MATERIAL SAFETY DATA SHEET

1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Hydrex 4102**

Product Application: RO Antiscalant

Manufacturer: Veolia Water Solutions & Technologies, Saudi – Chemical Industries
P.O. BOX 58515, Riyadh 11515, Kingdom of Saudi Arabia
Telephone: 011 478 77 21. Fax: 011 478 25 60
www.veoliawaterst.com

Emergency Telephone Number:

Riyadh - KSA 011 478 77 21

2 – COMPOSITION INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	EC No.	%
* Phosphonic acid compound	-	-	-

* The specific chemical identity and / or concentration is being withheld because it is trade secret information of Veolia Water Solutions & Technologies.

3 – HAZARDS IDENTIFICATION

Potential Health Effects:

Likely routes of exposure: Eye and skin contact.

Eye contact: Moderately irritating to eyes.

Skin contact: Moderately irritating to skin.

Inhalation: No information available.

Ingestion: Slightly toxic if swallowed small amount (less than a mouthful).

4 – FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing in an unconscious person.

If in eyes: Wash thoroughly with soft, clean water for 15 minutes holding eyelids open. Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

If on skin: DO NOT use solvents or thinners.

If inhaled: Immediate first aid is not likely to be required. If symptoms occur, remove to fresh air.

If swallowed: If the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor immediately.

5 – FIRE- FIGHTING MEASURES

Flash Point: Non flammable.

Extinguishing Media: Water spray, foam, dry chemical, or carbon dioxide.

Fire & Explosion Procedures: Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protection recommended in section 8.
Environmental Precautions:	Keep out of drains and water courses.
Spill Clean up Methods:	Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush spill area with water.

7 – HANDLING AND STORAGE

Handling:
Observe precautions stated on label and also industrial safety regulations. Avoid contact of product with the skin and eyes. Smoking, eating and drinking are prohibited in premises where the preparation is used.
Emptied containers retain vapour and product residue. Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed. The reuse of this material's container for non industrial purposes is prohibited and any reuse must be in consideration of the data provided in this material safety data sheet.

Storage:
Keep the container tightly closed in a dry place.

8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment:





Eye Protection:	Wear safety goggles. Provide eye washes in workshops where the product is constantly handled.
Hand protection:	Protective creams may be used for exposed skin, but they should be applied after contact with the product.
Body Protection:	Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wash thoroughly after handling.
Respiratory Protection:	Avoid breathing vapour or mist. Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. The respirator use limitations specified by the manufacturer must be observed.
Ventilation:	Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as processing equipment.

9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Clear
State	:	Liquid
Color	:	Pale yellow
Odor Characteristic	:	Not specified
pH of concentrate	:	10.0 – 11.0
Specific Gravity @ 25°C	:	1.35 – 1.45
Viscosity, cps	:	Not specified
Melting Point, (Deg. Celsius)	:	Not specified
Boiling Point, (Deg. Celsius)	:	Not specified
Percentage Volatility, (%)	:	Not specified
Solubility in Water	:	Complete

10 – STABILITY AND REACTIVITY

Stability:	Stable under proper storage conditions.
Conditions to avoid:	Low temperature (less than 2 Celsius).
Material to avoid:	None known
Hazardous decomposition products:	Carbon Monoxide (CO); Carbon Dioxide; Nitrogen Oxides (NOx); Phosphorus Oxides (PxOy)

11 – TOXICOLOGICAL INFORMATION

No data is available regarding the preparation itself.

It is generally agreed that substances contained are likely to cause the appearance of major lesions which persist for at least twenty-four hours after application to the eye of an animal. And are likely to cause significant irritation which lasts twenty-four hours after application to the healthy, unbroken skin of an animal for a period of up to 4 hours.

12 – ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

13 – DISPOSAL CONSIDERATIONS

Waste Management:

Do not pour into drains or waterways.

Disposal Methods:

Local, state, provincial, and national disposal regulations may be more or less stringent. Consult your attorney or appropriate regulatory officials for information on such disposal. This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

14 – TRANSPORT INFORMATION

UN Number:	3265
Proper Shipping Name:	Corrosive liquid, Acidic, Organic, n.o.s. (Phosphonic Acid)
IMDG Class:	8
Packing Group:	III

15 – REGULATORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 1999/45/EC and its adaptations

In addition directive 2004/73/EC with the 29° adaptation of directive 67/548/EEC (Hazardous substances) have been taken into account.

Particular hazards associated with the risk and safety recommendations:

R36/38	Irritating to eyes and skin
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S37	Wear suitable gloves
S60	This material and its containers must be disposed of as hazardous waste.

Product Label (s):



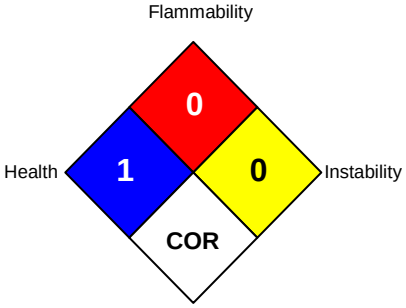


16 – OTHER INFORMATION

HMIS Rating

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

NFPA 704 Rating



Specific

HMIS: Hazardous Materials Identification System

NFPA: National Fire Protection Association

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties