



# Starch Damage Assay Kit

## Kit SIS (Safety Information Sheet)

Issue date (US):12/5/2017 Revision date (US):4/11/2022 Supersedes (US):12/5/2017 Version (US):1.1

### SECTION 1: Kit identification

#### 1.1. Kit identifier

Product name : Starch Damage Assay Kit  
Product code : K-SDAM

#### 1.2. Details of the supplier of the Kit safety information sheet

Megazyme  
Bray Business Park  
A98 YV29 Bray - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

### SECTION 2: General information

This product is a Kit which consists of several independently packaged components

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

### SECTION 3: Kit contents

Name	General description	Quantity	Unit	GHS US classification
Starch Damage Assay Kit (Bottle 1)	Reagent	1	pcs (pieces)	Resp. Sens. 1, H334
Starch Damage Assay Kit (Bottle 2)	Reagent	1	pcs (pieces)	Resp. Sens. 1, H334
Starch Damage Assay Kit (Bottle 3)	Reagent	1	pcs (pieces)	Skin Irrit. 2, H315 Eye Dam. 1, H318
Starch Damage Assay Kit (Bottle 4)	Reagent	1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334

Name	General description	Quantity	Unit	GHS US classification
Starch Damage Assay Kit (Bottle 5)	Reagent	1	pcs (pieces)	Not classified
Starch Damage Assay Kit (Bottle 6)	Reagent	1	pcs (pieces)	Not classified

### SECTION 4: General advice

No data available

### SECTION 5: Safe handling advice

Environmental precautions : Avoid release to the environment  
Storage conditions : Store in a well-ventilated place.  
Keep cool.  
Precautions for safe handling : Ensure good ventilation of the work station  
Wear personal protective equipment

### SECTION 6: First aid measures

First-aid measures after eye contact : Rinse eyes with water as a precaution  
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water  
Other medical advice or treatment : Treat symptomatically

### SECTION 7: Fire fighting measures

# Starch Damage Assay Kit

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Protection during firefighting : Do not attempt to take action without suitable protective equipment  
Self-contained breathing apparatus  
Complete protective clothing

Hazardous decomposition products in case of fire : Toxic fumes may be released

### SECTION 8: Other information

No data available



# Starch Damage Assay Kit (Bottle 6)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 11/24/2017

Revision date: 03/15/2022

Supersedes: 11/24/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Starch Damage Assay Kit (Bottle 6)  
Product code : K-SDAM (Bottle 6)

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

Use of the substance/mixture : Use as laboratory reagent

#### 1.3. Supplier

Megazyme  
Bray Business Park  
Bray, A98 YV29 - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

# Starch Damage Assay Kit (Bottle 6)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Starch Damage Assay Kit (Bottle 6)

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

#### Eye protection:

Safety glasses

Type	Use	Characteristics
Safety glasses	Dust	With side shields

#### Skin and body protection:

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Wear suitable protective clothing

Type
Lab coat

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	Protection for Liquid particles

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

# Starch Damage Assay Kit (Bottle 6)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

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### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/15/2022

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*



# Starch Damage Assay Kit (Bottle 5)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 11/24/2017

Revision date: 03/15/2022

Supersedes: 11/24/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Starch Damage Assay Kit (Bottle 5)  
Product code : K-SDAM (Bottle 5)

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

Use of the substance/mixture : Use as laboratory reagent

#### 1.3. Supplier

Megazyme  
Bray Business Park  
Bray, A98 YV29 - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.



