

ACEcolor
Safety Data Sheet
according to the European Regulation No 1907/2006/EC, Article31(REACH)

Reference No. 205259

This Document contains SDS for the following kit components.

- **Buffer Solution (Page 2 to 5)**
- **Substrate (Page 6 to 9)**
- **Stopper Solution (Page 10 to 13)**
- **Developer (Page 14 to 17)**
- **Buffer Solution for Blank (Page 18 to 21)**

01. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: ACEcolor, Buffer Solution

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

For In Vitro Diagnostic Use.

1.3. Details of the supplier of the safety data sheet

Supplier / Manufacturer:

FUJIREBIO INC.

2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410, Japan

Tel: +81-3-6279-0899

Fax: +81-3-6279-0299

E-mail: fri-info@fujirebio.co.jp

European Representative :

INNOGENETICS N.V. (Belgium)

Technologiepark 6, 9052 Gent, Belgium

Tel: +32-9-329-13-29

Fax: +32-9-329-19-11

E-mail: hse@innogenetics.com

1.4. Emergency telephone number

Emergency information:

FUJIREBIO INC. (Japan) Global Sales Department

Tel: +81-3-6279-0899

Mon – Fri 9:00am to 5:30pm (JST)

The other emergency information:

INNOGENETICS N.V. (Belgium)

Technologiepark 6, 9052 Gent, Belgium

Tel: + TEL: +32-9-329-13-29

Mon – Fri 9:00am to 5:30pm

02. Hazards identification

2.1. Classification of the substance or mixture

This product is not classified as dangerous mixture according to Directive 67/548/ECC or Directive 1999/45/EC.

2.2. Label elements

Not applicable.

2.3. Other hazards

PBT : Not applicable.

vPvB : Not applicable.

03. Composition / information on ingredients

3.1. Chemical characterization: Mixture

The mixture contains the following ingredients.

Hazardous ingredients

Dangerous components:			
CAS: 10043-35-3 EINECS: 233-139-2	Boric Acid	 Repr. Cat. 2, R60, R61	0.74 % (w/v)
		 Repr. 1B, H360FD	

For the wording of the listed relevant phrases refer to section 16.

4.1. Description of first aid measures

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin contact

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Eye contact

Rinse eyes with well opened eyelids for several minutes and see a doctor immediately.

Causes moderate eye irritation. Causes redness and pain.

Ingestion

Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

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

No further information available.

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

Show this material safety data sheet to the doctor in attendance.

05. Fire fighting measures

5.1. Extinguishing media

Practically non-combustible.
Water fog, CO₂, powder or foam

5.2. Special hazards arising from the substance or mixture

No hazardous combustion product known.

5.3. Advice for firefighters

During fumigation wear suitable protection clothing. Adjust fire fighting measures to surrounding.

06. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Area evacuation is not required. Wear boots, water proof clothing and gloves (nitrile, neoprene) to minimize skin contact.
Use proper personal protective equipment as indicated in Section 8.

6.2. Environmental precautions

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition.

6.3. Methods and material for containment and cleaning up

When released in small quantities clean up with plenty of running water.

When released in larger quantities contain spilled product, or dam otherwise to prevent release into bodies of water. Dispose spilled material in an appropriate container.

6.4. Reference to other sections

Refer to Section 13.

07. Handling and storage

7.1. Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Not to eat, drink and smoke in work areas. Empty containers retain product residue. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container.

Store in a cool, dry, well-ventilated place.

Refer to the package insert or product label for additional information on storage conditions.

7.3. Specific end use(s)

Refer to Section 13.

08. Exposure controls / Personal protection

8.1. Control parameters

Compounds with exposure limit values, occupational health limits:

10043-35-3 Boric acid

ACGIH

(as Borate compounds)

STEL 6 mg/m³ (15min)

TWA 2 mg/m³ (8hr)

8.2. Exposure controls

General protective measures

If workers are exposed to concentration above the limits, they must wear an appropriate and authorized breathing apparatus.

Respiratory protection

For normal use of the product a respirator mask is not required. Otherwise EN 143, 141.

Hand protection

EN 374. 1-4 hours through time: butyl rubber (0.7 mm) or nitrile rubber is recommended.

Eye/face protection

EN 166. Tightly fitting safety goggles.

Skin protection

Wear appropriate protective gloves to prevent skin exposure.

09. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form;

Liquid

Colour;

Colourless transparent

Odour;

Odourless

Safety-related data

pH:

8.25-8.35

Melting point/freezing point;

Not determined

Initial boiling point and boiling range;

Not determined

Flash point;	Not flammable
Evaporation rate;	Not determined
Flammability (solid, gas);	Not flammable
Upper/lower flammability or explosive limits;	Not available
Vapour pressure;	Not available
Vapour density;	Not determined
Relative density;	Not determined
Solubility(ies);	Soluble
Partition coefficient: n-octanol/water;	Not determined
Auto-ignition temperature;	Not determined
Decomposition temperature;	Not determined
Viscosity;	Not determined
Explosive properties;	Product is not explosive.
Oxidising properties.	Not determined

9.2. Other information

No further information available.

10. Stability and Reactivity

10.1. Reactivity

Under recommended storage conditions product is stable.

10.2. Chemical stability

Under recommended storage and handling conditions product is stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur. Keep away from incompatible materials.

10.4. Conditions to avoid

Under recommended storage conditions product is stable.

10.5. Incompatible materials

Acidic material, metals and base anhydrides. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of copper azide and lead azide.

10.6. Hazardous decomposition products

Under recommended storage conditions product is stable.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Boric acid:

LD50 oral rat: 2660 mg/kg

LD50 oral mouse: 3450 mg/kg

Inhalation of large quantities of aerosols and mists may cause temporary respiratory tract and mucus membrane irritation with coughing and difficulty in breathing.

Experiences from practice

When used properly, according to our current state of knowledge no damage will be expected.

12. Ecological information

12.1. Toxicity

Boric acid:

LC50 Daphnia magna: 658~875 mg/l water (48h)

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No information available, but no bioaccumulation expected.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

Do not allow entering waters, waste water or soil.

Initially, photolysis of sodium azide will result in the formation of metallic nitrides with metals found in natural waters. These nitrides will decompose over time into nitrogen gas and free metals.

13. Disposal considerations

Waste treatment method

Disposal of kits, instruments/tools: In general laboratory waste is under special supervision of the authorities. Refer to applicable local regulation or contact local authorities for information. All used instruments and tools (e.g., pipettes and tubes), waste solutions, tips, papers, etc. should be decontaminated with 2 % (w/v) glutaraldehyde solution (for at least 1 hour), sodium hypochloride solution (effective chlorine concentration 1,000 ppm at least 1 hour) or incineration since test specimens may be contaminated with Hepatitis B virus or other viruses. After the said procedures, dispose of in accordance with local regulations.

14. **Transport information**

This product is not classified under transport regulations.

- 14.1. UN number : No
- 14.2. UN proper shipping name : No
- 14.3. Transport hazard class(es) : No
- 14.4. Packing group : No
- 14.5. Environmental hazards : No
- 14.6. Special precautions for use : No
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No

15. **Regulatory information**

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

The European and national legislations are applicable.

15.2. **Chemical safety assessment**

Chemical safety assessment has not been executed.

16. **Other Information**

The above information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **SDS Revised Date:** Mar 05, 2013: Addition of the information of the dangerous component according to CLP.
Changes of the details of the suppliers and the emergency telephone number.
- **Full wording of relevant phrases (Section 3):**
 - R60: May impair fertility.
 - R61: May cause harm to the unborn child.
 - H360FD: May damage fertility. May damage the unborn child.

References:

RTECS (2005)
HSDB (2004)
GBZ2-2002
ACGIH

01. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: ACEcolor, Substrate

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

For In Vitro Diagnostic Use.

1.3. Details of the supplier of the safety data sheet

Supplier / Manufacturer:

FUJIREBIO INC.

2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410, Japan

Tel: +81-3-6279-0899

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1.4. Emergency telephone number

Emergency information:

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Tel: + TEL: +32-9-329-13-29

Mon – Fri 9:00am to 5:30pm

02. Hazards identification

2.1. Classification of the substance or mixture

This product is not classified as dangerous mixture according to Directive 67/548/ECC or Directive 1999/45/EC.

2.2. Label elements

Not applicable.

2.3. Other hazards

PBT : Not applicable.



vPvB : Not applicable.

03. Composition / information on ingredients

3.1. Chemical characterization: Mixture

The mixture contains the following ingredients:

Hazardous ingredients

Dangerous components:			
CAS: 83-07-8 EINECS: 201-452-3	4-Aminoantipyrine	 	Xn R22, R36/37/38 Acute Tox,4,H302;Skin Irrit.2,H315; Eye Irrit.2,H319;STOT SE3,H335
			0.21% (w/v)

For the wording of the listed relevant phrases refer to section 16.

