

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Version: 1.4

Creation Date: 2018/08/22

Revision Date: 2019/08/20

1. Identification

Product identifier

Product name	Dual Range™ Bradford Reagent (5X)
Product number	BR05-2S / BR05-500
Recommended use	Biochemical reagent for research use only

Details of the supplier of the safety data sheet

Manufacture / Supplier	Energenesis Biomedical Co., Ltd.
Address	6F-3, No.21, Ln. 583, Ruiguang Rd., Neihu Dist. Taipei City 114, Taiwan
Phone	+886-2-2627-0835
Fax	+886-2-2627-0836

Emergency telephone number +886-2-2627-0835

2. Hazard(s) identification

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3	H226
Skin Corr. 1B	H314
Eye Dam. 1	H318
Acute Tox. 4	H332
STOT SE 1	H370

Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictogram



Signal word Danger

Hazard statements

H226	Flammable liquid and vapour
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H370	Causes damage to organs

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition/information on ingredients

Substance/mixture		Mixture	
CAS No. EC No. Index No.	Component Name Synonyms	1272/2008 (CLP)	Percent
67-56-1 200-659-6 603-001-00-X	Methanol	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: 3% ≤ C < 10%	10-25
7664-38-2 231-633-2 015-011-00-6	Phosphoric acid	Eye Irrit. 2; H319: 10% ≤ C < 25% Skin Corr. 1B; H314: C ≥ 25% Skin Irrit. 2; H315: 10% ≤ C < 25%	30-50
Additional information		For the full text of the H-Statements mentioned in this Section, see Section 16.	

4. First aid measures

Description of first aid measures	
Eye Contact	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Remove contact lenses, clean before re-use. Get immediate medical attention.
Inhalation	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Skin Contact	Wash with soap and water. Remove contaminated clothing and launder immediately, and discard contaminated leather goods, and wash before re-use. Get medical attention immediately if irritation develops or persists.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water or milk to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention immediately.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Indication of any immediate medical attention and special treatment needed	No data available
---	-------------------

5. Firefighting measures	
Extinguishing media	
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	No data available
Advice for fire-fighters	Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and material for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. Handling and storage	
Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 2-8 °C
Specific end use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. Exposure controls/personal protection				
Control parameters	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.			
Component Name CAS No.	PEL-TWA	PEL-STEL	PEL-Ceiling	BEIs
Methanol 67-56-1	200 ppm	250 ppm	—	15mg/L (Urine)
Phosphoric acid	1 mg/m ³	3 mg/m ³	—	—

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

7664-38-2			
Exposure controls			
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.		
Personal protective equipment			
Eye protection	Wear chemical safety goggles. An eye wash station must be available where this product is used.		
Skin and body protection	Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.		
Respiratory protection	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.		
Hand protection	Wear chemically resistant gloves, Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Have a safety shower available.		

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Form: liquid, Color: dark red
Odour	Acrid
Odour Threshold	No data available
pH	<1
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Lower and upper explosive (flammable) limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	1.279 g/cm ³ at 20 °C
Solubility	No data available
Solubility in water	No data available
Partition coefficient: n-octanol/ water (log Kow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. Stability and reactivity

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Conditions to avoid	No data available
Incompatible materials	Strong bases, Powdered metals
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects No data available

Acute toxicity

Component Name CAS No.	Result	Species	Dose	Exposure
Methanol 67-56-1	LD50 Dermal	Rabbit	15800 mg/kg	—
	LD50 Oral	Rat	5600 mg/kg	—
Phosphoric acid 7664-38-2	LD50 Dermal	Rabbit	2730 mg/kg	—
	LD50 Oral	Rat	1.25 g/kg	—

Skin corrosion/irritation

Component Name CAS No.	Result	Species	Exposure
Methanol 67-56-1	Eyes - Moderate irritant	Rabbit	100 mg (24 h)
	Eyes - Moderate irritant	Rabbit	40mg
	Skin - Moderate irritant	Rabbit	20 mg (24 h)

Serious eye damage/eye irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	No data available

12. Ecological information

Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects	No data available

13. Disposal considerations

Waste treatment methods

Product	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

14. Transport information

IATA / ADR / RID / IMDG	Classified as dangerous in the meaning of transport regulations.
UN number	2924
UN proper shipping name	Flammable liquids, corrosive, n.o.s. (Methanol, Phosphoric acid solution)
Transport hazard class(es)	3 (8)
Packaging group	III
Environmental hazards	no
Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler)	338
EMS Number	F-E,S-C
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No data available
UN "Model Regulation"	UN 2924 FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (METHANOL, PHOSPHORIC ACID SOLUTION), 3 (8), III, MOLTEN

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Chemical safety assessment	No data available

16. Other information

Abbreviations

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
BEIs	Biological exposure indices
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association-Dangerous Goods Regulations
CAS	Chemical Abstracts Service (division of the American Chemical Society)
LD50	Lethal dose, 50 percent
OSHA	Occupational Health and Safety Administration
PEL	Permissible Exposure Limit
RID	Regulations Concerning the International Carriage of Dangerous Goods by Rail
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
Further information	<p>Copyright 2019 Energenisis Biomedical Co., Ltd.. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Energenisis Biomedical Corporation shall not be held liable for any damage resulting from handling or from contact with the above product.</p>