

# MATERIAL SAFETY DATA SHEET

## Arachidonic Acid Control

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Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

Printed: 01/15/2008  
Revision: 01/14/2008

Date Created: 04/15/2004

### 1. Product and Company Identification

**Product Code:** 10010377  
**Product Name:** Arachidonic Acid Control  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV	Other Limits
1. Arachidonic acid	506-32-1	0.0 -1.0 %	No data.	No data.	No data.
2. Ethyl alcohol	64-17-5	99.0 -100.0 %	8H TWA:1000 ppm (1900 mg/m3)	1000 ppm	No data.

  

Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Arachidonic acid	CE6675000	No data.	No data.	No data.	No data.
2. Ethyl alcohol	KQ6300000	No data.	No data.	No data.	No data.

### 3. Hazards Identification

**Emergency Overview:** No data available.

**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

**Potential Health Effects (Acute and Chronic):** The hazards identified with this product are those associated with the solvent(s). Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Material is irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. Repeated exposure may cause skin dryness or cracking. Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the CNS system of the fetus, producing a collection of effects which together constitute fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and small size head. The toxicological properties of this compound have not been fully evaluated.

**Signs and Symptoms Of Exposure:** Exposure may cause: Dizziness, drowsiness, headache, nausea, and vomiting.

**Medical Conditions Generally Aggravated By Exposure:** Repeated exposure to ethanol may aggravate liver injury produced from other causes.

### 4. First Aid Measures

**Emergency and First Aid Procedures:**

If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.

In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

## Arachidonic Acid Control

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## 5. Fire Fighting Measures

<b>Flash Pt:</b>	14.00 C Method Used: TCC
<b>Explosive Limits:</b>	LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C
<b>Fire Fighting Instructions:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes. Note: Flammable as diluted in ethanol.
<b>Flammable Properties and Hazards:</b>	Can release vapors that form explosive mixtures at temperatures at or above the flashpoint. Container explosion may occur under fire conditions. Emits toxic fumes under fire conditions. Flammable liquid. Vapors can travel to a source of ignition and flash back.
<b>Hazardous Combustion Products:</b>	carbon dioxide carbon monoxide
<b>Extinguishing Media:</b>	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.
<b>Unsuitable Extinguishing Media:</b>	No data available.

## 6. Accidental Release Measures

<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. After removal, ventilate contaminated area and flush thoroughly with water.
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## 7. Handling and Storage

<b>Hazard Label Information:</b>	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Handling:</b>	Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not reuse this container. Keep away from sources of ignition. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Storing:</b>	Store at correct temperature.

## 8. Exposure Controls/Personal Protection

<b>Protective Equipment Summary - Hazard Label Information:</b>	Eye wash station in work area Lab coat Latex disposable gloves Safety glasses Safety shower in work area Vent Hood
<b>Respiratory Equipment (Specify Type):</b>	No data available.
<b>Eye Protection:</b>	Safety glasses
<b>Protective Gloves:</b>	Latex disposable gloves
<b>Other Protective Clothing:</b>	Lab coat
<b>Engineering Controls (Ventilation etc.):</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Work/Hygienic/Maintenance Practices:</b>	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

## 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	No data.
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	14.00 C Method: TCC

**Arachidonic Acid Control**

**Explosive Limits:** LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C  
**Specific Gravity (Water = 1):** No data.  
**Vapor Pressure (vs. Air or mm Hg):** 44.6 MM\_HG at 20.0 C  
**Vapor Density (vs. Air = 1):** No data.  
**Evaporation Rate (vs Butyl Acetate=1):** No data.  
**Solubility in Water:** No data.  
**Percent Volatile:** No data.  
**Corrosion Rate:** No data.  
**pH:** No data.  
**Appearance and Odor:** A clear, colorless solution

**10. Stability and Reactivity**

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** No data available.  
**Incompatibility - Materials To Avoid:** strong inorganic acids  
 strong oxidizing agents  
**Hazardous Decomposition Or Byproducts:** carbon dioxide  
 carbon monoxide  
**Hazardous Polymerization:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Polymerization:** No data available.

