



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

1.1. Product identifier Trade name or designation of the mixture	840 R3: PTA Reagent	
Registration number	-	
Synonyms	None.	
Product code	840 R3, component of kit: 840 ACTICLOT Protein C Resistance	
Issue date	01-December-2017	
Version number	02	
Revision date	18-July-2017	
Supersedes date	14-September-2016	
1.2. Relevant identified uses of the substance or mixture and uses advised against		
Identified uses	For In Vitro Diagnostic use.	
Uses advised against	None known.	

1.3. Details of the supplier of the safety data sheet

Corporate Headquarters	BioMedica Diagnostics Inc. 94 Wentworth Road, PO Box 1030 Windsor, Nova Scotia CANADA B0N 2T0
Contact person	Corporate Phone: 1-902-798-5105 Corporate Fax: 1-902-798-1025 Email: info@biomedicadiagnostics.com Website: www.biomedicadiagnostics.com
1.4. Emergency telephone number	US, Canada, Puerto Rico & Virgin Islands 1-800-255-3924 International +1-813-248-0585 Australia 1-300-954-583 Brazil 0-800-591-6042 China 400-120-0751 India 000-800-100-4086 Mexico 01-800-099-0731
Contract number	MIS9591327

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards		
Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Specific target organ toxicity - repeated exposure	Category 2 (Respiratory tract)	H373 - May cause damage to organs (Respiratory tract) through prolonged or repeated exposure.

Hazard summary

Harmful if inhaled. Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Exposure to powder or dusts may be irritating to eyes, nose and throat.

2.2. Label elements

Contains:

Label according to Regulation (EC) No. 1272/2008 as amended

Albumins, blood serum, Disodium dihydrogen ethylenediaminetetraacetate

Hazard pictograms



Hazard statements	
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H373	May cause damage to organs (Respiratory tract) through prolonged or repeated exposure.
Precautionary statements	
Prevention	
P260	Do not breathe dust.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
Response	
P301 + P312	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P330	Rinse mouth.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTRE/doctor if you feel unwell.
Storage	Store away from incompatible materials.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental label information	None.
2.3. Other hazards	Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General	information	

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Albumins, blood serum	25 - 50	9048-46-8 232-936-2	-	-	
Classification: Acu	te Tox. 4;H302				
Disodium dihydrogen ethylenediaminetetraacetate	25 - 50	139-33-3 205-358-3	01-2119486775-20-0001	-	
Classification: Acu	te Tox. 4;H332, ST	OT RE 2;H373			

weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
4.1. Description of first aid meas	sures
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTRE or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed	Dusts may irritate the respiratory tract, skin and eyes. Prolonged exposure may cause chronic effects.
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	No unusual fire or explosion hazards noted.
5.1. Extinguishing media Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

1 /1	ctive equipment and emergency procedures
For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Stop the flow of material, if this is without risk.
	Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.
SECTION 7: Handling and	storage

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Minimise dust generation and accumulation. Do not breathe dust. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).
7.3. Specific end use(s)	For in vitro diagnostic use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General Population

Components	Value	Assessment factor	Notes
Disodium dihydrogen ethylenediaminete	traacetate (CAS 139-33-3)		
Long-term, Local, Inhalation Long-term, Systemic, Oral Short-term, Local, Inhalation	0.6 mg/m3 25 mg/kg 1.2 mg/m3	20	
<u>Workers</u>			
Components	Value	Assessment factor	Notes
Disodium dihydrogen ethylenediaminete	traacetate (CAS 139-33-3)		
Long-term, Local, Inhalation Short-term, Local, Inhalation	1.5 mg/m3 3 mg/m3		

