

VERSION : 01EN
 NO: BD-SS-WGB-01

BIODUCO SOLID STAIN
-BIODUCO-

DATES: 19/04/2019
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Color : white, grey, black

1. Substance/preparation and company identification

Substance/preparation	Emergency Response Information Company
Chemical family: Polymer, dispersion Synonyms: ACRYLATE POLYMER EMULSION	Bio Industries.CV Jl Sidikan no 94 Yogyakarta Indonesia Phn/fax. 0274-388301 Email. info.bioindustries@gmail.com

2. Composition/information on ingredients

Chemical name	CAS Number	EC Number	Content (W/W)
Aqua ammonia	1336-21-6		< 0,001 %
Colorant	13463-67-7	236-675-5	< 1.0 %
	1333-86-4	215-609-9	< 0,5 %

Substance very high concern (SVHC) list by ECHA : no identified

3. Hazard identification

Emergency overview

INHALATION OF VAPOR OR MIST CANS CAUSE HEADACHE, NAUSEA AND IRRITATION OF THE NOSE, THROAT AND LUNGS.
 MAY CAUSE EYE AND SKIN IRRITATION

Potential health effects

Primary routes of exposure

- Inhalation
- eye contact
- Skin contact

Eyes:

Direct contact with material can cause the Following: slight irritation

Skin:

Prolonged or repeated skin contact can cause the Following: slight irritation

Inhalation:

Inhalation of vapor or mist can cause the Following: irritation of nose, throat, and lungs, headache, nausea

Repeated dose toxicity:

No other known chronic effects.

4. First-aid measures

General advice:

Remove contaminated clothing.

If inhaled:

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Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes. If irritation develops, seek medical attention.

If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

5. Fire-fighting measures

Flash point: > 300 °F (Unspecified)
Autoignition: No data available.

Suitable extinguishing media:

water fog, foam, dry extinguishing media

Hazards during fire-fighting:

No particular hazards known.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

6. Accidental release measures

Personal precautions:

Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.

Environmental precautions:

Observe environmental regulations.

Cleanup:

Spills should be contained, solidified, and placed in suitable containers for disposal.

Further information:

High risk of slipping due to leakage/spillage of product.

7. Handling and storage

Handling

Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
Keep container tightly closed.
Do not breathe vapors, mist or gas.

Storage

Storage conditions : The product as supplied slowly evolves carbondioxide gas.

Storage temperature: 1 - 49 °C (34 - 120 °F)

Further information on storage conditions :

Keep from freezing - product stability may be affected.

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STIR WELL BEFORE USE.

Otherdata : Monomer vapors can be evolved when material is heated during processing operations.
 See SECTION 8, for types of ventilation required.

8. Exposure controls and personal protection

Exposure limits: aqua ammonia

Regulation	Type of listing	Value
ACGIH	TWA	25 ppm
ACGIH	STEL	35ppm
NIOSH/GUIDE	REL	18 mg/m ³ 25 ppm
NIOSH/GUIDE	STEL:	27 mg/m ³ 35 ppm
OSHA_TRANS	PEL	35 mg/m ³ 50 ppm
Z1A	STEL	27 mg/m ³ 35 ppm

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

9. Physical and chemical properties

Form	: liquid pasta
Odors	: specified odors
Colors	: specified
pH value	: 7 - 8.5 <i>Information on: water</i>
boiling point	: 100 °C
Vapor pressure	: 17.5 mmHg (20 °C) <i>Information on: water</i>
Relative density	: ≤ 1.0 water (68 °F)
Bulk density	: 8.58 lb/USg
Viscosity, dynamic	: -
Evaporation rate	: <math>< 1.00</math> Water
% volatiles	: 50-60 %
VOC	: ≤ 50 gr/ltr
Solubility in water	: soluble

10. Stability and reactivity

Conditions to avoid	: Avoid extreme heat.
Substances to avoid	: no identified
Hazardous reactions	: The product is chemically stable.
Decomposition products	: Hazardous decomposition products: carbon dioxide hydrocarbons

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PAGES : 4/6**Corrosion to metals** : No corrosive effect on metal.**11. Toxicological information****Acute toxicity****Oral** : LD50/rat: > 5,000 mg/kg
Skin irritation : rabbit: non-irritant (OECD Guideline 404)
Eye irritation : rabbit: non-irritant (OECD Guideline 405)**Chronic toxicity****Other information:**

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

The statement was derived from products of similar composition.

12. Ecological information**Environmental fate and transport****Biodegradation:**

Test method : OECD 302B; ISO 9888; 88/302/EEC, part C
Method of analysis : DOC reduction
Degree of elimination : > 70 %
Evaluation : Easily eliminated from water.

The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

Bioaccumulation:

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

Environmental toxicity**Acute and prolonged toxicity to fish:**

OECD Guideline 203 static
zebra fish/LC50 (96 h): > 100 mg/l

Acute toxicity to aquatic invertebrates:

OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): > 100 mg/l

Toxicity to aquatic plants:

OECD Guideline 201 green algae/EC50 (72 h): > 100 mg/l Nominal concentration.