**11. Toxicological Information**

**Toxicological Information:** The toxicological effects of this compound have not been thoroughly studied.  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

**12. Ecological Information**

**Ecological Information:** Runoff from fire control or dilution water may cause pollution.

**13. Disposal Considerations**

**Waste Disposal Method:** Dispose in accordance with local, state and federal regulations.

**14. Transport Information**

**LAND TRANSPORT (US DOT)**  
**DOT Proper Shipping Name** Ethyl alcohol  
**DOT Hazard Class:** 3  
**DOT Hazard Label:** FLAMMABLE LIQUID  
**UN/NA Number:** 1170  
**Packing Group:** II  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

**15. Regulatory Information**

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Arachidonic acid	506-32-1	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Arachidonic acid	506-32-1	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	Inventory	No

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**MATERIAL SAFETY DATA SHEET**  
**FABP Assay Buffer (10X)**

Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

Printed: 01/15/2008  
Revision: 01/14/2008

### 1. Product and Company Identification

**Product Code:** 10010317  
**Product Name:** FABP Assay Buffer (10X)  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV	Other Limits
1. Potassium phosphate	7778-77-0	0.0 -1.0 %	No data.	No data.	No data.
2. Potassium phosphate, dibasic	7758-11-4	0.0 -5.0 %	1000 ppm	1000 ppm	No data.
3. Potassium chloride	7447-40-7	0.0 -7.0 %	No data.	No data.	No data.
4. Water	7732-18-5	85.0 -100.0 %	No data.	No data.	No data.

  

Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Potassium phosphate	TC6615500	No data.	No data.	No data.	No data.
2. Potassium phosphate, dibasic	NA	No data.	No data.	No data.	No data.
3. Potassium chloride	TS8050000	No data.	No data.	No data.	No data.
4. Water	ZC0110000	No data.	No data.	No data.	No data.

### 3. Hazards Identification

**Emergency Overview:** No data available.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Potential Health Effects (Acute and Chronic):** Material may be irritating to the mucous membranes and upper respiratory tract.  
May be harmful by inhalation, ingestion, or skin absorption.  
May cause eye, skin, or respiratory system irritation.  
The toxicological properties of this compound have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 4. First Aid Measures

**Emergency and First Aid Procedures:**  
If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.  
If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.  
In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.  
In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 5. Fire Fighting Measures

**Flash Pt:** No data.  
**Explosive Limits:** LEL: No data. UEL: No data.  
**Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.



### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** No data available.  
**Incompatibility - Materials To Avoid:** No data available.  
**Hazardous Decomposition Or Byproducts:** No data available.  
**Hazardous Polymerization:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Polymerization:** No data available.

### 11. Toxicological Information

**Toxicological Information:** The toxicological effects of this compound have not been thoroughly studied.  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

**Ecological Information:** Runoff from fire control or dilution water may cause pollution.

### 13. Disposal Considerations

**Waste Disposal Method:** Dispose in accordance with local, state and federal regulations.

### 14. Transport Information

**LAND TRANSPORT (US DOT)**  
**DOT Proper Shipping Name:** No data available.  
**Packing Group:** II  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Potassium phosphate	7778-77-0	No	No	No	No
2. Potassium phosphate, dibasic	7758-11-4	No	No	No	No
3. Potassium chloride	7447-40-7	No	No	No	No
4. Water	7732-18-5	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Potassium phosphate	7778-77-0	No	No	Inventory	No
2. Potassium phosphate, dibasic	7758-11-4	No	No	Inventory	No
3. Potassium chloride	7447-40-7	No	No	Inventory	No
4. Water	7732-18-5	No	No	Inventory	No

### 16. Other Information

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

# MATERIAL SAFETY DATA SHEET

## FABP Assay Detection Reagent (5X)

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Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

Printed: 01/15/2008  
Revision: 01/14/2008

### 1. Product and Company Identification

**Product Code:** 10010376  
**Product Name:** FABP Assay Detection Reagent (5X)  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV	Other Limits
1. FABP Assay Detection Reagent	NA	0.0 -5.0 %	No data.	No data.	No data.
2. Ethyl alcohol	64-17-5	95.0 -100.0 %	8H TWA:1000 ppm (1900 mg/m3)	1000 ppm	No data.

  

Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. FABP Assay Detection Reagent	NA	No data.	No data.	No data.	No data.
2. Ethyl alcohol	KQ6300000	No data.	No data.	No data.	No data.

### 3. Hazards Identification

**Emergency Overview:** No data available.

**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

**Potential Health Effects (Acute and Chronic):** The hazards identified with this product are those associated with the solvent(s). Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Material is irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. Repeated exposure may cause skin dryness or cracking. Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the CNS system of the fetus, producing a collection of effects which together constitute fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and small size head. The toxicological properties of this compound have not been fully evaluated.

**Signs and Symptoms Of Exposure:** Exposure may cause: Dizziness, drowsiness, headache, nausea, and vomiting.

**Medical Conditions Generally Aggravated By Exposure:** Repeated exposure to ethanol may aggravate liver injury produced from other causes.

