

## pH Down

### MATERIAL SAFETY DATA SHEET (MSDS)

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

##### 1.1. Product identifier

Product name : pH Down  
Product code : NXP32

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

1.2.1. Industrial / For professional use only

##### 1.3. Details of the supplier of the safety data sheet

ZYAX Chem LLP  
401, 402 & 403 Concorde, Plot No.  
66 A, Sector No. 11, CBD Belapur,  
Navi Mumbai - 400 614, Maharashtra, INDIA.  
Contact No.: +91 87792 40420  
info@zyax.in - www.zyax.in

##### 1.4. Emergency telephone number

Emergency number : +91 22 2757 3899

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 1A	H290
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H290

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects  
No additional information available

##### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05 GHS07



Signal word (CLP)	: Danger
Hazard statements (CLP)	: H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation.
Precautionary statements (CLP)	: P261 - Avoid breathing vapours, spray, dust, fume, gas. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER/doctor

**2.3. Other hazards**

Not Known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	50 - 99	Not classified
HYDROCHLORIC ACID AR	(CAS-No.) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X	25 - 50	Skin Corr. 1B, H314 STOT SE 3, H335

Full text of H-statements: see section 16

**SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures**

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: Wash with plenty of water/.... Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Suitable extinguishing media	: Water spray. Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.



**5.2. Special hazards arising from the substance or mixture**

No additional information available

**5.3. Advice for firefighters**

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1. For non-emergency personnel  
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders  
Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Ventilate area.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers.

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour.  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Keep container tightly closed. Keep container closed when not in use.

**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No additional information available

**8.2. Exposure controls**

Hand protection : Protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.



**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Molecular mass	: 36.46 g/mol
Colour	: Clear Colorless.
Odour	: pungent odour.
Odour threshold	: No data available
pH	: < 1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -50
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.16 at 20° C
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No additional information available

**10.4. Conditions to avoid**

Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

Strong acids. Strong bases.



**10.6. Hazardous decomposition products**

Thermal decomposition generates : Corrosive vapours.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: < 1
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: < 1
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

No data available

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

No data available

**12.6. Other adverse effects**

No data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

No data available

**SECTION 14: TRANSPORT INFORMATION**

In accordance with ADR / RID / IMDG / IATA / ADN

**14.1. UN number**

UN-No. (ADR)	: 1789
UN-No. (IMDG)	: 1789
UN-No. (IATA)	: 1789
UN-No. (ADN)	: 1789
UN-No. (RID)	: 1789

**14.2. UN proper shipping name**

Proper Shipping Name (ADR)	: HYDROCHLORIC ACID
Proper Shipping Name (IMDG)	: HYDROCHLORIC ACID
Proper Shipping Name (IATA)	: HYDROCHLORIC ACID
Proper Shipping Name (ADN)	: HYDROCHLORIC ACID
Proper Shipping Name (RID)	: HYDROCHLORIC ACID
Transport document description (ADR)	: UN 1789 HYDROCHLORIC ACID, 8, II, (E)
Transport document description (IMDG)	: UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (IATA)	: UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (ADN)	: UN 1789 HYDROCHLORIC ACID, 8, II
Transport document description (RID)	: UN 1789 HYDROCHLORIC ACID, 8, II

**14.3. Transport hazard class(es)**

ADR

Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8



IMDG

Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8



IATA

Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8



**ADN**

Transport hazard class(es) (ADR) : 8

Danger labels (ADR) : 8



**RID**

Transport hazard class(es) (ADR) : 8

Danger labels (ADR) : 8



**14.4. Packing group**

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

**14.5. Environmental hazards**

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

**14.6. Special precautions for user**

- Overland transport

Classification code (ADR) : C1

Special provisions (ADR) : 520

Limited quantities (ADR) : 11

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP15

Portable tank and bulk container : T8

instructions (ADR)

Portable tank and bulk container special : TP2

provisions (ADR)

Tank code (ADR) : L4BN

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Hazard identification number (Kemler No.) : 80

Orange plates :





Tunnel restriction code (ADR)	: E
EAC code	: 2R
- Transport by sea	
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
IBC special provisions (IMDG)	: B20
Tank instructions (IMDG)	: T8
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: C
Properties and observations (IMDG )	: Colourless liquid.An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.
- Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L
- Inland waterway transport	
Classification code (ADN)	: C1
Special provisions (ADN)	: 520
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
- Rail transport	
Classification code (RID)	: C1
Special provisions (RID)	: 520
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T8
Portable tank and bulk container special provisions (RID)	: TP2
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 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**

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list





Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV

: Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: None of the components are listed

SZW-lijst van mutagene stoffen

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen –

: None of the components are listed

Vruchtbaarheid

NIET-limitatieve lijst van voor de

: None of the components are listed

voortplanting giftige stoffen – Ontwikkeling

Denmark

Recommendations Danish Regulation

: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H- and EUH-statements:

Met. Corr. 1

Corrosive to metals, Category 1

Skin Corr. 1A

Skin corrosion/irritation, Category 1A

Skin Corr. 1B

Skin corrosion/irritation, Category 1B

STOT SE 3

Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

H335

May cause respiratory irritation.

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*