Toxicity to microorganisms:

DIN EN ISO 8192-OECD 209-88/302/EEC, P. C activated sludge, domestic/EC20 (0.5 h): > 100 mg/l
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Other ecotoxicological advice:

Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected.
Ecological data are determined by analogy.

13. Disposal considerations**Waste disposal of substance:**

Incinerate or dispose of in a licensed facility. Do not discharge into drains/surface waters/groundwater.

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Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport information

Land transport

USDOT Not classified as a dangerous good under transport regulations

Sea transport

IMDG Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO Not classified as a dangerous good under transport regulations

15. Regulatory information

OSHA hazard category: Not hazardous

SARA hazard categories (EPCRA 311/312): Not hazardous

Workplace Classification

This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR1910.1200).
This product is not a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE III: Section 311/312 Categorizations (40CFR370):

This product is not a hazardous chemical under 29CFR1910.1200, and therefore is not covered by Title III of SARA.

SARA TITLE III: Section 313 Information (40CFR372)

This product does not contain a chemical which is listed in Section 313 at or above minimum concentrations.

CERCLA Information (40CFR302.4)

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

US. Toxic Substances Control Act (TSCA):

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. Column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

16. Other information

HMIS Hazard Rating

Health: 1 Fire : 0 Reactivity: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard.

A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
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BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):

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COLOR : YELLOW**1. Substance/preparation and company identification**

Substance/preparation	Emergency Response Information Company
Chemical family: Polymer, dispersion	Bio Industries.CV Jl Sidikan no 94 Sorosutan, Umbulharjo, Yogyakarta
Synonyms: ACRYLATE EMULSION	EMERGENCY CALL: Phn. 0274-388301 Email. info.bioindustries@gmail.com

2. Composition/information on ingredients**This product contains considered hazardous components**

<u>Chemical name</u>	<u>CAS No</u>	<u>EC No.</u>	<u>Content (W/W)</u>
Colorant	29204-84-0	215-609-9	1,0-5,0%
Ethylene Glycol	107-21-1	203-473-3	0,0-2,5%
Nonylphenol, branched, Ethoxylated	68412-54-4	500-209-1	< 0,1%

3. Hazard identification**Emergency overview**

CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE GASTRIC DISTURBANCES.

Potential health effects**Primary routes of exposure**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Ingestion may cause gastrointestinal disturbances.

Irritation:

Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.

Repeated dose toxicity:

No other known chronic effects.

3. First-aid measures**General advice:**

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes. If irritation develops, seek medical attention.

If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

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4. Fire-fighting measures**Flash point:** > 300 °F (Unspecified)**Autoignition:** No data available.**Suitable extinguishing media:** water fog, foam, dry extinguishing media**Hazards during fire-fighting:** No particular hazards known.**Protective equipment for fire-fighting:** Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.**6. Accidental release measures****Personal precautions:** Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.**Environmental precautions:** Observe environmental regulations.**Cleanup:** Spills should be contained, solidified, and placed in suitable containers for disposal.**Further information:** High risk of slipping due to leakage/spillage of product.**7. Handling and storage****Handling****General advice:**

Handle in accordance with good industrial hygiene and safety practice.

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

No explosion proofing necessary.

Storage**General advice:**

Store protected against freezing.

8. Exposure controls and personal protection**Airborne Exposure Limits:**

Ethylene Glycol [107-21-1]:

ACGIH Short-Term Exposure Limit (STEL): 100 mg/m3 Ceiling (aerosol only)**Advice on system design:**

Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment**Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

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9. Physical and chemical properties

Form	: liquid
Odors	: specified
Colors	: specified
pH value	: 7 - 8.5
<i>Information on: water</i>	
solidification temperature	: 21-30 °C
boiling temperature	: 150 °C (1,000 hPa)
Vapour pressure	: 17.5 mmHg (20 °C)
<i>Information on: water</i>	
Vapour pressure	: 23 mbar (20 °C)
Relative density	: 1.03 (68 °F)

10. Stability and reactivity

Conditions to avoid	: Avoid extreme heat.
Substances to avoid	: no identified
Hazardous reactions	: The product is chemically stable.
Decomposition products	: Hazardous decomposition products: carbon dioxide hydrocarbons
Corrosion to metals	: No corrosive effect on metal.

11. Toxicological information**Acute toxicity**

Ethylene Glycol

Oral (rat LD50 mg/kg): > 4,700 - 10,000 mg/kg**Skin irritation** (rabbit): non-irritant (OECD Guideline 404)**Eye irritation** (rabbit): non-irritant (OECD Guideline 405)**Chronic toxicity****Other information:**

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

The statement was derived from products of similar composition.

12. Ecological information**Environmental fate and transport****Biodegradation:**

Test method : OECD 302B; ISO 9888; 88/302/EEC,part C

Method of analysis : DOC reduction

Degree of elimination : > 70 %

Evaluation : Easily eliminated from water.

The product can be virtually eliminated from water by a biotic processes e.g. adsorption onto activated sludge.

