

Issuing Date 27-Apr-2023

Revision Date 20-Aug-2024

Revision Number 4

## **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

**Product Code(s)** PN002631

**Product Name** PyroSmart NextGen™ Reconstitution Buffer

**Synonyms** None

**Pure substance/mixture** Mixture

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

**Recommended use** Laboratory reagent  
For professional use only

**Uses advised against** No information available

### **1.3. Details of the supplier of the safety data sheet**

#### **Supplier**

Associates of Cape Cod, Intl, Inc.  
Unit 1 F/G/H Academy Business Park,  
Lees Road, Knowsley,  
Liverpool L33 7SA  
(T) 44-151-547-7444

#### **For further information, please contact**

**E-mail address** [custservice@acciusa.com](mailto:custservice@acciusa.com)

### **1.4. Emergency telephone number**

**Emergency telephone** Chemtel  
(International) +1-360-256-7365  
(North America) +1-800-704-9215

## **SECTION 2: Hazards identification**

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

Not classified

### **2.2. Label elements**

Not classified

#### **Hazard statements**

Not classified.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

The product does not contain any substance(s) classified as PBT or vPvB.

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

### 3.1 Substances

Not applicable

### 3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Trade secret	2-4	Trade secret	-	-	-	-	-

### Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (UK REACH Article 59)

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air.

**Eye contact** Rinse thoroughly with plenty of water, also under the eyelids.

**Skin contact** Wash skin with soap and water.

**Ingestion** Clean mouth with water and afterwards drink plenty of water.

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

**Symptoms** No information available.

**Effects of Exposure** No information available.

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

**Note to doctors** Treat symptomatically.

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** None known based on information supplied.

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

**Specific hazards arising from the chemical** None known based on information supplied.

**Hazardous combustion products** Carbon oxides, Nitrogen oxides (NOx).

### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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

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

**Personal precautions** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labelled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

**Advice on safe handling** Avoid breathing vapours.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep container tightly closed.

### **7.3. Specific end use(s)**

**Specific use(s)** No information available.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Trade secret		166.7 mg/kg bw/day [4] [6]	117.5 mg/m <sup>3</sup> [4] [6]

#### Notes

[4] Systemic health effects.  
[6] Long term.

#### Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Trade secret	8.3 mg/kg bw/day [4] [6]		29 mg/m <sup>3</sup> [4] [6]

#### Notes

[4] Systemic health effects.  
[6] Long term.

#### Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Trade secret			300 mg/L		

### 8.2. Exposure controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

#### Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.

**Hand protection** No special protective equipment required.

<b>Skin and body protection</b>	No special protective equipment required.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>Environmental exposure controls</b>	No special environmental measures are necessary.

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Clear liquid
<b>Physical state</b>	Liquid
<b>Colour</b>	Colourless
<b>Odour</b>	None
<b>Odour threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>		No data available
<b>Initial boiling point and boiling range</b>		No data available
<b>Flammability</b>		No data available
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>		No data available
<b>Lower flammability or explosive limits</b>		No data available
<b>Flash point</b>		No data available
<b>Autoignition temperature</b>		No data available
<b>Decomposition temperature</b>		No data available
<b>pH</b>	7 - 9	No data available
<b>pH (as aqueous solution)</b>		No data available
<b>Kinematic viscosity</b>		No data available
<b>Dynamic viscosity</b>		No data available
<b>Water solubility</b>		No data available
<b>Solubility(ies)</b>		No data available
<b>Partition coefficient</b>		No data available
<b>Vapour pressure</b>		No data available
<b>Relative density</b>		No data available
<b>Bulk density</b>		No data available
<b>Liquid Density</b>		No data available
<b>Relative vapour density</b>		No data available
<b>Particle characteristics</b>		
<b>Particle Size</b>		No data available
<b>Particle Size Distribution</b>		No data available

<b>Explosive properties</b>	No information available.
<b>Oxidising properties</b>	No information available.

### 9.2. Other information

<b>VOC</b>	No information available
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** No information available.

### 10.2. Chemical stability

**Stability** Stable under normal conditions.

#### **Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

### 10.4. Conditions to avoid

**Conditions to avoid** None known based on information supplied.

### 10.5. Incompatible materials

**Incompatible materials** None known based on information supplied.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition can lead to release of irritating and toxic gases and vapours, Carbon oxides, Nitrogen oxides (NOx).

## **SECTION 11: Toxicological information**

### 11.1. Toxicological information

#### Information on likely routes of exposure

##### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

#### Acute toxicity

##### **Numerical measures of toxicity**

Based on available data, the classification criteria are not met.

##### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
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Trade secret	= 5900 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	-
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Other adverse effects</b>	No information available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

<b>Ecotoxicity</b>	The environmental impact of this product has not been fully investigated.
<b>Unknown aquatic toxicity</b>	Contains 0 % of components with unknown hazards to the aquatic environment.

**12.2. Persistence and degradability**

<b>Persistence and degradability</b>	No information available.
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**12.3. Bioaccumulative potential**

<b>Bioaccumulation</b>	There is no data for this product.
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**12.4. Mobility in soil**

<b>Mobility in soil</b>	No information available.
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**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Trade secret	The substance is not PBT / vPvB

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**SECTION 14: Transport information****IMDG**

	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

**RID**

	Not regulated
14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users Special Provisions	None

**ADR**

	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users Special Provisions	None

**IATA**

	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	



**Special Provisions** None  
**Note:** None

## SECTION 15: Regulatory information

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

#### National regulations

##### **Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (UK REACH - Annex XIV). This product does not contain substances subject to restriction (UK REACH - Annex XVII).

##### **Persistent Organic Pollutants**

Not applicable

##### **Export Notification requirements**

Not applicable

##### **Named dangerous substances per COMAH Regulations 2015 (as amended)**

Not applicable

##### **The Ozone-Depleting Substances Regulations 2015**

Not applicable

##### **The Biocidal Products Regulations 2001 (as amended)**

Not applicable

##### **The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

##### **Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)**

Not applicable

#### International Inventories

Contact supplier for inventory compliance status

### 15.2. Chemical safety assessment

#### **Chemical Safety Report**

Chemical safety assessments for substances in this mixture were not carried out

## SECTION 16: Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Legend**

SVHC: Substances of Very High Concern for Authorisation:

#### **Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers	SCBA	Self-contained breathing apparatus

#### Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
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Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Issuing Date** 27-Apr-2023

**Revision Date** 20-Aug-2024

**Revision Note** Address update

**This material safety data sheet complies with the requirements of UK REACH**

**Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific

material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**