kg Species: Rabbit
Skin Irritation	:	Species: Rabbit Classification: Mild skin irritation Test substance: Dry product
Eye Irritation	:	Species: Rabbit Classification: Severe eye irritation Test substance: Dry product
Sensitisation	:	No data available
Repeated dose toxicity	:	No data available
Genotoxicity in vitro	:	No data available

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Carcinogenicity	:	Species: Not specified Not classified as a human carcinogen. Substance not expected to be a carcinogen based on available data.
Reproductive toxicity	:	Species: not specified No available data
Further information	:	Avoid repeated exposure

SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS
Disposal methods

Disposal Methods	:	Waste material may exhibit the US EPA's RCRA hazardous waste Characteristic of Corrosivity (D002) in the presence of water. If a representative sample exhibits a pH of 2 or less. The used product can contain material of a hazardous nature. Identify that material and dispose accordingly.
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SECTION 14. TRANSPORT INFORMATION

DOT	UN/ID No.	:	UN 3260
	Proper Shipping Name	:	CORROSIVE SOLID, ACIDIC, INORGANIC N.O.S. (Silicon orthophosphate)
	Class		8
	Packing Group		III
	Hazard Labels		8

IATA	UN/ID No.	:	UN 3260
	Description of goods	:	CORROSIVE SOLID, ACIDIC, INORGANIC N.O.S. (Silicon orthophosphate)
	Class		8
	Packing Group		III
	Hazard Labels		8
	Packing Instruction (passenger aircraft)	:	860
	Packing Instruction (passenger aircraft)	:	Y845

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IMDG	UN/ID No.	:	UN 3260
	Description of goods	:	CORROSIVE SOLID, ACIDIC, INORGANIC N.O.S. (SILICON ORTHOPHOSPHATE)
	Class	:	8
	Packing Group	:	III
	Hazard Labels	:	8
	EmS Number	:	F-A, S-B
	Marine pollutant	:	no
	IMDG Code segregation group	:	1 - ACIDS

SECTION 15. REGULATORY INFORMATION
Inventories

US Toxic Substances Control Act	:	On TSCA Inventory
Australia. Industrial Chemical (Notification and Assessment) Act	:	On the inventory, or in compliance with the inventory
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	:	All components of this product are on the Canadian DSL
Japan. Kashin-Hou Law List	:	not determined
Korea. Existing Chemicals Inventory (KECI)	:	On the inventory, or in compliance with the inventory
Philippines. The Toxic Substances and Hazardous And Nuclear Waste Control Act	:	not determined
China. Inventory of Existing Chemical Substances (IECSC)	:	On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZLoC), as published by ERMA New Zealand	:	not determined

US State Regulations

SARA 302 Components	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (Di Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	:	Acute Health Hazard

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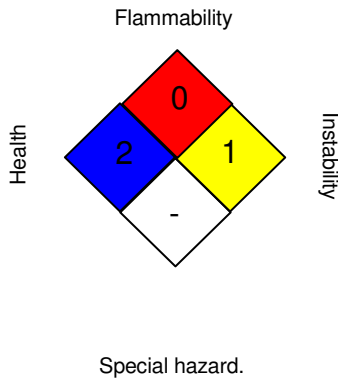
California Prop. 65

: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Hazard rating and rating systems (e.g. HMIS and NFPA): This information is intended solely for the use of individuals trained in the particular system.

NFPA 704:



HMIS III:

HEALTH	/	2
FLAMMABILITY		0
PHYSICAL HAZARD		1

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

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. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable. This information should not constitute a guarantee for any specific product properties.