04. First aid measures

4.1. Description of first aid measures

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin contact

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Eye contact

Rinse eyes with well opened eyelids for several minutes and see a doctor immediately. Causes moderate eye irritation. Causes redness and pain.

Ingestion

Potential for aspiration if swallowed. Get medical aid immediately.

Do not induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

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

No further information available.

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

Show this material safety data sheet to the doctor in attendance.

05. Fire fighting measures

5.1. Extinguishing media

Practically non-combustible.
Water fog, CO₂, powder or foam

5.2. Special hazards arising from the substance or mixture

No hazardous combustion product known.

5.3. Advice for firefighters

During fumigation wear suitable protection clothing. Adjust fire fighting measures to surrounding.

06. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Area evacuation is not required. Wear boots, water proof clothing and gloves (nitrile, neoprene) to minimize skin contact.
Use proper personal protective equipment as indicated in Section 8.

6.2. Environmental precautions

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition.

6.3. Methods and material for containment and cleaning up

When released in small quantities clean up with plenty of running water.

When released in larger quantities contain spilled product, or dam otherwise to prevent release into bodies of water. Dispose spilled material in an appropriate container.

6.4. Reference to other sections

Refer to Section 13.

07. Handling and storage

7.1. Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Not to eat, drink and smoke in work areas. Empty containers retain product residue. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container.

Store in a cool, dry, well-ventilated place.

Refer to the package insert or product label for additional information on storage conditions.

7.3. Specific end use(s)

Refer to Section 13.

08. Exposure controls / Personal protection

8.1. Control parameters

No data available.

8.2. Exposure controls

General protective measures

If workers are exposed to concentration above the limits, they must wear an appropriate and authorized breathing apparatus.

Respiratory protection

For normal use of the product a respirator mask is not required. Otherwise EN 143, 141.

Hand protection

EN 374. 1-4 hours through time: butyl rubber (0.7 mm) or nitrile rubber is recommended.

Eye/face protection

EN 166. Tightly fitting safety goggles.

Skin protection

Wear appropriate protective gloves to prevent skin exposure.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form;	Lyophilized
Colour;	Whitish lyophilized preparation
Odour;	Odourless

Safety-related data

pH;	Not determined
Melting point/freezing point;	Not determined
Initial boiling point and boiling range;	Not determined
Flash point;	Not flammable
Evaporation rate;	Not determined
Flammability (solid, gas);	Not flammable

Upper/lower flammability or explosive limits;	Not available
Vapour pressure;	Not available
Vapour density;	Not determined
Relative density;	Not determined
Solubility(ies);	Soluble
Partition coefficient: n-octanol/water;	Not determined
Auto-ignition temperature;	Not determined
Decomposition temperature;	Not determined
Viscosity;	Not determined
Explosive properties;	Product is not explosive.
Oxidising properties.	Not determined

9.2. Other information

No further information available

10. Stability and Reactivity

10.1. Reactivity

Under recommended storage conditions product is stable.

10.2. Chemical stability

Under recommended storage and handling conditions product is stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur. Keep away from incompatible materials.

10.4. Conditions to avoid

Under recommended storage conditions product is stable.

10.5. Incompatible materials

Acidic material, metals and base anhydrides. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of copper azide and lead azide.

10.6. Hazardous decomposition products

Under recommended storage conditions product is stable.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

4-Aminoantipyrine:

LD50 oral rat: 1700 mg/kg

LD50 oral mouse: 800 mg/kg

Inhalation of large quantities of aerosols and mists may cause temporary respiratory tract and mucus membrane irritation with coughing and difficulty in breathing.

Experiences from practice

When used properly, according to our current state of knowledge no damage will be expected.

12. Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No information available, but no bioaccumulation expected.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

Do not allow entering waters, waste water or soil.

Initially, photolysis of sodium azide will result in the formation of metallic nitrides with metals found in natural waters. These nitrides will decompose over time into nitrogen gas and free metals.

13. Disposal considerations

Waste treatment method

Disposal of kits, instruments/tools: In general laboratory waste is under special supervision of the authorities. Refer to applicable local regulation or contact local authorities for information. All used instruments and tools (e.g., pipettes and tubes), waste solutions, tips, papers, etc. should be decontaminated with 2 % (w/v) glutaraldehyde solution (for at least 1 hour), sodium hypochloride solution (effective chlorine concentration 1,000 ppm at least 1 hour) or incineration since test specimens may be contaminated with Hepatitis B virus or other viruses. After the said procedures, dispose of in accordance with local regulations.

