



SAFETY DATA SHEET

BETZDEARBORN CP1156

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

1.1. Product identifier

Trade name or designation of the mixture BETZDEARBORN CP1156

Version number 5.4

Revision date 29/01/2022

Supersedes date 02/03/2020

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

Identified uses This product contains a nanoscale material.
Organic sludge dewatering

Uses advised against None known.

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

JV Process and Water Chemicals LLC

Address: Street V. Kadirov 10, city Chirchik, Region Tashkent

Republic of Uzbekistan, 111702

Tel: +99871 209 10 40

Email address: info@pwch.uz

www.pwch.uz

1.4. Emergency telephone number

Multilingual emergency number (24/7)

Street V. Kadirov 10, city Chirchik, Region Tashkent

Republic of Uzbekistan, 111702

Tel: +99871 209 10 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word None.

Hazard statements The product does not need to be labelled in accordance with EC directives or respective national laws.

Precautionary statements

Prevention Not available.

Response Not available.

Storage Not available.



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Disposal	Not available.
Supplemental label information	EUH210 - Safety data sheet available on request.
2.3. Other hazards	None known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical description	Polyacrylamide Powder				
Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Adipic acid	1 - < 2,5	124-04-9 204-673-3	01-2119457561-38	607-144-00-9	
Classification:	Eye Irrit. 2;H319				
Sulphamic acid	1 - < 2,5	5329-14-6 226-218-8	01-2119488633-28	016-026-00-0	
Classification:	Skin Irrit. 2;H315, Eye Irrit. 2;H319, Aquatic Chronic 3;H412				

The classification of the above substance(s) is given, including the hazard class, category code and hazard statements which are assigned in accordance with their physicochemical, health and environmental hazards. Please refer to section 16 where the full text of each relevant H-statement is listed.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water.
Eye contact	Immediately flush eye(s) with plenty of water.
Ingestion	Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed Not applicable.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	None.

5.2. Special hazards arising from the substance or mixture Thermal decomposition or combustion may produce oxides of carbon, ammonia, oxides of nitrogen and/or hydrogen chloride.
 Dust may be explosive if mixed with air in critical proportions and in the presence of a source of ignition.

5.3. Advice for firefighters

Special protective equipment for firefighters	Self contained breathing apparatus. (CEN : EN 137) Protective clothing (CEN : EN 469) Protective gloves (CEN : EN 659) Helmet (CEN : EN 443)
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials. Prevent spillage and fire-fighting water from entering in public sewers or the immediate environment.



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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Protective clothing

For emergency responders Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Prevent from entering sewers or the immediate environment.
 Accidental release of large quantities into the aquatic environment may harm aquatic organisms.

6.3. Methods and material for containment and cleaning up Spills of the product are very slippery.
 Contain and recover by physical means.

6.4. Reference to other sections Please refer also to section no. 8 'Exposure controls' for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Handle in accordance with good industrial hygiene and safety procedures.
 Avoid producing or diffusing dust into the air.
 Spills are very slippery.

7.2. Conditions for safe storage, including any incompatibilities Store in original package.
 Store in dry, cool area.
 Keep away from strong acids and oxidizers.
 Store between 0 - 35 °C.

7.3. Specific end use(s) Only for professional and industrial users

Shelf life 720 days

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Adipic acid (CAS 124-04-9)	TWA	5 mg/m ³	
Additional components	Type	Value	Form
Dust (CAS N/A)	TWA	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs)

Workers

Components	Value	Assessment factor	Notes
Adipic acid (CAS 124-04-9)			
Long-term, Local, Inhalation	5 mg/m ³		
Long-term, Systemic, Dermal	38 mg/kg	20	
Long-term, Systemic, Inhalation	264 mg/m ³	5	
Short-term, Local, Inhalation	5 mg/m ³		
Short-term, Systemic, Dermal	38 mg/kg	20	
Short-term, Systemic, Inhalation	264 mg/m ³	5	
Sulphamic acid (CAS 5329-14-6)			
Long-term, Systemic, Dermal	10 mg/kg bw/day	100	Repeated dose toxicity
Long-term, Systemic, Inhalation	70,5 mg/m ³	25	Repeated dose toxicity