# Starch Damage Assay Kit (Bottle 5)

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Starch Damage Assay Kit (Bottle 5)

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

#### Eye protection:

Safety glasses

Type	Use	Characteristics
Safety glasses	Droplet	With side shields

#### Skin and body protection:

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Wear suitable protective clothing

Type
Lab coat

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	Protection for Liquid particles

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colourless
Odor	: Characteristic odour
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

# Starch Damage Assay Kit (Bottle 5)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

# Starch Damage Assay Kit (Bottle 5)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/15/2022

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*



# Starch Damage Assay Kit (Bottle 4)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 11/24/2017

Revision date: 03/15/2022

Supersedes: 11/24/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Starch Damage Assay Kit (Bottle 4)  
Product code : K-SDAM (Bottle 4)

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

Use of the substance/mixture : Use as laboratory reagent

#### 1.3. Supplier

Megazyme  
Bray Business Park  
Bray, A98 YV29 - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2	Causes serious eye irritation
Respiratory sensitization, Category 1	May cause an allergy or asthma symptoms or breathing difficulties if inhaled

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : Causes skin irritation  
Causes serious eye irritation  
May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (GHS US) : Avoid breathing dust.  
Wash hands thoroughly after handling.  
Wear eye protection, protective clothing, protective gloves  
[In case of inadequate ventilation] wear respiratory protection.  
If on skin: Wash with plenty of water.  
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Specific treatment (see supplemental first aid instruction on this label).  
If skin irritation occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
If experiencing respiratory symptoms: Call a doctor, a POISON CENTER.  
Take off contaminated clothing and wash it before reuse.  
Dispose of contents/container to

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

# Starch Damage Assay Kit (Bottle 4)

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
GLUCOSE OXIDASE		(CAS-No.) 9001-37-0	10 – 20	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Resp. Sens. 1, H334
4-aminoantipyrine	1,5-dimethyl-2-phenyl-4-aminopyrazoline / 1,5-dimethyl-2-phenyl-4-aminopyrazolone / 3H-pyrazol-3-one, 4-amino-1,2-dihydro-1,5-dimethyl-2-phenyl- / 3-pyrazolin-5-one, 4-amino-2,3-dimethyl-1-phenyl- / 4-AAP (=4-aminoantipyrine) / 4-amino-1,2-dihydro-1,5-dimethyl-2-phenyl-3H-pyrazol-3-one / 4-amino-2,3-dimethyl-1-phenyl-3-pyrazolin-5-one / 4-aminoantipyrine / 4-aminophenazone / aminoantipyrin / aminoantipyrine / aminoazophenazone / ampyrone / antipyrine, 4-amino- / metapirazone / solnapyrin-A	(CAS-No.) 83-07-8	10 – 20	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
HORSERADISH PEROXIDASE		(CAS-No.) 9003-99-0	1 – 5	Resp. Sens. 1, H334

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Call a poison center/doctor/physician if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

# Starch Damage Assay Kit (Bottle 4)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapors/spray.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>Starch Damage Assay Kit (Bottle 4)</b>
No additional information available
<b>4-aminoantipyrine (83-07-8)</b>
No additional information available
<b>HORSERADISH PEROXIDASE (9003-99-0)</b>
No additional information available
<b>GLUCOSE OXIDASE (9001-37-0)</b>
No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

##### Eye protection:

Safety glasses

Type	Use	Characteristics
Safety glasses	Dust	With side shields

# Starch Damage Assay Kit (Bottle 4)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Skin and body protection:

Wear suitable protective clothing

Type
Lab coat

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear respiratory protection.

Device	Filter type	Condition
Dust mask	Type P1	Dust protection

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: Mixture contains one or more component(s) which have the following colour(s): Light yellow to brown
Odor	: None
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.



# Starch Damage Assay Kit (Bottle 4)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

#### 4-aminoantipyrine (83-07-8)

LD50 oral rat	1700 mg/kg rat
---------------	----------------

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

#### 4-aminoantipyrine (83-07-8)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

#### 4-aminoantipyrine (83-07-8)

Persistence and degradability	Biodegradability in water: no data available.
-------------------------------	---

### 12.3. Bioaccumulative potential

#### 4-aminoantipyrine (83-07-8)

Partition coefficient n-octanol/water (Log Pow)	-0.07 (estimated value)
---	-------------------------

Bioaccumulative potential	Bioaccumulation unlikely.
---------------------------	---------------------------