### 4. First Aid Measures

**Emergency and First Aid Procedures:**

If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.

In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

# MATERIAL SAFETY DATA SHEET

## FABP Assay Detection Reagent (5X)

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### 5. Fire Fighting Measures

<b>Flash Pt:</b>	14.00 C Method Used: TCC
<b>Explosive Limits:</b>	LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C
<b>Fire Fighting Instructions:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes. Note: Flammable as diluted in ethanol.
<b>Flammable Properties and Hazards:</b>	Can release vapors that form explosive mixtures at temperatures at or above the flashpoint. Container explosion may occur under fire conditions. Emits toxic fumes under fire conditions. Flammable liquid. Vapors can travel to a source of ignition and flash back.
<b>Hazardous Combustion Products:</b>	carbon dioxide carbon monoxide
<b>Extinguishing Media:</b>	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.
<b>Unsuitable Extinguishing Media:</b>	No data available.

### 6. Accidental Release Measures

<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. After removal, ventilate contaminated area and flush thoroughly with water.
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### 7. Handling and Storage

<b>Hazard Label Information:</b>	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Handling:</b>	Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not reuse this container. Keep away from sources of ignition. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Storing:</b>	Store at correct temperature.

### 8. Exposure Controls/Personal Protection

<b>Protective Equipment Summary - Hazard Label Information:</b>	Eye wash station in work area Lab coat Latex disposable gloves Safety glasses Safety shower in work area Vent Hood
<b>Respiratory Equipment (Specify Type):</b>	No data available.
<b>Eye Protection:</b>	Safety glasses
<b>Protective Gloves:</b>	Latex disposable gloves
<b>Other Protective Clothing:</b>	Lab coat
<b>Engineering Controls (Ventilation etc.):</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Work/Hygienic/Maintenance Practices:</b>	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

### 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	No data.
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	14.00 C Method: TCC

# MATERIAL SAFETY DATA SHEET

## FABP Assay Detection Reagent (5X)

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Printed: 01/15/2008  
Revision: 01/14/2008

<b>Explosive Limits:</b>	LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C
<b>Specific Gravity (Water = 1):</b>	No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	44.6 MM_HG at 20.0 C
<b>Vapor Density (vs. Air = 1):</b>	No data.
<b>Evaporation Rate (vs Butyl Acetate=1):</b>	No data.
<b>Solubility in Water:</b>	No data.
<b>Percent Volatile:</b>	No data.
<b>Corrosion Rate:</b>	No data.
<b>pH:</b>	No data.
<b>Appearance and Odor:</b>	A clear, colorless solution

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	No data available.
<b>Incompatibility - Materials To Avoid:</b>	strong inorganic acids strong oxidizing agents
<b>Hazardous Decomposition Or Byproducts:</b>	carbon dioxide carbon monoxide
<b>Hazardous Polymerization:</b>	Will occur [ ] Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Polymerization:</b>	No data available.

### 11. Toxicological Information

<b>Toxicological Information:</b>	The toxicological effects of this compound have not been thoroughly studied.
<b>Carcinogenicity/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

<b>Ecological Information:</b>	Runoff from fire control or dilution water may cause pollution.
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### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state and federal regulations.
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### 14. Transport Information

**LAND TRANSPORT (US DOT)**

<b>DOT Proper Shipping Name</b>	Ethyl alcohol
<b>DOT Hazard Class:</b>	3
<b>DOT Hazard Label:</b>	FLAMMABLE LIQUID
<b>UN/NA Number:</b>	1170
<b>Packing Group:</b>	II
<b>Additional Transport Information:</b>	Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. FABP Assay Detection Reagent	NA	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. FABP Assay Detection Reagent	NA	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	Inventory	No

## 16. Other Information

### Company Policy or Disclaimer

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**MATERIAL SAFETY DATA SHEET**  
**FABP4 Assay Protein (human recombinant) (5X)**

Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

Printed: 01/15/2008  
Revision: 01/14/2008

### 1. Product and Company Identification

**Product Code:** 10010318  
**Product Name:** FABP4 Assay Protein (human recombinant) (5X)  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA PEL	ACGIH TLV	Other Limits
1. Sodium phosphate, Dibasic	7558-79-4	0.0 -1.0 %	No data.	No data.	No data.
2. Sodium phosphate, Monobasic	7558-80-7	0.0 -1.0 %	1000 ppm	1000 ppm	No data.
3. Sodium chloride	7647-14-5	0.0 -1.0 %	No data.	No data.	No data.
4. Glycerol	56-81-5	10.0 -25.0 %	No data.	10 mg/m3	No data.
5. FABP4 (human recombinant)	NA	0.0 -1.0 %	No data.	No data.	No data.
6. Water	7732-18-5	75.0 -100.0 %	No data.	No data.	No data.