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Adipic acid (CAS 124-04-9)			
Freshwater	0,126 mg/l	50	
Intermittent releases	0,46 mg/l	100	
Marine water	0,0126 mg/l	500	



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Sediment (freshwater)	0,484 mg/kg	
Sediment (marine water)	0,0484 mg/kg	
Soil	0,0228 mg/kg	
STP	59,1 mg/l	10
Sulphamic acid (CAS 5329-14-6)		
Freshwater	1,8 mg/l	10
Intermittent releases	0,48 mg/l	100
Marine water	0,18 mg/l	100
Sediment (freshwater)	8,36 mg/kg	
Sediment (marine water)	0,84 mg/kg	
Soil	5 mg/kg	10
STP	20 mg/l	10

8.2. Exposure controls

Appropriate engineering controls Avoid producing or diffusing dust into the air.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety goggles.
CEN : EN 166

Skin protection

- Hand protection Protective gloves (Plastic, impervious) (Protection against unintentional short-term contact)
Coating thickness: 0.5 mm
Penetration time: > 480 min
CEN : EN 420

- Other Protective clothing if splashing or repeated contact with product is likely.
CEN : EN ISO 13688

Respiratory protection In case of insufficient ventilation, use a breathing mask with filter type: P2
CEN : EN 140; EN 143; EN 149

Thermal hazards Not available.

Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Colour White

Physical state Powder

Odour None

Odour threshold Not available.

pH (concentrated product) Not available.

pH in aqueous solution 3,5 (1% SOL.)

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point > 100 °C P-M(CC)

Evaporation rate < 1 (Ether = 1)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapour pressure < 0,1 mm Hg

Vapour pressure temp. 21 °C



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Vapour density	< 1 (Air = 1)
Relative density	Not available.
Relative density temperature	21 °C
Solubility	
Solubility (water)	1,5 %
Partition coefficient (n-octanol/water)	< 0
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Viscosity temperature	21 °C
Explosive properties	Not available.
Oxidising properties	Not available.
9.2. Other information	
Shelf life	720 days
VOC	0 % (Estimated)

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Not applicable.
10.4. Conditions to avoid	Avoid sources of ignition.
10.5. Incompatible materials	Avoid contact with strong oxidisers.
10.6. Hazardous decomposition products	Thermal decomposition or combustion may produce oxides of carbon, ammonia, oxides of nitrogen and/or hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product	Test Results
BETZDEARBORN CP1156 (Mixture)	Acute Dermal LD50 Rabbit: > 5000 mg/kg (Calculated according to GHS additivity formula) Acute Inhalation LC50 Rat: > 5 mg/l 4 hour (Calculated according to GHS additivity formula) Acute Oral LD50 Rat: > 5000 mg/kg (Calculated according to GHS additivity formula)
Components	Test Results
Adipic acid (124-04-9)	Acute Dermal LD50 Rabbit: > 2000 mg/kg Acute Inhalation LC50 Rat: > 7,7 mg/l 4 hour Acute Oral LD50 Rat: > 2000 mg/kg
Sulphamic acid (5329-14-6)	Acute Dermal LD50 Rabbit: > 2000 mg/kg Acute Oral LD50 Rat: 2140 mg/kg
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	May be irritating to eyes.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.



