Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) as amended
SDS ID: REP-003

For additional languages please refer to www.repligen.com/resources/quality-documents/

Section 1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Material Name:	Reagent A (CPR1101)
Contains:	Sodium Acetate
Product Description:	Kit Component
Substance Registration Number(s):	This material is imported in amounts <1 ton/year. This product and the other components are not subject to REACH legislation.

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

Identified uses:	Detection and quantification of Protein A
Uses advised against:	R&D use only

1.3 Details of the supplier of the safety data sheet

Repligen Corporation.
41 Seyon Street, Building 1 Suite 100
Waltham, MA 02453
Phone: 1 (800) 622-2259
E-mail: sales@repligen.com
Fax: 1(781)-250-0115

1.4 Emergency telephone number: 1(800) 622-2259

Section 2 – Hazards Identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]
Skin Corrosion/Irritation - Category 2

2.2 Label elements
Labeling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard Symbols:

Signal word: Warning

Hazard statements: **GHS code H315** Causes skin irritation.

Precautionary statements

Prevention: GHS code P280 Wear protective gloves.
GHS code P264 Wash thoroughly after handling.

Response: GHS code P305 +P351 +P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
GHS code P302+P352 IF ON SKIN: Wash with plenty of soap and water.
GHS code P362+P364 Take off contaminated clothing and wash before reuse.

Storage: None needed according to classification criteria.

Disposal: **GHS code P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards None known.

Section 3 – Composition / Information on Ingredients

CAS EC No Registration No	Component Name Synonyms	1272/2008 (CLP)	Percent
127-09-3 204-823-8 --	Sodium acetate	Skin Irrit. 2 - H315	15
9005-64-5 500-018-3 --	Polyoxyethylene sorbitan monolaurate	--	0.1

* Self-classification. Full text of H- and EUH-statements: see section 16.

Section 4 – First Aid Measures

4.1 Description of first aid measures

Inhalation: If adverse effects occur, remove to uncontaminated area. Get immediate medical attention.

Skin: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse.

Eyes: **F**lush eyes with plenty of water for at least 15 minutes. If eye irritation persists: Get medical attention.

Ingestion: If swallowed, get medical attention. Do NOT induce vomiting.

4.2 Most Important Symptoms/Effects

Acute:	Causes skin irritation.
Delayed:	No information on significant adverse effects.

4.3 Indication of Immediate Medical Attention and Special Treatment

Treat symptomatically and supportively.

Section 5 – Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media:	Use foam, dry chemical, CO2, or water spray.
Unsuitable Extinguishing Media:	None known.

5.2 Special hazards arising from the substance or mixture

	May explode if heated in closed container.
Combustion:	Decomposition products include oxides of carbon and low molecular weight hydrocarbons.

5.3 Advice for firefighters	Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.
Fire Fighting Measures:	Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear personal protective clothing and equipment, see Section 8.

6.2 Environmental precautions:	Avoid release to the environment. Do not allow to enter into ground-water, surface water or drains.

6.3 Methods and Materials for Containment and Cleaning Up:

Contain the discharged material with an inert absorbent material. Isolate hazard area. Keep unnecessary personnel away.

6.4 Reference to other sections:	Safe handling: see section 7. Personal protection equipment (PPE): see section 8. Disposal: see section 13.

Section 7 – Handling and Storage

7.1 Precautions for safe handling:	Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wear eye protection. Wash thoroughly after handling.
7.2 Conditions for safe storage, including any incompatibilities:	Keep container tightly closed. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Store at 2-8 °C.
Incompatible Materials:	Strong oxidizing agents, peroxides, acid, alkali
7.3 Specific end use(s):	Detection and quantification of Protein A. R&D Use Only.

Section 8 – Exposure Controls/Personal Protection

8.1 Control parameters

Component Exposure Limits	EU, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Netherlands, Portugal, Spain, Sweden and United Kingdom have not developed exposure limits for any of this product's components.
Component Biological Exposure Limits:	None of this product's components are on the list.
Derived No Effect Levels (DNELs):	No DNELs available.
Predicted No Effect Concentrations (PNECs):	No PNECs available.

8.2 Exposure Controls

Engineering controls:	Provide adequate ventilation. Ensure compliance with applicable exposure limits.
Eye/face protection:	Wear safety googles with a faceshield (EN 166).
Skin Protection:	Wear suitable protective clothing. Wash contaminated clothing before reuse (EN ISO 6529).
Respiratory Protection:	If engineering controls do not maintain airborne concentrations to a negligible level, an approved respirator must be worn (EN 137).
Glove Recommendations:	Wear suitable gloves (EN 374).
Environmental exposure controls:	Avoid release to the environment.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Colorless liquid	**Physical State**	Not available
Odor	strong ,vinegar-like	**Color**	Colorless liquid
Odor Threshold	Not available	**pH**	3
Melting Point	Not available	**Boiling Point**	Not available
Boiling Point Range	Not available	**Freezing point**	Not available
Evaporation Rate	Not available	**Flammability (solid, gas)**	Not available
Autoignition Temperature	Not available	**Flash Point**	Not available
Lower Explosive Limit	Not available	**Decomposition temperature**	Not available
Upper Explosive Limit	Not available	**Vapor Pressure**	Not available
Vapor Density (air=1)	Not available	**Specific Gravity (water=1)**	Not available
Water Solubility	(soluble)	**Partition coefficient: n-octanol/water**	Not available
Viscosity	Not available	**Solubility (Other)**	Not available
Density	Not available	**Physical Form**	liquid
Molecular Weight	Not available		

9.2 Other information: No additional information is available.

Section 10 – Stability and Reactivity

10.1 Reactivity: May be corrosive to metals.

10.2 Chemical stability: Stable at normal temperatures and pressure.

10.3 Possibility of hazardous reactions: Will not polymerize.

10.4 Conditions to avoid: Avoid contact with incompatible materials. Avoid heat, flames, sparks and other sources of ignition

10.5 Incompatible materials: Strong oxidizing agents, peroxides, acids, alkalis

10.6 Hazardous decomposition Products: Decomposition products include oxides of carbon and low molecular weight hydrocarbons.

