

# Safety Data Sheet

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**Document Group:** 38-8828-6 **Version Number:** 1.00

**Issue Date:** 02/12/18 **Supercedes Date:** Initial Issue

**Product identifier** 

3M<sup>TM</sup> Egg White Protein Rapid Kit

**ID Number(s):** 

70-2011-7549-7

#### Recommended use

Screening for the presence of allergens in the food and beverage industry.

#### Supplier's details

MANUFACTURER: 3M

**DIVISION:** Food Safety Department

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### **Emergency telephone number**

1-800-364-3577 or (651) 737-6501 (24 hours)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

38-5690-3

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08/03/18



# **Safety Data Sheet**

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 38-5690-3
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 2.00

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 08/03/18
 Supercedes Date:
 11/28/17

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M Extraction Buffer

#### 1.2. Recommended use and restrictions on use

#### Recommended use

For screening the presence of allergen proteins in the Food and Beverage industry, Industrial use

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Food Safety Department

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA **Telephone:** 1-888-3M HELPS (1-888-364-3577)

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## 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

# **SECTION 2: Hazard identification**

#### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

## 2.2. Label elements

#### Signal word

Warning

## **Symbols**

Exclamation mark |

#### **Pictograms**



#### **Hazard Statements**

Causes serious eye irritation.

## **Precautionary Statements**

#### **Prevention:**

Wear eye/face protection.

Wash thoroughly after handling.

## **Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

2% of the mixture consists of ingredients of unknown acute oral toxicity.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Water	7732-18-5	50 - 99
Ethyl Alcohol	64-17-5	0 - 15 Trade Secret *
GLYCEROL	56-81-5	0 - 15
UREA	57-13-6	0 - 15 Trade Secret *
GELATIN	9000-70-8	0 - 2
SODIUM CHLORIDE	7647-14-5	0 - 2

<sup>\*</sup>The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

No need for first aid is anticipated. If signs/symptoms persist, get medical attention.

## **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

## If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1. Information on toxicological effects.

## 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

None inherent in this product.

## 5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## **SECTION 6: Accidental release measures**

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

## 6.2. Environmental precautions

Avoid release to the environment.

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

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Avoid eye contact. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

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

No special storage requirements.

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
GLYCEROL	56-81-5	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable	
			fraction):5 mg/m3	
UREA	57-13-6	AIHA	TWA(as total particulates):10 mg/m3	
Ethyl Alcohol	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
Ethyl Alcohol	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	

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ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

#### 8.2. Exposure controls

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

**Indirect Vented Goggles** 

## Skin/hand protection

No chemical protective gloves are required.

### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates Organic vapor respirators may have short service life.

For questions about suitability for a specific application, consult with your respirator manufacturer.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

General Physical Form:LiquidOdor, Color, Grade:clear liquidOdor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data AvailableBoiling PointNo Data Available

Flash Point Flash point > 93 °C (200 °F) [Test Method: Closed Cup]

Evaporation rateNo Data AvailableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableVapor PressureNo Data AvailableVapor DensityNo Data AvailableDensityNo Data Available

Specific Gravity 1.04 [Ref Std: WATER=1]

Solubility in Water Soluble
Solubility- non-water Complete

Partition coefficient: n-octanol/ water No Data Available

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Autoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosityNo Data AvailableMolecular weightNot ApplicablePercent volatileNo Data Available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

None known.

## 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

Substance

**Condition** 

None known.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

#### 11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

## Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

## **Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation.

#### **Eve Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

#### **Additional Information:**

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

## **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ethyl Alcohol	Dermal	Rabbit	LD50 > 15,800 mg/kg
Ethyl Alcohol	Inhalation- Vapor (4 hours)	Rat	LC50 124.7 mg/l
Ethyl Alcohol	Ingestion	Rat	LD50 17,800 mg/kg
GLYCEROL	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
GLYCEROL	Ingestion	Rat	LD50 > 5,000 mg/kg
UREA	Dermal		LD50 estimated to be > 5,000 mg/kg
UREA	Ingestion	Rat	LD50 14,300 mg/kg
SODIUM CHLORIDE	Dermal	Rabbit	LD50 > 10,000 mg/kg
SODIUM CHLORIDE	Inhalation-	Rat	LC50 > 10.5 mg/l
	Dust/Mist		
	(4 hours)		
SODIUM CHLORIDE	Ingestion	Rat	LD50 3,550 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Ethyl Alcohol	Rabbit	No significant irritation
GLYCEROL	Rabbit	No significant irritation
UREA	Rabbit	No significant irritation
SODIUM CHLORIDE	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethyl Alcohol	Rabbit	Severe irritant
GLYCEROL	Rabbit	No significant irritation
UREA	Rabbit	Moderate irritant
SODIUM CHLORIDE	Rabbit	Mild irritant

## **Skin Sensitization**

Name	Species	Value
Ethyl Alcohol	Human	Not classified
GLYCEROL	Guinea	Not classified
	pig	

### **Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity** 

Name   Route   Value
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Ethyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification
UREA	In Vitro	Some positive data exist, but the data are not sufficient for classification
UREA	In vivo	Some positive data exist, but the data are not sufficient for classification
SODIUM CHLORIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification
SODIUM CHLORIDE	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Ethyl Alcohol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
GLYCEROL	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
UREA	Ingestion	Multiple animal species	Not carcinogenic
SODIUM CHLORIDE	Ingestion	Rat	Not carcinogenic

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Ethyl Alcohol	Inhalation	Not classified for development	Rat	NOAEL 38 mg/l	during gestation
Ethyl Alcohol	Ingestion	Not classified for development	Rat	NOAEL 5,200 mg/kg/day	premating & during gestation
GLYCEROL	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
GLYCEROL	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
GLYCEROL	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
Ethyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
Ethyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
Ethyl Alcohol	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg	
UREA	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Professio nal judgeme nt	NOAEL Not available	

# Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethyl Alcohol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
Ethyl Alcohol	Inhalation	hematopoietic system   immune system	Not classified	Rat	NOAEL 25 mg/l	14 days
Ethyl Alcohol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
Ethyl Alcohol	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg/day	7 days
GLYCEROL	Inhalation	respiratory system   heart   liver   kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
GLYCEROL	Ingestion	endocrine system   hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years
UREA	Dermal	heart   endocrine system   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL Not available	25 weeks
UREA	Ingestion	liver   endocrine system   kidney and/or bladder	Not classified	Rat	NOAEL 2,700 mg/kg/day	28 days
SODIUM CHLORIDE	Ingestion	blood   kidney and/or bladder   vascular system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,240 mg/kg/day	9 months
SODIUM CHLORIDE	Ingestion	nervous system   eyes	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,700 mg/kg/day	90 days
SODIUM CHLORIDE	Ingestion	liver   respiratory system	Not classified	Rat	NOAEL 33 mg/kg/day	90 days

## **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

#### **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

# **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

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Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. Empty and clean product containers may be disposed as non-hazardous waste. Consult your specific regulations and service providers to determine available options and requirements.

EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501

# **SECTION 15: Regulatory information**

#### 15.1. US Federal Regulations

Contact 3M for more information.

#### **EPCRA 311/312 Hazard Classifications:**

## Physical Hazards

Not applicable

#### **Health Hazards**

Serious eye damage or eye irritation

#### 15.2. State Regulations

Contact 3M for more information.

#### 15.3. Chemical Inventories

Contact 3M for more information.

#### 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## **SECTION 16: Other information**

#### NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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