

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

1.1 Product identifier

Trade name: Ammonium polyphosphate

CAS No.: 68333-79-9 EC No.: 269-789-9

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

Relevant identified uses:

Flame retardant for plastics, adhesives, elastomers, paints, intumescent coatings, mastics, PU foams, wood, paper and textile coatings; catalyst; sequestrant; in fertilizers, cement, refractories

Uses identified against: no data available

1.2 Details of the supplier of the safety data sheet:

Manufacturer/Supplier:

Prasol Chemicals Ltd.,

Prasol House, Plot No.A-17/2/3,

T.T.C. Indl. Area, Khairne M.I.D.C.,

Navi Mumbai - 400 710. Maharashtra, India.

Tel: +91-22-27782555 *Fax:* +91-22-27782430

Further information obtainable from:

Mr. Dhaval Parikh

e-mail:sales@prasolchem.com; inquiry@prasolchem.com

1.4 Information in case of emergency:

Product safety department Tel: +91-22- 27782555; Fax:+91-22- 27782430

Other Comments (e.g. language(s) of the phone service): English

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008(CLP): Non hazardous

Adverse human health effects: No significant hazards.

Environmental hazard: Not expected.

2.1.2 Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Non hazardous

Information concerning particular hazards for human and environment: Not applicable

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 (CLP)

The substance is classified and labeled according to the CLP regulation.

Hazard pictograms not applicable

Signal word none

Hazard-determining components of labeling: Void

Hazard statements Not applicable

Precautionary statements

P405 Store locked up

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 Other hazards

Results of PBT and vPvB assessment: Not applicable

SECTION 3: Composition/information on ingredients

Chemical characterization:

CAS No. Description

68333-79-9 Ammonium polyphosphate

Identification number(s) EC Number : 269-789-9

Revision: 15-01 Page **1** of **5**



Additional information:

Molecular Formula: (NH4PO3)n Molecular Weight: not determined

SECTION 4: First aid measures

4.1 General information:

After inhalation: Generally not considered an inhalation hazard.

After skin contact: Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water. Wash skin with soap and water. In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Keep victim warm and quiet. After eye contact: Immediately flush eyes with running water for at least 20 minutes. If symptoms persist consult a doctor. After swallowing: If conscious, immediately give large quantities of water and induce vomiting. If symptoms persist consult doctor. Large doses of ammonium salts may induce diarrhea and dieresis. Low oral toxicity

Information for doctor: Ensure that medical personnel are aware of the material involved and take precautions to protect themselves.

- 4.2 Most important symptoms and effects, both acute and delayed See section 2 and section 11
- 4.3 Indication of any immediate medical attention and special treatment needed no further information

SECTION 5: Firefighting measures

- 5.1 Suitable extinguishing agents: Water jet, dry chemical, Carbon Dioxide, halon and foam
- 5.2 Special hazards caused by the substance, its products of combustion or resulting gases:

When heated, it may release ammonia gas (this material is a fire retardant)..

5.3 Protective equipment: Due to possible evolution of ammonia, wear self-contained breathing apparatus

Additional information Use water spray to cool unopened containers

SECTION 6: Accidental release measures

6.1 Person-related safety precautions:

Wear protective clothing.

Keep unprotected persons away. Do not touch or walk through spilled material. Can cause slippery condition

6.2 Measures for environmental protection:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Measures for cleaning/collecting:

Eliminate all ignition sources. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors.

Large spills: Dike far ahead of liquid spill for later disposal.

Additional information: no further information

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment

See Section 13 for disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Avoid breathing mist, if any should be formed. Minimize contact of liquid with eyes, skin and clothing. Use good personal hygiene and housekeeping. Do not handle broken packages without protective equipment. Wash away any material which may have contacted the body with copious amounts of water or soap and water.

Information about fire and explosion protection: Eliminate all ignition sources (Do not smoke, flares, sparks or flames in immediate area). Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities: Steel tanks. Avoid using containers, pipes and fittings

Revision: 15-01 Page **2** of **5**



made of zinc-clad, copper-bearing alloys or aluminum. Storage in open containers may result in formation of an ammonium polyphosphate solid on walls. Protect from physical damage. Aluminum tanks not recommended because of possible pitting. Local exhaust ventilation should be applied wherever there is an incidence of point source emissions or dispersion of regulated contaminants in the work area.

Information about storage in one common storage facility: Store away from incompatibles.

Further information about storage conditions:

Store in closed containers, and keep away from heat, sparks, and flames. Store in cool and dry conditions.

7.3 Specific end use(s) No further relevant information available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

 $Occupational\ exposure\ limits:\ TLV(8h):10\ mg/m3\ (\ Total\ inhalable\ dust.\)$

TLV(8h): 5 mg/m3 (Respirable dust.)

8.2 Exposure controls Avoid high dust concentration and provide ventilation where necessary.

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands: Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles; Face shield

Body protection: Protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : White solid

Odour threshold : not determined pH : 5-7.5 (at 25°C, 10g/L)

Melting point/Melting range : 275°C (decomposes) Boiling point/Boiling range : not applicable Flash point : no data available Evaporation rate : not applicable Flammability (solid, gas) : no data available Upper/lower flammability or explosive limits: no data available Vapour pressure at $20^{\circ}C$: not applicable Vapour density : not applicable Density at 20°C : not applicable

Solubility in / Miscibility with water : 10g/L at 25°C

Partition coefficient (n-octanol/water) at 23°C: no data available

Auto-ignition temperature : no data available

Decomposition temperature : 275°C

Viscosity: Dynamic at 25°C : 100mPas (10% suspension) Explosive properties : Product is not explosive.

Revision: 15-01 Page **3** of **5**



Oxidising properties : no oxidising properties

9.2 Other information: Bulk density 700k g/m³ at $20^{\circ}C$

SECTION 10: Stability and reactivity

10.1 Reactivity No dangerous reactions known.

10.2 Chemical stability stable under recommended conditions

10.3 Possibility of hazardous reactions no data

10.4 Conditions to avoid: alkali

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.5 Incompatible materials Oxidizers, plastics

Dangerous reactions: no data

10.6 Hazardous decomposition products: ammonia.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD 50 Oral 2000mg/kg rat Skin corrosion/irritation: slightly irritating24h (rabbit)

Serious eye damage/irritation: not irritating

Respiratory or skin sensitization: No sensitizing effects known.

Germ cell mutagenicity: non mutagenic

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC

Reproductive toxicity: not toxic STOT-single exposure: no data STOT-repeated exposure: no data Aspiration hazard: no data available

Additional information: To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

LC50 96h >500 mg/L (Brachydanio rerio, zebrafish)

12.2 Persistence and degradability Biodegradation: Readily biodegradable

Photo degradation: no data.

12.3 Bio accumulative potential low potential for bioaccumulation.

12.4 Mobility in soil no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects no further information

SECTION 13: Disposal considerations

Waste treatment methods

Product:

Recommendation: Incineration: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of waste according to applicable legislation. Handle contaminated packages in the

Revision: 15-01 Page **4** of **5**



same way as the substance itself. Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land Transport (ADR/RID) Marine Transport (IMDG) Air Transport (ICAO/ IATA)

14.1 UN/ID Number: not applicable Not restricted

14.2 UN proper shipping name: not applicable 14.3 Transport hazard class: not applicable 14.4 Packaging group: not applicable

14.5 Environmental hazards: none

14.6 Special precautions for the user: no further information

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

This safety datasheet complies with the requirements of COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006

Hazard pictograms Please refer section 2

Signal word Danger

Labeling according to EU guidelines:

Code letter and hazard designation of product: Please refer section 2

Risk phrases: Please refer section 2 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out and will be applicable at the time of REACH Registration. Substances of very high concern (SVHC) according to REACH, Article 57 The substance is not listed as SVHC.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS:

Product safety department.

Contact:

Tel: +91-022-27782555 Fax: +91-022-27782430

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS: Chemical Abstracts Service (division of the American Chemical Society) EINECS/ EC: European Inventory of Existing Commercial Chemical Substances GHS: Globally Harmonized System of Classification and Labeling of Chemicals

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

Sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/ EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

ChemIDplus: http://chem.sis.nlm.nih.gov/chemidplus/rn/68333-79-9 ACToR: http://actor.epa.gov/actor/GenericChemical?casrn=68333-79-9

Inchem: http://www.inchem.org/documents/ehc/ehc/ehc192.htm

AAKO MSDS: http://www.aako.nl/uploads/bestanden/42658705-524c-4234-83b4-c7177b854f20/popup

Data compared to the previous version altered: new MSDS

Revision: 15-01 Page **5** of **5**