



Cations Mix in Drinking Water

1. IDENTIFICATION OF SUBSTANCE OR PREPARATION

Product Name	Cations Mix in Drinking Water
Catalog/Product No	CRM-001
Brand	PQP
Application	For Laboratory use only, Quality Control Material in laboratories.
MSDS Issue Date	January 4, 2016
Company	Pasargad Quality Pioneers Ltd.
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Description An Aqueous solution of Cations Mix for IC standards.

Hazardous Components Nitric Acid

Components:

	CAS	EC NO	SYMBOL/Formula
Water	7732-18-5	231-791-2	H ₂ O
Calcium	7440-70-2	231-179-5	Ca
Magnesium	7439-95-4	231-104-6	Mg
Sodium	7440-23-5	231-132-9	Na
Potassium	7440-09-7	231-119-8	K
Nitric Acid	7697-37-2	231-714-2	HNO ₃

3. HAZARDS IDENTIFICATION

Not classified in physical hazardous compounds.
Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation

4. FIRST AID MEASURES

Eyes Immediately flush with water for a minimum of 15 minutes.

Skin Wash off with soap and plenty of water..



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Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Inhalation	If breathed in, move person into fresh air. Rinse mouth with water. If not breathing, give artificial respiration. Consult a physician
Delayed Symptoms	the chemical, physical, and toxicological properties have not been thoroughly investigated.
OTHER	NA

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire And Explosion hazards	Thermal decomposition will form oxides of nitrogen.
Protective Measures	Do not enter confined spaces without proper protective equipment including respirator. Use water spray or fog to cool containers exposed to fire.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

	Any spillage should be regarded as a potential fire risk.
Personal Precautions	Avoid breathing vapors, mist or gas..
Environmental Precautions	No special environmental precautions required.
Recovery	Keep in suitable, closed containers for disposal.

7. STORAGE AND HANDLING (IN NORMAL USE)

Storage	Store at 4±2°C temperature in suitably designed container and storage areas away from heat, ignition sources and open flames, in compliance with national and local regulations and codes of practice.
Ventilation	Ensure adequate ventilation.
Handling	Handle in accordance with good laboratory practices.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (NORMAL USE)

Occupational Exposure Limits	None.
Engineering Measures	Work in a fume hood or use general or other local exhaust ventilation to meet Exposure Limits.
Personal Protective Equipment	
Respiratory	Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand	Impervious gloves of nitrile rubber or PVC gloves should be worn at all times when handling chemicals. Wash and dry hands. (EN374).



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Eye	Use chemical goggles if possibility of eye contact. (EN166) An eye wash station should be readily available near areas of use.
OTHER	Coveralls.

9. PHYSICAL / CHEMICAL PROPERTIES

Appearance	Clear liquid
Odour	NA
Viscosity	NA
Boiling Point	100°C
Flash Point	NA
Density @ 15°C kg/m³	NA
Solubility in Water	NA
pH	≤2
Melting point	0 °C
Evaporation rate	NA
Flammability (solid, gas)	NA
Upper/lower flammability	NA
Vapour pressure (mmHg)	17.5 (20 °C)
Vapour density	NA
Partition coefficient	NA
Autoignition temperature	NA
Decomposition temperature	NA
Explosive properties	NA
Oxidizing properties	NA

10. STABILITY AND REACTIVITY

Stability	Stable.
Conditions to Avoid	Contact with combustible or incompatible materials.
Materials to Avoid	Avoid strong oxidising materials.
Reactivity	NA
Hazardous Decomposition Products	Thermal decomposition will produce oxides of nitrogen..

11. TOXICOLOGICAL INFORMATION

Acute Effects	NA
Eyes	Severe eye irritation and damage.
Skin	Severe skin corrosion



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Ingestion	severe burns and damage to the gastrointestinal tract
Inhalation	Inhalation of nitric acid can damage the mucous membranes and upper respiratory tract. Short term exposure may cause irritation and inflammation of the upper respiratory tract, coughing, choking, sore throat, shortness of breath, headache, dizziness, and nausea. Long term exposure to acid fumes may cause damage to teeth, bronchial irritation, chronic cough, bronchial pneumonia, and gastrointestinal disturbances.
Chronic Effects	NA
Carcinogenicity	
IARC: 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.	
Numerical Measures of Toxicity:	
Reproductive Toxicity	NA.
Specific target organ toxicity(single exposure)	NA
Eyes	cause eye damage and irritation.
Skin	harmful if absorbed through skin. May cause skin corrosion and irritation
Ingestion	harmful if swallowed.
Inhalation	harmful if inhaled. cause respiratory tract irritation.
Signs and Symptoms of Exposure	the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Mobility	NA
Persistence & Degradability	NA
BIO-Accumulation	NA
Aquatic Toxicity	NA

13. DISPOSAL CONSIDERATIONS

Dispose of via a licensed waste carrier in accordance with local/national regulations. Do not discharge into the public drainage system.

14. TRANSPORT INFORMATION (REGULATIONS)

DOT/IATA/IMDG:

Transport Classification	CORROSIVE LIQUID
UN Number	3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)
Packing Group	Group II.



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Hazard Class Class 8

15. REGULATORY INFORMATION (Supply & Labelling)

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Supply Classification Not Harmful for the environment.

Labelling Symbols Not Harmful for the environment.

Risk Phrases R40 Limited evidence of carcinogen effect.
R51/R53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R65 Harmful – may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.

Safety Phrases S2 Keep out of the reach of children.
S20/S21 When using do not eat, drink or smoke.
S24/S25 Avoid contact with skin and eyes.
S36/S37 Wear suitable protective clothing and gloves.
S61 Avoid release into the environment. Refer to special instructions/safety data sheets.
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

16. OTHER INFORMATION

This product is intended for use as a QC material for laboratory use only and is not applicable for household uses.

NA: No available Data, Not established, not determined or not pertinent

The information given in this data sheet is presented as guidance only for the purpose of determining health, safety and environmental measures. No warranty or representation express or implied is made as to the accuracy of completeness of the data and information contained in this data sheet. It is the users responsibility to evaluate this product and its intended use and to ensure compliance with applicable laws and regulations.
