



## Safety Data Sheet

In accordance with the Regulation on Safety Data Sheets Regarding Hazardous Substances and Mixtures published in the Official Journal numbered 29204 on December 13, 2014

Date of issue: 07/12/2016  
Revision date: 27/01/2020  
Version: 0.0

### HEDP

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

##### 1.1. Product identifier

Product form : Mixture  
Trade name : HEDP

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

No additional information available

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

Bilim Endüstriyel Kimyasallar Sanayi ve Ticaret LTD.ŞTİ.  
İkitelli Organize Sanayi Bölgesi Mahallesi, Enkoop Caddesi, Enkoop Sanayi Sitesi No:8 Başakşehir  
İSTANBUL  
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##### 1.4. Emergency telephone number

| Country | Organisation/Company   | Address  | Emergency number | Comment   |
|---------|--|--|------------------|---|
| Turkey  | Ulusal Zehir Merkezi (UZEM)<br>Refik Saydam Hıfzısıhha Merkezi<br>Başkanlığı | Cemal Gürsel Cd. No: 18 Sıhhiye<br>Çankaya<br>06590 Ankara | 114              | Information is provided to public and medical personnel on poisoning incidents via 114. |

#### SECTION 2: Hazards identification

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

Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.

Corrosive to metals, Category 1 H290

Acute toxicity (oral), Category 4 H302

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 1 H318

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : May be corrosive to metals. Harmful if swallowed. Causes skin irritation. Causes serious eye damage.

##### 2.2. Label elements

Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.

Hazard pictograms (SEA) :



Signal word (SEA) :

Danger

Hazardous ingredients :

phosphonic acid

Hazard statements (SEA) :

H290 - May be corrosive to metals.  
H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H318 - Causes serious eye damage.

Precautionary statements (SEA) :

P234 - Keep only in original container.  
P264 - Wash hands, forearms and face with soap and water thoroughly after handling.



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P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 - IF SWALLOWED: Immediately dial 114 for the NATIONAL POISON CENTER or call a doctor/physician.  
P301+P312 - IF SWALLOWED: If you feel unwell, immediately dial 114 for the NATIONAL POISON CENTER or call a doctor/physician.  
P302+P352 - IF ON SKIN: Wash with plenty of water/...  
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 dial 114 for the NATIONAL POISON CENTER or call a doctor/physician.  
P321 - Specific treatment (see on this label).  
P330 - Rinse mouth.  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P390 - Absorb spillage to prevent material damage.  
P406 - Store in corrosive resistant container with a resistant inner liner.

**2.3. Other hazards****Other hazards not contributing to the classification**

No additional information available

**SECTION 3: Composition/information on ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**

| Name            | Product identifier  | %       | Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013. |
|-----------------|---|---------|--|
| ETIDRONIC ACID  | (CAS-No.) 2809-21-4<br>(EC-No.) 220-552-8                                 | 58 - 62 | Not determined   |
| phosphonic acid | (CAS-No.) 13598-36-2<br>(EC-No.) 237-066-7<br>(EC Index-No.) 015-157-00-0 | < 4     | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1A, H314   |

Full text of H-statements: see section 16

**SECTION 4: First aid measures****4.1. Description of first aid measures**

First-aid measures general : Call a poison center or a doctor if you feel unwell.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get 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. Call a physician immediately.  
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Irritation.  
Symptoms/effects after eye contact : Serious damage to eyes.

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

Treat symptomatically.



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#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

##### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

#### SECTION 6: Accidental release measures

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

###### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

###### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

##### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

##### 6.4. Reference to other sections

For further information refer to section 13.

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store in a well-ventilated place. Keep cool.

Incompatible materials : Metals.

##### 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

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment



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Environmental exposure controls : Avoid release to the environment.

#### SECTION 9: Physical and chemical properties

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

|  |   |
|--|---|
| Physical state                             | : Liquid  |
| Molecular mass                             | : 1.44 g/mol  |
| Colour                                     | : Colourless  |
| Odour                                      | : Mixture contains one or more component(s) which have the following odour: |
| Odour threshold                            | : No data available   |
| pH   | : No data available   |
| Relative evaporation rate (butylacetate=1) | : No data available   |
| Melting point                              | : Not applicable  |
| Freezing point                             | : -25   |
| Boiling point                              | : No data available   |
| Flash point                                | : No data available   |
| Auto-ignition temperature                  | : No data available   |
| Decomposition temperature                  | : No data available   |
| Flammability (solid, gas)                  | : Not applicable  |
| Vapour pressure                            | : No data available   |
| Relative vapour density at 20 °C           | : No data available   |
| Relative density                           | : No data available   |
| Solubility                                 | : No data available   |
| Log Pow                                    | : -3.5  |
| Viscosity, kinematic                       | : No data available   |
| Viscosity, dynamic                         | : 46 mPa·s  |
| 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

The product is non-reactive under normal conditions of use, storage and transport.

##### 10.2. Chemical stability

Stable under normal conditions.

##### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

##### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

##### 10.5. Incompatible materials

metals.

##### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed. Not classified.



