1. Product and Company Identification

Product Name	: **AD-H20**
Usage	: Bathroom Sanitizer & Deodorizer
Address	: KSA -Khobar – NSH Tower 9th floor
Phone Number	: +966 50 519 6007
E-mail	: info@maracialsharq.com
Revision date	: Jan, 2021.D
Distributed by	: Maraci Alsharq

2. Hazards identification

2.1. Classification

Hazard Classification : This chemical is considered:
Hazardous according to the criteria of NOHSC.
Dangerous goods according to the Australia Dangerous Goods Code.

Health hazards : Skin corrosion/irritation - Category 1 Sub category B
Serious eye damage/eye irritation - Category 1

Physical hazards : May be Corrosive to metal

2.2. Label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : Harmful if swallowed
Causes severe skin burns and eye damage

Precautionary statements : Do not breathe mist, vapors, spray
Wash exposed skin thoroughly after handling
Wear protective gloves, protective clothing, and eye protection.

Inhalation : May cause irritation and corrosive effects to nose, throat and respiratory tract.

Ingestion : Corrosive, causes burns to mouth, throat and stomach.

Eye contact : Corrosive, causes permanent eye damage, including blindness.

Skin contact : May be harmful if absorbed through skin. Causes skin irritation, burning in some cases depend on frequency and duration of use.

3. Composition/information on ingredients

Information on hazardous components

Active ingredients	Conc. %	CAS #
Phosphoric Acid	25 - 40	7664-38-2
Non-ionic surfactant	1 - 10	-
Hydrochloric Acid	1 - 5	7647-01-0
Benzyl ammonium chloride	0.05 - 0.20	68424-85-1

4. First-aid measures

Inhalation : Remove the victim into fresh air. Loosen tight clothing such as a collar, tie, belt or waistband. Apply artificial respiration if not breathing.
Get medical attention immediately.

Skin contact : If skin or hair contact occurs, remove heavily contaminated clothing and immediately wash with lots of water for at least 15 minutes.
Do not remove clothing if it sticks to the skin. Do not apply (chemical) neutralizing agents. Get medical attention immediately.
Wash contaminated clothing before reuse.

Eye contact : Immediately rinse eye with plenty of cool water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye.
Do not apply neutralizing agents.
GET IMMEDIATE MEDICAL ATTENTION.

Ingestion : If swallowed, Rinse mouth with water. Do not attempt to give anything by mouth to an unconscious person. DO NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If victim is alert and not convulsing, rinse mouth out and give 1/2 to 1 glass of water to dilute material. IMMEDIATELY GET MEDICAL ATTENTION or calls Poison Control Center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water.
Ingestion of large quantities: Immediately to hospital. Do not give chemical antidote.

Advice to Doctor : Gastric lavage is not recommended.
CORROSIVE POISONING TREATMENT:
Immediate treatment preferably in a hospital is mandatory. In treating corrosive poisoning. DO NOT INDUCE VOMITING; DO NOT ATTEMPT GASTRIC LAVAGE; and DO NOT ATTEMPT TO NEUTRALISE THE CORROSIVE SUBSTANCE.
Vomiting will increase the severity of damage to the oespohagus as the corrosive substance will again come in contact with it.
Attempting gastric lavage may result in perforating either the oesophagus or stomach.

First Aid Facilities : Eye wash facilities and safety shower should be available.

5. Fire and explosion measures

Flammability	:	Non-flammable liquid.
Suitable Extinguishing Media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool containers and surrounds.
Hazardous combustion products	:	If involved in a fire, toxic and corrosive gases/fumes will be evolved and released such as (toxic phosphorous oxide fumes, Carbon oxides, Sulfur oxides).
Fire and Explosion	:	Reacts exothermically with water (moisture). Reacts on exposure to temperature rise with (some) metals release of highly flammable gases/vapors (Contact with metals may produce hydrogen gas which is flammable and explosive). Violent exothermic reaction with (some) bases. Violent to explosive reaction with many compounds such as (strong) oxidizers and with (strong) reducers.
Instructions to the Fire Fighters	:	Isolate materials that are not involved in the fire and protect personnel. Use water spray or fog to cool fire-exposed containers or structures. Use water spray to disperse vapors.
Personal protective equipment	:	Fire fighters to wear self-contained breathing apparatus and suitable protective clothing.
Standard procedure for chemical fires	:	As in any fire: Fight fire with normal precautions from a reasonable distance. Do not enter fire area without full protective equipment including respiratory protection. Exercise caution when fighting any chemical fire. **Be careful,** Spilled material may cause floors and contact surfaces to become slippery. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental release measures