14. **Transport information**

This product is not classified under transport regulations.

- 14.1. UN number : No
14.2. UN proper shipping name : No
14.3. Transport hazard class(es) : No
14.4. Packing group : No
14.5. Environmental hazards : No
14.6. Special precautions for use : No
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No
-

15. **Regulatory information**

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

The European and national legislations are applicable.

15.2. **Chemical safety assessment**

Chemical safety assessment has not been executed.

16. **Other Information**

The above information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **SDS Revised Date:** Mar 05, 2013: Addition of the information of the dangerous component according to CLP.
Changes of the details of the suppliers and the emergency telephone number.
- **Full wording of relevant phrases (Section 3):**
R22: Harmful if swallowed.
R36/37/38: Irritating to eyes, respiratory system and skin.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

References:

RTECS (2005)
HSDB (2004)
GBZ2-2002
WEL (Great Britain)

01. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: ACEcolor, Stopper Solution

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

For In Vitro Diagnostic Use.

1.3. Details of the supplier of the safety data sheet

Supplier / Manufacturer:

FUJIREBIO INC.

2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410, Japan

Tel: +81-3-6279-0899

Fax: +81-3-6279-0299

E-mail: fri-info@fujirebio.co.jp

European Representative :

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Tel: +32-9-329-13-29

Fax: +32-9-329-19-11

E-mail: hse@innogenetics.com

1.4. Emergency telephone number

Emergency information:

FUJIREBIO INC. (Japan) Global Sales Department

Tel: +81-3-6279-0899

Mon – Fri 9:00am to 5:30pm (JST)

The other emergency information:

INNOGENETICS N.V. (Belgium)

Technologiepark 6, 9052 Gent, Belgium

Tel: + TEL: +32-9-329-13-29

Mon – Fri 9:00am to 5:30pm

02. Hazards identification

2.1. Classification of the substance or mixture

This product is not classified as dangerous mixture according to Directive 67/548/ECC or Directive 1999/45/EC.

2.2. Label elements

Not applicable.

2.3. Other hazards

PBT : Not applicable.

vPvB : Not applicable.

03. Composition / information on ingredients

3.1. Chemical characterization: Mixture

The mixture contains no hazardous ingredients.

04. First aid measures

4.1. Description of first aid measures

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin contact

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Eye contact

Rinse eyes with well opened eyelids for several minutes and see a doctor immediately.

Causes moderate eye irritation. Causes redness and pain.

Ingestion

Potential for aspiration if swallowed. Get medical aid immediately.

Do not induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

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

No further information available.

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

Show this material safety data sheet to the doctor in attendance.

05. Fire fighting measures

5.1. Extinguishing media

Practically non-combustible.

Water fog, CO₂, powder or foam

5.2. Special hazards arising from the substance or mixture

No hazardous combustion product known.

5.3. Advice for firefighters

During fumigation wear suitable protection clothing. Adjust fire fighting measures to surrounding.

06. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Area evacuation is not required. Wear boots, water proof clothing and gloves (nitrile, neoprene) to minimize skin contact. Use proper personal protective equipment as indicated in Section 8.

6.2. Environmental precautions

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition.

6.3. Methods and material for containment and cleaning up

When released in small quantities clean up with plenty of running water.
When released in larger quantities contain spilled product, or dam otherwise to prevent release into bodies of water. Dispose spilled material in an appropriate container.

6.4. Reference to other sections

Refer to Section 13.

07. Handling and storage

7.1. Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Not to eat, drink and smoke in work areas. Empty containers retain product residue. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container.
Store in a cool, dry, well-ventilated place.
Refer to the package insert or product label for additional information on storage conditions.

7.3. Specific end use(s)

Refer to Section 13.

08. Exposure controls / Personal protection

8.1. Control parameters

No data available.

8.2. Exposure controls

General protective measures

If workers are exposed to concentration above the limits, they must wear an appropriate and authorized breathing apparatus.

Respiratory protection

For normal use of the product a respirator mask is not required. Otherwise EN 143, 141.

Hand protection

EN 374. 1-4 hours through time: butyl rubber (0.7 mm) or nitrile rubber is recommended.

Eye/face protection

EN 166. Tightly fitting safety goggles.

Skin protection

Wear appropriate protective gloves to prevent skin exposure.

09. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form;	Liquid
Colour;	Colourless Transparent
Odour;	Odourless

Safety-related data

pH:	6.80-7.20
Melting point/freezing point;	Not determined
Initial boiling point and boiling range;	Not determined
Flash point;	Not flammable
Evaporation rate;	Not determined
Flammability (solid, gas);	Not flammable
Upper/lower flammability or explosive limits;	Not available
Vapour pressure;	Not available
Vapour density;	Not determined
Relative density;	Not determined
Solubility(ies);	Soluble
Partition coefficient: n-octanol/water;	Not determined
Auto-ignition temperature;	Not determined
Decomposition temperature;	Not determined

Viscosity;
Explosive properties;
Oxidising properties.

Not determined
Product is not explosive.
Not determined

9.2. Other information

No further information available

10. Stability and Reactivity

10.1. Reactivity

Under recommended storage conditions product is stable.

10.2. Chemical stability

Under recommended storage and handling conditions product is stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur. Keep away from incompatible materials.

10.4. Conditions to avoid

Under recommended storage conditions product is stable.

10.5. Incompatible materials

Acidic material, metals and base anhydrides. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of copper azide and lead azide.

10.6. Hazardous decomposition products

Under recommended storage conditions product is stable.

11. Toxicological information

11.1. Information on toxicological effects

Inhalation of large quantities of aerosols and mists may cause temporary respiratory tract and mucus membrane irritation with coughing and difficulty in breathing.

Experiences from practice

When used properly, according to our current state of knowledge no damage will be expected.

12. Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No information available, but no bioaccumulation expected.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

Do not allow entering waters, waste water or soil.

Initially, photolysis of sodium azide will result in the formation of metallic nitrides with metals found in natural waters.

These nitrides will decompose over time into nitrogen gas and free metals.

13. Disposal considerations

Waste treatment method

Disposal of kits, instruments/tools: In general laboratory waste is under special supervision of the authorities. Refer to applicable local regulation or contact local authorities for information. All used instruments and tools (e.g., pipettes and tubes), waste solutions, tips, papers, etc. should be decontaminated with 2 % (w/v) glutaraldehyde solution (for at least 1 hour), sodium hypochloride solution (effective chlorine concentration 1,000 ppm at least 1 hour) or incineration since test specimens may be contaminated with Hepatitis B virus or other viruses. After the said procedures, dispose of in accordance with local regulations.

14. Transport information

This product is not classified under transport regulations.

- 14.1. UN number** : No
14.2. UN proper shipping name : No
14.3. Transport hazard class(es) : No
14.4. Packing group : No
14.5. Environmental hazards : No
14.6. Special precautions for use : No
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No

15. **Regulatory information**

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

The European and national legislations are applicable.

15.2. Chemical safety assessment

Chemical safety assessment has not been executed.

16. **Other Information**

The above information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **SDS Revised Date:** Mar 05, 2013: Addition of the information of the dangerous component according to CLP.
Changes of the details of the suppliers and the emergency telephone number.

01. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: ACEcolor, Developer

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

For In Vitro Diagnostic Use.

1.3. Details of the supplier of the safety data sheet

Supplier / Manufacturer:

FUJIREBIO INC.

2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410, Japan

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1.4. Emergency telephone number

Emergency information:

FUJIREBIO INC. (Japan) Global Sales Department

Tel: +81-3-6279-0899

Mon – Fri 9:00am to 5:30pm (JST)

The other emergency information:

INNOGENETICS N.V. (Belgium)

Technologiepark 6, 9052 Gent, Belgium

Tel: + TEL: +32-9-329-13-29

Mon – Fri 9:00am to 5:30pm

02. Hazards identification

2.1. Classification of the substance or mixture

This product is not classified as dangerous mixture according to Directive 67/548/ECC or Directive 1999/45/EC.

2.2. Label elements

Not applicable.

2.3. Other hazards

PBT : Not applicable.






vPvB : Not applicable.

03. Composition / information on ingredients

3.1. Chemical characterization: Mixture

The mixture contains the following ingredients:

Hazardous ingredients

Dangerous components:			
CAS: 7790-28-5 EINECS: 232-197-6	Sodium metaperiodate	 O R8  Xn R22, R36/37/38 <hr/>  Ox Sol.2, H272:  Acute Tox.3, H301: <hr/>  Skin Irrit.2, H315, Eye Irrit.2, H319, STOT SE 3, H335	1.39 % (w/v)

For the wording of the listed relevant phrases refer to section 16.

04. First aid measures

4.1. Description of first aid measures

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin contact

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Eye contact

Rinse eyes with well opened eyelids for several minutes and see a doctor immediately. Causes moderate eye irritation. Causes redness and pain.

Ingestion

Potential for aspiration if swallowed. Get medical aid immediately.

Do not induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

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

No further information available.

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

Show this material safety data sheet to the doctor in attendance.

05. Fire fighting measures

5.1. Extinguishing media

Practically non-combustible.

Water fog, CO₂, powder or foam

5.2. Special hazards arising from the substance or mixture

No hazardous combustion product known.

5.3. Advice for firefighters

During fumigation wear suitable protection clothing. Adjust fire fighting measures to surrounding.

06. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Area evacuation is not required. Wear boots, water proof clothing and gloves (nitrile, neoprene) to minimize skin contact.

Use proper personal protective equipment as indicated in Section 8.

6.2. Environmental precautions

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition.

6.3. Methods and material for containment and cleaning up

When released in small quantities clean up with plenty of running water.

When released in larger quantities contain spilled product, or dam otherwise to prevent release into bodies of water. Dispose spilled material in an appropriate container.

6.4. Reference to other sections

Refer to Section 13.

07. Handling and storage

7.1. Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Not to eat, drink and smoke in work areas. Empty containers retain product residue. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container.

Store in a cool, dry, well-ventilated place.

Refer to the package insert or product label for additional information on storage conditions.

7.3. Specific end use(s)

Refer to Section 13.

08. Exposure controls / Personal protection

8.1. Control parameters

No further information available.

8.2. Exposure controls

General protective measures

If workers are exposed to concentration above the limits, they must wear an appropriate and authorized breathing apparatus.

Respiratory protection

For normal use of the product a respirator mask is not required. Otherwise EN 143, 141.

Hand protection

EN 374. 1-4 hours through time: butyl rubber (0.7 mm) or nitrile rubber is recommended.

Eye/face protection

EN 166. Tightly fitting safety goggles.

Skin protection

Wear appropriate protective gloves to prevent skin exposure.

09. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form

Lyophilized

Colour

Whitish lyophilized preparation.

Odour

Odourless

Safety-related data

pH:

7.0-7.6 (after reconstitution)

Melting point/freezing point;

Not determined

Initial boiling point and boiling range;	Not determined
Flash point;	Not flammable
Evaporation rate;	Not determined
Flammability (solid, gas);	Not flammable
Upper/lower flammability or explosive limits;	Not available
Vapour pressure;	Not available
Vapour density;	Not determined
Relative density;	Not determined
Solubility(ies);	Soluble
Partition coefficient: n-octanol/water;	Not determined
Auto-ignition temperature;	Not determined
Decomposition temperature;	Not determined
Viscosity;	Not determined
Explosive properties;	Product is not explosive.
Oxidising properties.	Not determined

9.2. Other information

No further information available

10. Stability and Reactivity

10.1. Reactivity

Under recommended storage conditions product is stable.

10.2. Chemical stability

Under recommended storage and handling conditions product is stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur. Keep away from incompatible materials.

10.4. Conditions to avoid

Under recommended storage conditions product is stable.

10.5. Incompatible materials

Acidic material, metals and base anhydrides. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of copper azide and lead azide.

10.6. Hazardous decomposition products

Under recommended storage conditions product is stable.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Sodium metaperiodate :

LD50 ipr rat: 58 mg/kg

Inhalation of large quantities of aerosols and mists may cause temporary respiratory tract and mucus membrane irritation with coughing and difficulty in breathing.

Experiences from practice

When used properly, according to our current state of knowledge no damage will be expected.

12. Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No information available, but no bioaccumulation expected.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

Do not allow entering waters, waste water or soil.

Initially, photolysis of sodium azide will result in the formation of metallic nitrides with metals found in natural waters. These nitrides will decompose over time into nitrogen gas and free metals.

13. Disposal considerations

Waste treatment method

Disposal of kits, instruments/tools: In general laboratory waste is under special supervision of the authorities. Refer to applicable local regulation or contact local authorities for information. All used instruments and tools (e.g., pipettes and tubes), waste solutions, tips, papers, etc. should be decontaminated with 2 % (w/v) glutaraldehyde solution (for at least 1 hour), sodium hypochloride solution (effective chlorine concentration 1,000 ppm at least 1 hour) or incineration since test specimens may be contaminated with Hepatitis B virus or other viruses. After the said procedures, dispose of in accordance with local regulations.