Section 11 – Toxicological Information

11.1 Information on toxicological effects

Component Analysis - LD50/LC50 The components of this material have been reviewed in various sources and the following selected endpoints are published:

Sodium acetate (127-09-3)

Oral LD50 Rat 3530 mg/kg
Dermal LD50 Rabbit >10 g/kg
Inhalation LC50 Rat >30 g/m3 1 h

Polyoxyethylene sorbitan monolaurate (9005-64-5)

Oral LD50 Rat 36700 µL/kg

Product Toxicity Data
Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Oral	> 2000 mg/kg

Irritation/Corrosivity Data: Causes skin irritation.
Respiratory Sensitization: No data available.
Dermal Sensitization: No data available.
Germ Cell Mutagenicity: No data available.
Component Carcinogenicity: None of this product's components are listed by IARC or DFG.
Reproductive toxicity: No data available.
Specific Target Organ Toxicity – Single Exposure: No target organs identified.
Specific Target Organ Toxicity – Repeated Exposure: No target organs identified.
Aspiration hazard No data available.

Section 12 – Ecological Information

12.1 Toxicity:
Component Analysis – Aquatic Toxicity:

Sodium acetate	**127-09-3**
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID

12.2 Persistence and degradability: No information available for the product.

12.3 Bioaccumulative potential: No information available for the product.

12.4 Mobility in soil: No information available for the product.

12.5 Results of PBT and vPvB assessment: No information available for the product.

Section 13 – Disposal Considerations

13.1 Waste treatment methods: Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Waste codes/waste designations according to LoW. EWC-code: 18 02 05*.
No data specific data available.
Release to the environment or sewage system is prohibited.
Recycle if possible. Dispose of material in accordance with all local, regional, national and international regulations.

Section 14 – Transport Information

		ADR	RID	ICAO	IATA	ADN	IMDG
14.1	UN Number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2	UN Proper Shipping Name	--	--	--	--	--	--
14.3	Transport Hazard Class(es)	--	--	8	8	--	8
14.4	Packing Group	--	--	I	II	--	II
14.5	Environmental Hazards	--	--	--	--	--	--
14.6	Special Precautions For User	--	--	--	--	--	--
14.7	Transport in Bulk According to Annex II of MARPOL and the IBC Code	--	--	--	--	--	--
14.8	Additional information	--	--	--	--	--	--

Component Marine Pollutants (IMDG): Not a marine pollutant.
International Bulk Chemical Code: This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU - REACH (1907/2006) - Annex XIV List of Substances Subject to Authorization
No components of this material are listed.
EU - REACH (1907/2006) - Article 59(1) Candidate List of Substances Subject to Authorization
No components of this material are listed.
EU - REACH (1907/2006) - Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles
No components of this material are listed.
EU - Substances Depleting the Ozone layer (1005/2009)
No components of this material are listed
EU - Persistent Organic Pollutants (850/2004)
No components of this material are listed
EU - Export and Import Restrictions (689/2008) - Chemicals and Articles Subject to Export Ban
No components of this material are listed

EU - Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances
No components of this material are listed
EU - Plant Protection Products (1107/2009/EC)
No components of this material are listed

EU - Biocides (528/2012/EU)

Sodium acetate	**127-09-3**
Active Substances	Category 1 (E 262)

EU – Water Framework Directive (2000/60/EC)
No components of this material are listed
EU - Limitation of Emissions of Volatile Organic Compounds Due to the Use of Organic Solvents in Certain Activities and Installations (1999/13/EC)
No components of this material are listed
EU Detergent Regulation 648/2004/EC
No components of this material are listed
Germany Regulations
Germany Water Classification - Product
hazard class 1 - low hazard to waters
* Self-classification
Germany Water Classification - Component
Sodium acetate (127-09-3)
ID Number 367 , hazard class 1 - low hazard to waters
Polyoxyethylene sorbitan monolaurate (9005-64-5)
ID Number 3692, hazard class 1 - low hazard to waters
Denmark Regulations
No components of this material are listed.

Component Analysis - Inventory
Sodium acetate (127-09-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes

Polyoxyethylene sorbitan monolaurate (9005-64-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	No	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes

15.2 Chemical Safety Assessment
No chemical safety assessment has been carried out for the substance/mixture.

Section 16 – Other Information

16.1 Indication of changes New SDS: 12 June 2017

16.2 Key / Legend : ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL – Korea Existing Chemicals List; KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; NDSL – Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term

Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS - Workplace Hazardous Materials Information System (Canada)

16.3 Key literature references and sources for data:

Available upon request.

16.4 Methods Used for Classification of Mixture According to Regulation (EC) No 1272/2008

Available upon request.

16.5 Relevant H- and EUH-phrases (Number and full text) and Notes:

H315 Causes skin irritation.

16.6 Training advice:

Read the Safety Data Sheet before handling product.

16.7 Further Information
Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.