### 12.4. Mobility in soil

No additional information available

# Starch Damage Assay Kit (Bottle 4)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/15/2022

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*



# Starch Damage Assay Kit (Bottle 3)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 11/24/2017

Revision date: 03/15/2022

Supersedes: 11/24/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Starch Damage Assay Kit (Bottle 3)  
Product code : K-SDAM (Bottle 3)

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

Use of the substance/mixture : Use as laboratory reagent

#### 1.3. Supplier

Megazyme  
Bray Business Park  
Bray, A98 YV29 - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation Category 2 Causes skin irritation  
Serious eye damage/eye irritation Category 1 Causes serious eye damage

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : Causes skin irritation  
Causes serious eye damage  
Precautionary statements (GHS US) : Wash hands thoroughly after handling.  
Wear eye protection, protective clothing, protective gloves  
If on skin: Wash with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a doctor, a POISON CENTER.  
Specific treatment (see supplemental first aid instruction on this label).  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
sodium hydroxide, caustic soda		(CAS-No.) 1310-73-2	1 – 5	Skin Corr. 1A, H314

# Starch Damage Assay Kit (Bottle 3)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
4-HYDROXYBENZOIC ACID		(CAS-No.) 99-96-7	1 – 5	Eye Dam. 1, H318 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after eye contact : Serious damage to eyes.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

# Starch Damage Assay Kit (Bottle 3)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Starch Damage Assay Kit (Bottle 3)</b>
No additional information available
<b>sodium hydroxide, caustic soda (1310-73-2)</b>
No additional information available
<b>4-HYDROXYBENZOIC ACID (99-96-7)</b>
No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

#### Eye protection:

Safety glasses

Type	Use	Characteristics
Safety glasses	Droplet	With side shields

#### Skin and body protection:

Wear suitable protective clothing

Type
Lab coat

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: None
Odor threshold	: No data available
pH	: No data available

# Starch Damage Assay Kit (Bottle 3)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

# Starch Damage Assay Kit (Bottle 3)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 4-HYDROXYBENZOIC ACID (99-96-7)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

# Starch Damage Assay Kit (Bottle 3)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/15/2022

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*





# Starch Damage Assay Kit (Bottle 2)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 12/25/2017

Revision date: 03/15/2022

Supersedes: 12/25/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Starch Damage Assay Kit (Bottle 2)  
Product code : K-SDAM (Bottle 2)

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

Use of the substance/mixture : Use as laboratory reagent

#### 1.3. Supplier

Megazyme  
Bray Business Park  
Bray, A98 YV29 - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Respiratory sensitization, Category 1 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : May cause an allergy or asthma symptoms or breathing difficulties if inhaled  
Precautionary statements (GHS US) : Avoid breathing mist, spray, vapors.  
[In case of inadequate ventilation] wear respiratory protection.  
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
If experiencing respiratory symptoms: Call a doctor, a POISON CENTER.  
Dispose of contents/container to

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
AMYLOGUCOSIDASE		(CAS-No.) 9032-08-0	5 – 10	Resp. Sens. 1, H334

# Starch Damage Assay Kit (Bottle 2)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

- Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Storage conditions : Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### Starch Damage Assay Kit (Bottle 2)

No additional information available

# Starch Damage Assay Kit (Bottle 2)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### AMYLOGLUCOSIDASE (9032-08-0)

No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

##### Eye protection:

Safety glasses

Type	Use	Characteristics
Safety glasses	Droplet	With side shields

##### Skin and body protection:

Wear suitable protective clothing

Type
Lab coat

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	Protection for Liquid particles

##### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Color : milky  
Odor : Mixture contains one or more component(s) which have the following odour:  
Odor threshold : No data available  
pH : No data available  
Melting point : Not applicable  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Flammability (solid, gas) : Not applicable.  
Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : No data available  
Solubility : Soluble in water.