Personal precautions	:	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment (Eye protection, rubber gloves, and rubber boots to protect feet).
Methods for Containment & cleaning up	:	Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate. Large Spill: Corrosive liquid. Poisonous liquid. Prevent further leakage or spillage if safe to do so. Absorb with DRY earth, sand or other non-combustible material. Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into waterways, soil, sewers, or confined areas. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium

carbonate.
Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Environmental Precautions : Avoid release to the environment.

7. Handling and storage

Precautions for safe handling :
Handling Before use carefully read the product label.
Use of safe work practices are recommended to avoid contact with skin and eyes or inhalation.
Keep away from flames/heat sources.
Use good personal hygiene practices.
Do not eat, drink or smoke when using this product.
Wash hands before eating, drinking, smoking, or using toilet facilities.
Wash thoroughly after work using soap and water.

Conditions for safe storage, including any incompatibilities :
Keep containers in cool, dry, well ventilated area, removed from combustible materials and foodstuffs.
Keep away from sources of ignition/flames/heat and Direct sunlight.
Store in corrosive resistant containers.
Keep containers sealed when not in use.
Check regularly for leaks or spills.
KEEP OUT OF REACH OF CHILDREN.
Store away from incompatible materials.
Incompatible products:
Strong bases, light metals, organic materials, Oxidizing agents, bleaches.

8. Exposure controls and personal protection

Exposure Guidelines :
Phosphoric Acid
OSHA PEL (TWA): 1 mg/m³
NIOSH REL (TWA): 1 mg/m³
ACGIH (STEL): 3 mg/m³
Hydrochloric Acid
OSHA PEL (Ceiling): 7 mg/m³
NIOSH REL (Ceiling): 7 mg/m³
ACGIH (Ceiling): 2.98 mg/m³

Eye/Face protection : The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.

Hand Protection :
Avoid skin contact when removing gloves from hands; do not touch the gloves outer surface. Dispose of gloves as hazardous waste.
Compatible chemical resistant gloves are recommended.
Butyl rubber, Natural rubber, Neoprene, Nitrile rubber, Polyethylene, viton and PVC give an excellent resistant.
PVA give poor resistance.

Skin Protection :
Protective clothing recommended. Chemicals proof footwear.
Wash contaminated clothing before reuse.
Avoid inhalation and contact with skin and eyes.

Respiratory	:	Where an inhalation risk exists or ventilation is not adequate, respiratory protection may be required (protection for acid fumes should be worn). Avoid breathing dust, vapors or mists. Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels.
Other Personal Protective Wear	:	Measures should be taken to prevent materials from being splashed into the eyes or on the skin. Wear eye shields, protective clothing and Chemicals resistance safety boots. Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
Engineering Controls	:	Ensure adequate ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. Ensure that eyewash stations and safety showers are proximal to the work-station location. Only mix product in plastic containers or buckets.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

9. Physical and chemical properties

Appearance	: Clear Liquid
Color	: Blue
Odor	: Mint odor
PH	: 0.5
Density	: 1.10 - 1.20 g/ml (H2O = 1)
Solubility in Water	: Soluble 100%

10. Stability and reactivity

Chemical Stability	: Stable under normal conditions.
Condition to Avoid	: Heat, Extremes of temperature and direct sunlight.
Incompatible Materials	: Strong caustics, strong oxidizing agents, reducing agents, organic peroxides and metals.

Hazardous Decomposition Products	:	May decompose upon heating to produce corrosive and/or toxic fumes such as: Irritating/toxic phosphorus oxides, (as phosphorus pentoxide may be generated), Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Hydrogen and chloride chlorine.
Hazardous Reactions	:	Contact with metals may produce hydrogen gas which is flammable. If splashing occurs rinse with water and wipe clean.

