Aluminum dihydrogen phosphate, 50% w/w aq. soln.: sc-300186

MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name: **Aluminum dihydrogen phosphate, 50% w/w aq. soln.**

Catalog Number: sc-300186

Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

2 Composition/Data on components:

Chemical characterization:
Description: (CAS#)
Aluminum dihydrogen phosphate (CAS# 13530-50-2): 50%
Water (CAS# 7732-18-5): 50%
Identification number(s):
EINECS Number: 236-875-2

3 Hazards identification

Hazard description:

Xi Irritant

Information pertaining to particular dangers for man and environment
R 36/38 Irritating to eyes and skin.
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)

HEALTH	1
FIRE	0
REACTIVITY	1

Health (acute effects) = 1
Flammability = 0
Reactivity = 1

GHS label elements

Warning

3.2/2 - Causes skin irritation.
3.3/2A - Causes serious eye irritation.
Prevention:
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Response:
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.

4 First aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.
After skin contact
Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing *Seek immediate medical advice.*

5 Fire fighting measures

Suitable extinguishing agents
Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.
Special hazards caused by the material, its products of combustion or resulting gases:
In case of fire, the following can be released:
Phosphorus oxides
Metal oxide fume
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures

Person-related safety precautions:
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Measures for environmental protection:
Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Additional information:
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Handling
Information for safe handling:
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires:
Keep ignition sources away.
The product is not flammable

Storage
Requirements to be met by storerooms and receptacles: *No special requirements.*
Information about storage in one common storage facility:
Aqueous solutions are incompatible with alkali and alkaline earth metals and many reactive organic and inorganic chemicals.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Aluminum, soluble salts (as Al)

	mg/m3
ACGIH TLV	5 (welding fumes); 5 (pyro powders) 10 (metal dust)
Austria MAK	6 (dust)
Belgium TWA	10; 2 (salts), 5 (fumes), 5 (resp. dust)
Denmark TWA	10 (dust or fume)
Finland TWA	2 (salts)
France VME	10; 5 (fumes), 5 (resp. dust)
Germany MAK	6
Hungary TWA	2; 5-STEL, 4-STEL (salts)
Korea TLV	5 (welding fumes); 5 (pyro powders) 10 (metal dust)

Norway TWA	5
Russia	2-STEL
Sweden NGV	4 (resp. dust); 10 (total dust)
Switzerland MAK-W	6
United Kingdom TWA	4 (resp. dust)
USA PEL	15 (total dust); 5 (resp. fraction)

Additional information: No data

Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Breathing equipment: Use suitable respirator when high concentrations are present.
Protection of hands: Impervious gloves
Eye protection: Safety glasses
Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information	
Form:	Liquid
Color:	Clear
Odor:	Odorless
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined
Flash point:	Not determined
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not determined
Density at 20°C (68°F):	1.49-1.51 g/cm³
pH-value (2 g/l) at 20°C (68°F):	2-2.4

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.
Materials to be avoided:
Aqueous solutions are incompatible with alkali and alkaline earth metals and many reactive organic and inorganic chemicals.
Dangerous reactions
Reacts with alkali metals.
Reacts with alkaline earth metals.
Dangerous products of decomposition:
Phosphorus oxides (e.g. P2O5)
Metal oxide fume

11 Toxicological information

Acute toxicity:
Primary irritant effect:
on the skin: Irritant to skin and mucous membranes.
on the eye: Irritating effect.
Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:
Inorganic phosphorus compounds may cause irritation and hemorrhages in the stomach as well as liver and kidney damage. Bone structure may be attacked, especially the jaw and teeth. Aluminum may be implicated in Alzheimers disease. Inhalation of aluminum containing dusts may cause pulmonary disease.
Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:
Recommendation *Consult state, local or national regulations to ensure proper disposal.*

Uncleaned packagings:
Recommendation: *Disposal must be made according to official regulations.*

14 Transport information

Not a hazardous material for transportation.

DOT regulations: ***Hazard class:*** *None*
Land transport ADR/RID (cross-border) ***ADR/RID class:*** *None*
Maritime transport IMDG: ***IMDG Class:*** *None*
Air transport ICAO-TI and IATA-DGR: ***ICAO/IATA Class:*** *None*

Transport/Additional information: *Not dangerous according to the above specifications.*

15 Regulations

Product related hazard informations:

Hazard symbols:
Xi Irritant

Risk phrases:
36/38 Irritating to eyes and skin.

Safety phrases:
23 Do not breathe gas/fumes/vapour/spray.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).

Information about limitation of use: *For use only by technically qualified individuals.*

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.