14. **Transport information**

This product is not classified under transport regulations.

- 14.1. UN number : No
- 14.2. UN proper shipping name : No
- 14.3. Transport hazard class(es) : No
- 14.4. Packing group : No
- 14.5. Environmental hazards : No
- 14.6. Special precautions for use : No
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No

15. **Regulatory information**

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

The European and national legislations are applicable.

15.2. **Chemical safety assessment**

Chemical safety assessment has not been executed.

16. **Other Information**

The above information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **SDS Revised Date:** Mar 05, 2013: Addition of the information of the dangerous component according to CLP.
Changes of the details of the suppliers and the emergency telephone number.
- **Full wording of relevant phrases (Section 3):**
 - R8: Contact with combustible material may cause fire.
 - R22: Harmful if swallowed.
 - R36/37/38: Irritating to eyes, respiratory system and skin.
 - H272: May intensify fire; oxidiser.
 - H301: Toxic if swallowed.
 - H315: Causes skin irritation.
 - H319: Causes serious eye irritation.
 - H335: May cause respiratory irritation.

References:

RTECS (2005)
HSDB (2004)
GBZ2-2002
WEL (Great Britain)

01. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: ACEcolor, Buffer Solution for Blank

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

For In Vitro Diagnostic Use.

1.3. Details of the supplier of the safety data sheet

Supplier / Manufacturer:

FUJIREBIO INC.

2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410, Japan

Tel: +81-3-6279-0899

Fax: +81-3-6279-0299

E-mail: fri-info@fujirebio.co.jp

European Representative :

INNOGENETICS N.V. (Belgium)

Technologiepark 6, 9052 Gent, Belgium

Tel: +32-9-329-13-29

Fax: +32-9-329-19-11

E-mail: hse@innogenetics.com

1.4. Emergency telephone number

Emergency information:

FUJIREBIO INC. (Japan) Global Sales Department

Tel: +81-3-6279-0899

Mon – Fri 9:00am to 5:30pm (JST)

The other emergency information:

INNOGENETICS N.V. (Belgium)

Technologiepark 6, 9052 Gent, Belgium

Tel: + TEL: +32-9-329-13-29

Mon – Fri 9:00am to 5:30pm

02. Hazards identification

2.1. Classification of the substance or mixture

This product is not classified as dangerous mixture according to Directive 67/548/ECC or Directive 1999/45/EC.

2.2. Label elements

Not applicable.

2.3. Other hazards

PBT : Not applicable.



vPvB : Not applicable.

03. Composition / information on ingredients

3.1. Chemical characterization: Mixture

The mixture contains the following ingredients:

Hazardous ingredients

Dangerous components:			
CAS: 10043-35-3 EINECS: 233-139-2	Boric Acid	 Repr. Cat. 2, R60, R61  Repr. 1B, H360FD	0.74 % (w/v)

For the wording of the listed relevant phrases refer to section 16.

04. First aid measures

4.1. Description of first aid measures

Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin contact

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Eye contact

Rinse eyes with well opened eyelids for several minutes and see a doctor immediately.

Causes moderate eye irritation. Causes redness and pain.

Ingestion

Potential for aspiration if swallowed. Get medical aid immediately.

Do not induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

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

No further information available.

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

Show this material safety data sheet to the doctor in attendance.

05. Fire fighting measures

5.1. Extinguishing media

Practically non-combustible.
Water fog, CO₂, powder or foam

5.2. Special hazards arising from the substance or mixture

No hazardous combustion product known.

5.3. Advice for firefighters

During fumigation wear suitable protection clothing. Adjust fire fighting measures to surrounding.

06. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Area evacuation is not required. Wear boots, water proof clothing and gloves (nitrile, neoprene) to minimize skin contact.
Use proper personal protective equipment as indicated in Section 8.

6.2. Environmental precautions

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition.

6.3. Methods and material for containment and cleaning up

When released in small quantities clean up with plenty of running water.

When released in larger quantities contain spilled product, or dam otherwise to prevent release into bodies of water. Dispose spilled material in an appropriate container.

6.4. Reference to other sections

Refer to Section 13.

07. Handling and storage

7.1. Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Not to eat, drink and smoke in work areas. Empty containers retain product residue. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container.