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| HEDP               |                      |
|--------------------|----------------------|
| LD50 oral rat      | 2400 mg/kg           |
| LD50 dermal rabbit | 7940 mg/kg           |
| ATE (SEA) (oral)   | 500 mg/kg bodyweight |

|                                   |                              |
|-----------------------------------|------------------------------|
| Skin corrosion/irritation         | : Causes skin irritation.    |
| Serious eye damage/irritation     | : Causes serious eye damage. |
| Respiratory or skin sensitisation | : Not classified             |
| Germ cell mutagenicity            | : Not classified             |
| Carcinogenicity                   | : Not classified             |
| Reproductive toxicity             | : Not classified             |
| STOT-single exposure              | : Not classified             |
| STOT-repeated exposure            | : Not classified             |
| Aspiration hazard                 | : Not classified             |

## SECTION 12: Ecological information

## 12.1. Toxicity

|   |   |
|---|---|
| Ecology - general   | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified.   |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified  |

| HEDP           |          |
|----------------|----------|
| LC50 fish 1    | 368 mg/l |
| LC50 fish 2    | 868 mg/l |
| EC50 Daphnia 1 | 527 mg/l |

## 12.2. Persistence and degradability

| HEDP                         |                                   |
|------------------------------|-----------------------------------|
| Chemical oxygen demand (COD) | 263 g O <sub>2</sub> /g substance |
| BOD (% of ThOD)              | 280 % ThOD                        |

## 12.3. Bioaccumulative potential

| HEDP                      |                                     |
|---------------------------|-------------------------------------|
| Log Pow                   | -3.5                                |
| Bioaccumulative potential | No additional information available |

## 12.4. Mobility in soil

| HEDP             |                                     |
|------------------|-------------------------------------|
| Mobility in soil | No additional information available |

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

|                       |                                       |
|-----------------------|---------------------------------------|
| Ozone                 | : Not classified                      |
| Other adverse effects | : No additional information available |



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## SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

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

| ADR   | IMDG  | IATA  | ADN  | RID   |
|---|---|---|--|---|
| <b>14.1. UN number</b>  |   |   |  |   |
| 3265  | 3265  | 3265  | 3265   | 3265  |
| <b>14.2. UN proper shipping name</b>  |   |   |  |   |
| CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.   | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.   | Corrosive liquid, acidic, organic, n.o.s.   | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.   |
| <b>Transport document description</b>   |   |   |  |   |
| UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, III, (E)                      | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, III                           | UN 3265 Corrosive liquid, acidic, organic, n.o.s., 8, III                           | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, III                            | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., 8, III                             |
| <b>14.3. Transport hazard class(es)</b>   |   |   |  |   |
| 8   | 8   | 8   | 8  | 8   |
|  |  |  |  |  |
| <b>14.4. Packing group</b>  |   |   |  |   |
| III   | III   | III   | III  | III   |
| <b>14.5. Environmental hazards</b>  |   |   |  |   |
| Dangerous for the environment : No  | Dangerous for the environment : No<br>Marine pollutant : No                         | Dangerous for the environment : No  | Dangerous for the environment : No   | Dangerous for the environment : No  |
| No supplementary information available  |   |   |  |   |

## 14.6. Special precautions for user

## - Overland transport

Classification code (ADR) : C3  
Special provisions (ADR) : 274  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P001, IBC03, LP01, R001  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T7  
Portable tank and bulk container special provisions (ADR) : TP1, TP28  
Tank code (ADR) : L4BN  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V12  
Hazard identification number (Kemler No.) : 80



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Orange plates :



Tunnel restriction code (ADR) : E

#### - Transport by sea

Special provisions (IMDG) : 223, 274  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP1, TP28  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : A  
Stowage and handling (IMDG) : SW2  
Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

#### - Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y841  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 852  
PCA max net quantity (IATA) : 5L  
CAO packing instructions (IATA) : 856  
CAO max net quantity (IATA) : 60L  
Special provisions (IATA) : A3  
ERG code (IATA) : 8L

#### - Inland waterway transport

Classification code (ADN) : C3  
Special provisions (ADN) : 274  
Limited quantities (ADN) : 5 L  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

#### - Rail transport

Classification code (RID) : C3  
Special provisions (RID) : 274  
Limited quantities (RID) : 5L  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P001, IBC03, LP01, R001  
Mixed packing provisions (RID) : MP19  
Portable tank and bulk container instructions (RID) : T7  
Portable tank and bulk container special provisions (RID) : TP1, TP28  
Tank codes for RID tanks (RID) : L4BN



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Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W12  
Colis express (express parcels) (RID) : CE8  
Hazard identification number (RID) : 80

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. National regulations**

This product doesn't contain any substances that is controlled or prohibited for use according to the Regulation for Reduction of Ozone Depleting Substances published in the Official Journal numbered 27052 on November 12, 2008.

**SECTION 16: Other information**

Full text of H-statements

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4             |
| Eye Dam. 1          | Serious eye damage/eye irritation, Category 1 |
| Met. Corr. 1        | Corrosive to metals, Category 1               |
| Skin Corr. 1A       | Skin corrosion/irritation, Category 1A        |
| Skin Irrit. 2       | Skin corrosion/irritation, Category 2         |
| H290                | May be corrosive to metals.                   |
| H302                | Harmful if swallowed.                         |
| H314                | Causes severe skin burns and eye damage.      |
| H315                | Causes skin irritation.                       |
| H318                | Causes serious eye damage.                    |

Safety Data Sheet author's

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*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.*