Bioaccumulation

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

Environmental toxicity**Acute and prolonged toxicity to fish:**

OECD Guideline 203 static

zebra fish/LC50 (96 h): > 100 mg/l

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Acute toxicity to aquatic invertebrates:

OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): > 100 mg/l

Toxicity to aquatic plants:

OECD Guideline 201 green algae/EC50 (72 h): > 100 mg/l Nominal concentration.

Toxicity to microorganisms:

DIN EN ISO 8192-OECD 209-88/302/EEC,P. C activated sludge, domestic/EC20 (0.5 h): > 100 mg/l
The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological. treatment plants in appropriate low concentrations.

Other ecotoxicological advice:

Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected.
Ecological data are determined by analogy.

13. Disposal considerations**Waste disposal of substance:**

Incinerate or dispose of in a licensed facility. Do not discharge into drains/surface waters/groundwater.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport information**Land transport**

USDOT Not classified as a dangerous good under transport regulations

Sea transport

IMDG Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO Not classified as a dangerous good under transport regulations

15. Regulatory information

OSHA hazard category: Not hazardous

SARA hazard categories (EPCRA 311/312): Not hazardous

16. Other information**HMIS III rating**

Health: 1 Flammability: 0 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Further information :

This product is based on ingredients which are registered according to:

- EINECS (Europe)
- TSCA (USA)
- DSL (Canada)
- AICS (Australia)

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- ENCS (Japan)
- ECL (Korea)
- PICCS (Phillipines)
- IECSC (China)
- ERMA (New Zealand)

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COLOR : RED**1. Substance/preparation and company identification**

Substance/preparation	Emergency Response Information Company
Chemical family: Polymer, dispersion	Bio Industries.CV Jl Sidikan no 94 Sorosutan, Umbulharjo, Yogyakarta
Synonyms: ACRYLATE EMULSION	EMERGENCY CALL: Phn. 0274-388301 Email. info.bioindustries@gmail.com

2. Composition/information on ingredients**This product contains considered hazardous components**

<u>Chemical name</u>	<u>CAS No</u>	<u>EC No.</u>	<u>Content (W/W)</u>
Colorant	6535-46-2	215-609-9	1,0-5,0%
Ethylene Glycol	107-21-1	203-473-3	0,0-2,5%
Nonylphenol, branched, Ethoxylated	68412-54-4	500-209-1	< 0,1%

3. Hazard identification**Emergency overview**

CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE GASTRIC DISTURBANCES.

Potential health effects**Primary routes of exposure**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Ingestion may cause gastrointestinal disturbances.

Irritation:

Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.

Repeated dose toxicity:

No other known chronic effects.

3. First-aid measures**General advice:**

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes. If irritation develops, seek medical attention.

If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

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4. Fire-fighting measures**Flash point:** > 300 °F (Unspecified)**Autoignition:** No data available.**Suitable extinguishing media:** water fog, foam, dry extinguishing media**Hazards during fire-fighting:** No particular hazards known.**Protective equipment for fire-fighting:** Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.**6. Accidental release measures****Personal precautions:** Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.**Environmental precautions:** Observe environmental regulations.**Cleanup:** Spills should be contained, solidified, and placed in suitable containers for disposal.**Further information:** High risk of slipping due to leakage/spillage of product.**7. Handling and storage****Handling****General advice:**

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ACGIH Short-Term Exposure Limit (STEL): 100 mg/m3 Ceiling (aerosol only)**Advice on system design:**

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9. Physical and chemical properties

Form	: liquid
Odors	: specified
Colors	: specified
pH value	: 7 - 8.5
<i>Information on: water</i>	
solidification temperature	: 21-30 °C
boiling temperature	: 150 °C (1,000 hPa)
Vapour pressure	: 17.5 mmHg (20 °C)
<i>Information on: water</i>	
Vapour pressure	: 23 mbar (20 °C)
Relative density	: 1.03 (68 °F)

10. Stability and reactivity

Conditions to avoid	: Avoid extreme heat.
Substances to avoid	: no identified
Hazardous reactions	: The product is chemically stable.
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Corrosion to metals	: No corrosive effect on metal.

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zebra fish/LC50 (96 h): > 100 mg/l

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Acute toxicity to aquatic invertebrates:

OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): > 100 mg/l

Toxicity to aquatic plants:

OECD Guideline 201 green algae/EC50 (72 h): > 100 mg/l Nominal concentration.

Toxicity to microorganisms:

DIN EN ISO 8192-OECD 209-88/302/EEC,P. C activated sludge, domestic/EC20 (0.5 h): > 100 mg/l
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14. Transport information**Land transport**

USDOT Not classified as a dangerous good under transport regulations

Sea transport

IMDG Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO Not classified as a dangerous good under transport regulations

15. Regulatory information

OSHA hazard category: Not hazardous

SARA hazard categories (EPCRA 311/312): Not hazardous

16. Other information**HMIS III rating**

Health: 1 Flammability: 0 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Further information :

This product is based on ingredients which are registered according to:

- EINECS (Europe)
- TSCA (USA)
- DSL (Canada)
- AICS (Australia)

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- ENCS (Japan)
- ECL (Korea)
- PICCS (Phillipines)
- IECSC (China)
- ERMA (New Zealand)

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