Store in a cool, dry, well-ventilated place.

Refer to the package insert or product label for additional information on storage conditions.

7.3. Specific end use(s)

Refer to Section 13.

08. Exposure controls / Personal protection

8.1. Control parameters

Compounds with exposure limit values, occupational health limits:

10043-35-3 Boric acid

ACGIH

(as Borate compounds)

STEL 6 mg/m³ (15min)

TWA 2 mg/m³ (8hr)

8.2. Exposure controls

General protective measures

If workers are exposed to concentration above the limits, they must wear an appropriate and authorized breathing apparatus.

Respiratory protection

For normal use of the product a respirator mask is not required. Otherwise EN 143, 141.

Hand protection

EN 374. 1-4 hours through time: butyl rubber (0.7 mm) or nitrile rubber is recommended.

Eye/face protection

EN 166. Tightly fitting safety goggles.

Skin protection

Wear appropriate protective gloves to prevent skin exposure.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form;

Liquid

Colour;

Colourless transparent.

Odour;

Odourless

Safety-related data

pH:

8.25-8.35

Melting point/freezing point;

Not determined

Initial boiling point and boiling range;

Not determined

Flash point;	Not flammable
Evaporation rate;	Not determined
Flammability (solid, gas);	Not flammable
Upper/lower flammability or explosive limits;	Not available
Vapour pressure;	Not available
Vapour density;	Not determined
Relative density;	Not determined
Solubility(ies);	Soluble
Partition coefficient: n-octanol/water;	Not determined
Auto-ignition temperature;	Not determined
Decomposition temperature;	Not determined
Viscosity;	Not determined
Explosive properties;	Product is not explosive.
Oxidising properties.	Not determined

9.2. Other information

No further information available

10. Stability and Reactivity

10.1. Reactivity

Under recommended storage conditions product is stable.

10.2. Chemical stability

Under recommended storage and handling conditions product is stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur. Keep away from incompatible materials.

10.4. Conditions to avoid

Under recommended storage conditions product is stable.

10.5. Incompatible materials

Acidic material, metals and base anhydrides. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of copper azide and lead azide.

10.6. Hazardous decomposition products

Under recommended storage conditions product is stable.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Boric acid:

LD50 oral rat: 2660 mg/kg

LD50 oral mouse: 3450 mg/kg

Inhalation of large quantities of aerosols and mists may cause temporary respiratory tract and mucus membrane irritation with coughing and difficulty in breathing.

Experiences from practice

When used properly, according to our current state of knowledge no damage will be expected.

12. Ecological information

12.1. Toxicity

Boric acid:

LC50 Daphnids magna: 658~875 mg/l water (48h)

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No information available, but no bioaccumulation expected.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

Do not allow entering waters, waste water or soil.

Initially, photolysis of sodium azide will result in the formation of metallic nitrides with metals found in natural waters. These nitrides will decompose over time into nitrogen gas and free metals.

13. Disposal considerations

Waste treatment method

Disposal of kits, instruments/tools: In general laboratory waste is under special supervision of the authorities. Refer to applicable local regulation or contact local authorities for information. All used instruments and tools (e.g., pipettes and tubes), waste solutions, tips, papers, etc. should be decontaminated with 2 % (w/v) glutaraldehyde solution (for at least 1 hour), sodium hypochloride solution (effective chlorine concentration 1,000 ppm at least 1 hour) or incineration since test specimens may be contaminated with Hepatitis B virus or other viruses. After the said procedures, dispose of in accordance with local regulations.

14. **Transport information**

This product is not classified under transport regulations.

- 14.1. UN number : No
- 14.2. UN proper shipping name : No
- 14.3. Transport hazard class(es) : No
- 14.4. Packing group : No
- 14.5. Environmental hazards : No
- 14.6. Special precautions for use : No
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No

15. **Regulatory information**

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

The European and national legislations are applicable.

15.2. **Chemical safety assessment**

Chemical safety assessment has not been executed.

16. **Other Information**

The above information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **SDS Revised Date:** Mar 05, 2013: Addition of the information of the dangerous component according to CLP.
Changes of the details of the suppliers and the emergency telephone number.
- **Full wording of relevant phrases (Section 3):**
 - R60: May impair fertility.
 - R61: May cause harm to the unborn child.
 - H360FD: May damage fertility. May damage the unborn child.

References:

RTECS (2005)
HSDB (2004)
GBZ2-2002
ACGIH