11. Toxicological information

Acute Toxicity	:	***Phosphoric Acid (30%):*** Oral LD50: 5.1 g/kg (rat) Dermal LD50 >4.2 g/kg (rabbit) Inhalation LC50: 709 mg/m^3 (rat,4 hr) ***Hydrochloric Acid:*** Oral LD50: 240 mg/kg (estimate) (rat) Oral LD50: 900 mg/kg (rabbit) Dermal LD50 >5010 mg/kg (rabbit) Inhalation LC50: 3124 mg/L 1 H (rat)
Carcinogenicity	:	Phosphoric Acid: IARC has not evaluated the carcinogenicity of this chemical.
Information on likely routes of exposure	:	Inhalation, Eye contact, Skin contact.
Chronic Exposure	:	Health injuries are not known or expected under normal use.
Acute & Chronic Potential Health Effects	:	**Skin:** Causes skin irritation/Corrosive burns depending on the concentration, site (abraded or intact skin), and duration of exposure. **Eyes:** Corrosive to eyes. Risk of serious eye damage. **Ingestion:** Corrosive. May cause burns to the lips, tongue, throat, esophagus and stomach if ingested. Symptoms may include difficulty swallowing, intense thirst, nausea, vomiting, diarrhea, and in severe cases, collapse. **Inhalation:** Inhalation is not an expected hazard unless misted or heated to high temperatures. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract.
Germ Cell Mutagenicity	:	The limited information located does not suggest that phosphoric acid solutions are mutagenic.
Reproductive Toxicity	:	Phosphoric acid is not known to cause developmental toxicity.

12. Ecological information

Ecotoxicity effects	:	Dangerous to aquatic life in high concentrations. Phosphate has indirect long-term effect on the ecosystems due to eutrophication. pH shift. ***Ecotoxicity of Phosphoric Acid:*** WATER: Toxicity to fish: LC50 (Oryzias latipes, 96h) = 75.1mg/l. Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna, 48h) >376mg/l. Toxicity to Algae: EC50 (Pseudokirchneriella subcapitata, 72hr) = 32.0mg/l. Mobility: Mobile in soil. ATMOSPHERE: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Air pollutant.
Biodegradability	:	Expected to be readily biodegradable.
Bioaccumulation	:	No bioaccumulation expected.

13. Disposal considerations

Waste Disposal	:	Avoid release to the environment. For small amounts absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result. **If discarded**, this material and its containers should be treated as hazardous waste according to Directive 2008/98/EC Diluted neutralize material may be flushed to sewer.
Legislations	:	Disposal should be in accordance with applicable regional, national and local laws and regulations
Empty containers	:	Do not reuse container. Dispose container as hazardous waste.

14. Regulatory information:

TSCA Inventory Status	:	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	:	All ingredients are listed on the DSCL inventory.
California Proposition 65	:	Not Listed
SARA 302	:	Not Listed
SARA 304	:	Not Listed
SARA 311	:	Acute health hazard, Chronic health hazard.
SARA 312	:	Acute health hazard, Chronic health hazard.
SARA 313	:	Not Listed
WHMIS Canada	:	Class E: Corrosive liquid.

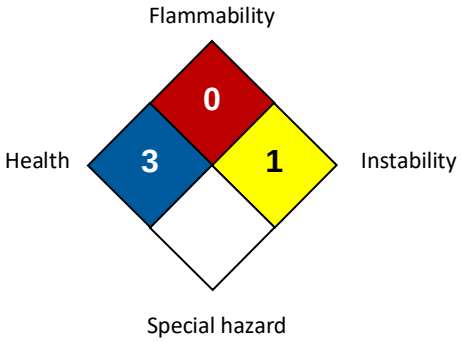
15. Transport information

In accordance with DOT

UN-Number	:	UN1805
Description of the goods	:	Phosphoric acid solution
Transport hazard class(es)	:	8
Packing group	:	III
Environmental hazards	:	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special precautions for user	:	Not applicable.
Hazard labels	:	8 - Corrosive

16. Other information

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION	E

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High,
4 = Extreme, * = Chronic

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

The information of this MSDS is based on the present state of our knowledge and on current EEC and national laws. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product. It is not to be considered as guarantee of the product's properties.

References: Not available.
Other Special Considerations: Not available.