Predicted no effect concentrat	ions (PNECs)	
Components	Value	Assessment factor Notes
Disodium dihydrogen ethyle	nediaminetetraacetate (CAS 139-33-3)	
Freshwater	2.2 mg/l	10
Intermittent releases	1.2 mg/l	100
Marine water STP	0.22 mg/l 43 mg/l	100 10
8.2. Exposure controls	45 mg/i	10
•	Cood general ventilation (typically 1)	0 air changes per hour) should be used. Ventilation rates
Appropriate engineering controls	should be matched to conditions. If a or other engineering controls to main	applicable, use process enclosures, local exhaust ventilation rates ntain airborne levels below recommended exposure limits. If lished, maintain airborne levels to an acceptable level.
Individual protection measures	s, such as personal protective equipn	nent
General information		as required. Personal protection equipment should be chosen I in discussion with the supplier of the personal protective
Eye/face protection	Wear safety glasses with side shield	ls (or goggles).
Skin protection		
- Hand protection	Wear appropriate chemical resistant	gloves.
- Other	Wear suitable protective clothing.	
Respiratory protection	In case of insufficient ventilation, we organic vapour cartridge, full facepie	ar suitable respiratory equipment. Chemical respirator with ce, dust and mist filter.
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.
Hygiene measures		ays observe good personal hygiene measures, such as and before eating, drinking, and/or smoking. Routinely wash ent to remove contaminants.
Environmental exposure controls	Environmental manager must be info	ormed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid. Lyophilised powder.
Colour	White.
Odour	Not determined.
Odour threshold	Not determined.
рН	7.4 - 7.6
Melting point/freezing point	Not determined.
Initial boiling point and boiling range	Not determined.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or expl	losive limits
Flammability limit - lower (%)	Not determined.
Flammability limit - upper (%)	Not determined.
Vapour pressure	Not applicable.
Vapour density	Not determined.
Relative density	Not determined.
Solubility(ies)	Not determined.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Does not ignite.
Decomposition temperature	Not determined.
Viscosity	Not applicable.

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Explosive properties	Product does not present an explosion hazard under normal conditions of use.
Oxidising properties	Not determined.
9.2. Other information	
VOC	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information

Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely route	s of exposure
Inhalation	Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	Harmful if swallowed.
Symptoms	Dusts may irritate the respiratory tract, skin and eyes.

11.1. Information on toxicological effects

Acute toxicity Harmful if inhaled. Harmful if swallowed.

Components	Species	Test results	
Disodium dihydrogen ethylenediai	minetetraacetate (CAS 139-3	3-3)	
Acute			
Oral			
LD50	Rat	2800 mg/kg	
Skin corrosion/irritation	Based on available data, the classification criteria are not met.		
Serious eye damage/eye irritation	Based on available data, t	he classification criteria are not met.	
Respiratory sensitisation	Based on available data, t	he classification criteria are not met.	
Skin sensitisation	Based on available data, t	he classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.		
Carcinogenicity	Based on available data, t	he classification criteria are not met.	
Reproductive toxicity	Based on available data, t	he classification criteria are not met.	
Specific target organ toxicity - single exposure	Based on available data, t	he classification criteria are not met.	
Specific target organ toxicity - repeated exposure	May cause damage to org	ans (Respiratory tract) through prolonged or repeated exposure.	
Aspiration hazard	Based on available data, t	he classification criteria are not met.	
Mixture versus substance information	No information available.		
Other information	No other specific acute or	chronic health impact noted.	
SECTION 12: Ecological in	nformation		
12.1. Toxicity	Due to partial or complete	lack of data the classification for hazardous to the aquatic environment.	

12.1. Toxicity	•	Due to partial or complete lack of data the classification for hazardous to the aquatic environment, is not possible.	
Components		Species	Test results
Disodium dihydrogen ethyle	nediaminetetraace	etate (CAS 139-33-3)	
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	140 mg/l, 48 hours

12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

ΙΑΤΑ

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk Not applicable.

according to Annex II of Marpol and the IBC Code

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU or	n major accident hazards involving dangerous substances, as amended
Not listed.	
Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative. DNEL: Derived No-Effect Level. PNEC: Predicted No-Effect Concentration.
References	IARC Monographs. Overall Evaluation of Carcinogenicity
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H302 Harmful if swallowed. H332 Harmful if inhaled. H373 May cause damage to organs through prolonged or repeated exposure.
Training information	Follow training instructions when handling this material.
Disclaimer	The information above is provided in good faith. It is believed to be accurate and represents the best information currently available to us. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER TYPE, EXPRESSED OR IMPLIED, WITH RESPECT TO PRODUCTS DESCRIBED OR DATA OR INFORMATION PROVIDED, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OF SUCH PRODUCTS, DATA OR INFORMATION. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage and disposal of the material, and must be familiar with and follow generally accepted safe handling procedures. In no event shall BioMedica Diagnostics be liable for any claims, losses, or damages of any individual or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if BioMedica Diagnostics has been advised of the possibility of such damages.