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Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Information on likely routes of exposure	
Ingestion	May cause irritation of the gastrointestinal tract.
Inhalation	Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact	May be irritating to the skin.
Eye contact	May be irritating to eyes.
Symptoms	Not available.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	None known.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity

Product	Species	Test Results
BETZDEARBORN CP1156 (CAS Mixture)		
Aquatic		
Algae	Algae	Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
Crustacea	EC50 Daphnia magna	20 - 50 mg/l, 48 hours, Fresh water
	LC50 Ceriodaphnia	0,45 mg/l, Static Acute Bioassay, 48 hour
Fish	LC50 Danio rerio	5 - 10 mg/l, 96 hours, Fresh water
	Fathead minnow	1,7 mg/l, Static Acute Bioassay, 96 hour

12.2. Persistence and degradability

At natural pHs (>6) the product degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

12.3. Bioaccumulative potential

Not bioaccumulating

Partition coefficient n-octanol/water (log Kow)

BETZDEARBORN CP1156	< 0
Adipic acid	0,08

Bioconcentration factor (BCF)

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects

Not available.

Summary

The effects of this product on aquatic organisms are rapidly and significantly reduced by the presence of dissolved organic carbon in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods



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Contaminated packaging	According to Controlled Waste Regulations. EWC (European Waste Code) recommendation : 15 01 01, 15 01 02 15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified. 15 01 Packaging (including separately collected municipal packaging waste). 15 01 01 paper and cardboard packaging 15 01 02 Plastic packaging. Depending on the origin and state of the waste, other EWC numbers may be applicable too.
Disposal methods/information	According to Controlled Waste Regulations. EWC (European Waste Code) recommendation : 16 03 06 16 Wastes not otherwise specified in the list. 16 03 Off-specification batches and unused products. 16 03 06 Organic wastes Depending on the origin and state of the waste, other EWC numbers may be applicable too.

SECTION 14: Transport information

- ADR**
Not regulated as dangerous goods.
- RID**
Not regulated as dangerous goods.
- ADN**
Not regulated as dangerous goods.
- IATA**
Not regulated as dangerous goods.
- IMDG**
Not regulated as dangerous goods.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**
Not listed.
- Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**
Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**
Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**
Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**
Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**
Not listed.
- Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**
Not listed.
- Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**
Not listed.

Authorisations

- Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**
Not listed.

Restrictions on use

- Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**
Not listed.



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Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

National regulations Not available.

15.2. Chemical safety assessment Not available.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16: Other information

List of abbreviations

COD: Chemical Oxygen Demand
EC-No: European Commission Number
VME: Valeur moyenne d'exposition (Time weighted average)
IATA: International Air Transport Association
CAS: Chemical Abstract Service.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CEN: European Committee for Standardization (Comité Européen de Normalisation).
TWA: Time Weighted Average.
STEL: Short-term Exposure Limit.
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.
NOEL: No observed effect level.
BOD: Biochemical oxygen demand.
TOC: Total Organic Carbon.
ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).
IMDG Code: International Maritime Dangerous Goods Code.
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
Safety data sheets of raw materials.

References

Information on evaluation method leading to the classification of mixture

The physical, health and environmental hazards of this mixture are assessed by applying the classification criteria for each hazard class or differentiation in Parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008 (CLP).

Full text of any H-statements not written out in full under Sections 2 to 15

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.



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Revision information	SECTION 8: Exposure controls/personal protection: - Hand protection Physical & Chemical Properties: Multiple Properties SECTION 11: Toxicological information: Acute toxicity SECTION 11: Toxicological information: Carcinogenicity SECTION 11: Toxicological information: Skin corrosion/irritation SECTION 11: Toxicological information: Germ cell mutagenicity SECTION 11: Toxicological information: Reproductive toxicity SECTION 11: Toxicological information: Respiratory or skin sensitisation SECTION 11: Toxicological information: Specific target organ toxicity - repeated exposure SECTION 11: Toxicological information: Specific target organ toxicity - single exposure Transport Information: Material Transportation Information SECTION 16: Other information: Further information
Training information	Provide training on safe handling while considering the type of application and exposure scenarios.
Based on EC Directive / Regulations	(EC) No 1907/2006 (REACH) (EU) 2015/830 (EC) No 1272/2008 (EU) No 1357/2014
Further information	Correction in Section: 8,11