# Starch Damage Assay Kit (Bottle 2)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

No additional information available

# Starch Damage Assay Kit (Bottle 2)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/15/2022

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*



# Starch Damage Assay Kit (Bottle 1)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 11/24/2017

Revision date: 03/15/2022

Supersedes: 11/24/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Starch Damage Assay Kit (Bottle 1)  
Product code : K-SDAM (Bottle 1)

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

Use of the substance/mixture : Use as laboratory reagent

#### 1.3. Supplier

Megazyme  
Bray Business Park  
Bray, A98 YV29 - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Respiratory sensitization, Category 1 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : May cause an allergy or asthma symptoms or breathing difficulties if inhaled  
Precautionary statements (GHS US) : Avoid breathing mist, spray, vapors.  
[In case of inadequate ventilation] wear respiratory protection.  
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
If experiencing respiratory symptoms: Call a doctor, a POISON CENTER.  
Dispose of contents/container to

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

# Starch Damage Assay Kit (Bottle 1)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
alpha-amylase	1,4- alpha-D-glucan glucanohydrolase / 1,4-alpha-D-glucanase / 1,4-alpha-glucanase / alpha-amylase from hog pancreas / alpha-amylase from human saliva / alpha-amylase, DFP treated from hog pancreas / alpha-amylase, PMSF treated from hog pancreas / amano AD 1 / amylase AD / amylase THC 250 / amylase, alpha- / amylogal CS / amyloisin 5 / amylopin / amylosubtilin / aquazym 120L / aquazyme 240 / bactosol TK / BAM 240 / ban / ban (enzyme) / BAN 120L / BAN 240 / ban 480L / beisol T 2090 / biobake 40000 / bioferm / bioferm P / bioprep TBS / biotex GT / biozyme A / biozyme F / brewers Amylique TS / buclamase / canalpha 1000P / canalpha 600L / canalpha 60P / cenazyme SA 7 / clarase / denazyme SA 7 / desize 160 / E.C. 3.2.1.1 / EC 3.2 1.1 / ekikakoso 6T / EMCEmaltex 1000 / endoamylase / FD Super / fortizyme / fungamyl / fungamyl 2500BG / fungamyl 300 L / fungamyl 800L / G 995 / G6- Amylase / gamalpha HT 120L / gemsiz 4A / G-zyme G 995 / hitempase / kleistase KD / kleistase L 1 / kleistase T 5 / kokugen K / maltogenase 4000L / maxamyl / maxamyl HT 3000 / maxamyl WL 15,000 / maxilase / pivozin / plurafact oxam / ptyalin / speedase HS / speedase M / speedase XP 404 / spitase CP 1 / sumizyme L / taka-amylase / taka-amylase A / taka-diaastase / takalite / takalite L 340 / takatherm / tanase / termamyl / termamyl 120L / termamyl 60L / termamyl 60T / thermolase / WC 8	(CAS-No.) 9000-90-2	5 – 10	Resp. Sens. 1, H334

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Starch Damage Assay Kit (Bottle 1)

No additional information available

##### alpha-amylase (9000-90-2)

No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)		2 (< 1.5)

##### Eye protection:



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Safety glasses

Type	Use	Characteristics
Safety glasses	Droplet	With side shields

### Skin and body protection:

Wear suitable protective clothing

Type
Lab coat

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition
Dust mask	Type P1	Protection for Liquid particles

Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colourless
Odor	: Characteristic odour
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

#### alpha-amylase (9000-90-2)

LD50 oral rat	> 7500 mg/kg (Rat)
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Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

#### alpha-amylase (9000-90-2)

LC50 fish 1	> 100 mg/l (LC50)
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EC50 Daphnia 1	> 100 mg/l (EC50)
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Threshold limit algae 1	> 100 mg/l (EC50)
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### 12.2. Persistence and degradability

#### alpha-amylase (9000-90-2)

Persistence and degradability	Readily biodegradable in water.
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### 12.3. Bioaccumulative potential

#### alpha-amylase (9000-90-2)

Bioaccumulative potential	Bioaccumulation unlikely.
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### 12.4. Mobility in soil

No additional information available

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### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

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Revision date : 03/15/2022

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*