  

Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Sodium phosphate, Dibasic	WC4500000	No data.	No data.	No data.	No data.
2. Sodium phosphate, Monobasic	WA1900000	No data.	No data.	No data.	No data.
3. Sodium chloride	VZ4725000	No data.	No data.	No data.	No data.
4. Glycerol	MA8050000	No data.	No data.	No data.	No data.
5. FABP4 (human recombinant)	NA	No data.	No data.	No data.	No data.
6. Water	ZC0110000	No data.	No data.	No data.	No data.

### 3. Hazards Identification

**Emergency Overview:** No data available.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Potential Health Effects (Acute and Chronic):** Material may be irritating to the mucous membranes and upper respiratory tract.  
May be harmful by inhalation, ingestion, or skin absorption.  
May cause eye, skin, or respiratory system irritation.  
The toxicological properties of this compound have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 4. First Aid Measures

**Emergency and First Aid Procedures:**  
If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.  
If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.  
In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.  
In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 5. Fire Fighting Measures

**Flash Pt:** No data.

**Explosive Limits:** LEL: No data. UEL: No data.

**Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

**Flammable Properties and Hazards:** No data available.

**Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.

**Unsuitable Extinguishing Media:** No data available.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. After removal, ventilate contaminated area and flush thoroughly with water.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
 Avoid contact with eyes, skin, and clothing.  
 Avoid prolonged or repeated exposure.  
 Do not reuse this container.  
 Keep away from sources of ignition.  
 Use with adequate ventilation.  
 Wash thoroughly after handling.

**Precautions To Be Taken in Storing:** Store at correct temperature.

### 8. Exposure Controls/Personal Protection

**Protective Equipment Summary - Hazard Label Information:** Eye wash station in work area    Lab coat    Latex disposable gloves    Safety glasses    Safety shower in work area    Vent Hood

**Respiratory Equipment (Specify Type):** No data available.

**Eye Protection:** Safety glasses

**Protective Gloves:** Latex disposable gloves

**Other Protective Clothing:** Lab coat

**Engineering Controls (Ventilation etc.):** Good general ventilation should be sufficient to control airborne levels.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
 Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas    [ ] Liquid    [ X ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data. Method:

**Explosive Limits:** LEL: No data. UEL: No data.

**Specific Gravity (Water = 1):** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

# MATERIAL SAFETY DATA SHEET

## FABP4 Assay Protein (human recombinant) (5X)

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<b>Percent Volatile:</b>	N.A.
<b>Corrosion Rate:</b>	No data.
<b>pH:</b>	No data.
<b>Appearance and Odor:</b>	A clear, colorless solution

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ]    Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	No data available.
<b>Incompatibility - Materials To Avoid:</b>	No data available.
<b>Hazardous Decomposition Or Byproducts:</b>	No data available.
<b>Hazardous Polymerization:</b>	Will occur [ ]    Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Polymerization:</b>	No data available.

### 11. Toxicological Information

<b>Toxicological Information:</b>	The toxicological effects of this compound have not been thoroughly studied.
<b>Carcinogenicity/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No    IARC Monographs? No    OSHA Regulated? No

### 12. Ecological Information

<b>Ecological Information:</b>	Runoff from fire control or dilution water may cause pollution.
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### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state and federal regulations.
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### 14. Transport Information

<b>LAND TRANSPORT (US DOT)</b>	
<b>DOT Proper Shipping Name</b>	No data available.
<b>Packing Group:</b>	II
<b>Additional Transport Information:</b>	Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

#### US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Sodium phosphate, Dibasic	7558-79-4	No	Yes 5000 LB	No	No
2. Sodium phosphate, Monobasic	7558-80-7	No	No	No	No
3. Sodium chloride	7647-14-5	No	No	No	No
4. Glycerol	56-81-5	No	No	No	No
5. FABP4 (human recombinant)	NA	No	No	No	No
6. Water	7732-18-5	No	No	No	No

#### US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Sodium phosphate, Dibasic	7558-79-4	No	No	Inventory	No
2. Sodium phosphate, Monobasic	7558-80-7	No	No	Inventory	No
3. Sodium chloride	7647-14-5	No	No	Inventory	No
4. Glycerol	56-81-5	No	No	Inventory	No
5. FABP4 (human recombinant)	NA	No	No	No	No
6. Water	7732-18-5	No	No	Inventory	No

### 16. Other Information

#### Company Policy or Disclaimer

For research use only, not for human or veterinary clinical use.

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