1 Identification of the substances/ mixture and of the company/ undertaking

1.1 Product Identifiers

Product Number	HTBM018
Product Name	HiPer® Bacterial Gene Expression Teaching Kit
REACH Registration Number	Reach registration number is not available for this mixture. The annual tonnage does not require a REACH registration.

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

1.2.1 Relevant identified uses Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Produced by	HiMedia Laboratories Private Limited		
Reg Address	C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane(W), - 400 604, India		
Tel. No.	+91-22-6147 1919/6116 9797	Fax No.	:+91-22-61471920
Mail Id	mb@himedialabs.com	Website	: www.himedialabs.com

1.4 Emergency Tel. No.

Emergency Tel. No. Please contact the regional HiMedia representation in your country

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2 Hazards Identification

2.1 Classification of the substance or mixture

CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]

Acute toxicity, Oral, (Category 3), H301
Acute toxicity, Oral, (Category 4), H302
Acute toxicity, Dermal, (Category 2), H310
Skin corrosion or irritation, (Category 1A), H314
Skin corrosion or irritation, (Category 2), H315
Sensitisation, Skin, (Category 1), H317
Serious eye damage or eye irritation, (Category 1), H318
Acute toxicity, Inhaled, (Category 3), H331
Sensitisation, respiratory, (Category 1), H334
Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335
Germ cell mutagenicity, (Category 1A), H340
Carcinogenicity, (Category 1A), H350
Reproductive toxicity, (Category 2), H361f
Specific target organ toxicity, repeated exposure, (Category 1), H372
Specific target organ toxicity, repeated exposure, (Category 2), H373

2.2 Label elements

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

Pictogram
Signal word Danger

Hazard Statement(s)

H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H350	May cause cancer
H361f	Suspected of damaging fertility
H372	Causes damage to organs through prolonged or repeated exposure

Precautionary Statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + 310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342 + P311	IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.
P304+P340+P311	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.
P332 + P313	IF SKIN irritation occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse.
P337 + P313	IF eye irritation persists: Get medical advice/attention.
P309+P310	If exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

2.3 Other Hazards

None

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3 Composition/Information On Ingredients

Component	Classification	Concentration
ASN salt For Molecular Biology		
CAS No. : 69-52-3 EC No. : 200-708-1 Molecular Formula : $C_{16}H_{18}N_3NaO_4S$ Molecular Weight : 371.39	**As Per EC Regulation 1272/2008** Skin Sens. 1; Resp. Sens. 1 H317; H334	>=99 - <=100%

Component	Classification	Concentration
2-Mercaptoethanol For Molecular Biology		
CAS No. : 60-24-2 EC No. : 200-464-6 Molecular Formula : C_2H_6OS Molecular Weight : 78.13	**As Per EC Regulation 1272/2008** Acute Tox. Oral, inhal, 3; Acute Tox. 2; Skin Irrit. 2; Skin Sens. 1; Eye Dam. 1; Repr. 2; STOT RE 2; Aquatic Chronic 1 H301+H331; H310; H315; H317; H318; H361fd; H373; H410	>=1 - <=10%

Component	Classification	Concentration
Lauryl sulphate sodium salt, For Molecular Biology		
CAS No. : 151-21-3 EC No. : 205-788-1 Molecular Formula : $C_{12}H_{25}NaO_4S$ Molecular Weight : 288.38	**As Per EC Regulation 1272/2008** Flam. Sol. 1; Acute Tox. oral, inhal, 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Chronic 3 H228; H302+H332; H315; H318; H335; H412	>=5 - <=15%

Component	Classification	Concentration
Acrylamide, For Molecular Biology		
CAS No. : 79-06-1 EC No. : 201-173-7 Molecular Formula : C_3H_5NO Molecular Weight : 71.08	**As Per EC Regulation 1272/2008** Acute Tox.oral. 3; Acute Tox. Oral, dermal, inhal, 4; Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2A; Mut. 1A, 1B; Carc. 1B; Repr. 2; STOT RE 1 H301; H312+H332; H315; H317; H319; H340; H350; H361f; H372	>=20 - <=40%

Component	Classification	Concentration
N,N'-Methylenebis(acrylamide), For Molecular Biology		
CAS No. : 110-26-9 EC No. : 203-750-9 Molecular Formula : $C_7H_{10}N_2O_2$ Molecular Weight : 154.17	**As Per EC Regulation 1272/2008** Acute Tox.oral 4; Acute Tox.inhal. 4 H302; H332	>=1 - <=5%

Component	Classification	Concentration
Carbinol, For Molecular Biology		
CAS No. : 67-56-1 EC No. : 200-659-6	**As Per EC Regulation 1272/2008** Flam. Liq. 2; Acute Tox.oral. 3; Acute	>=40 - <=60%

Index-No : 603-001-00-X Molecular Formula : CH_3OH Molecular Weight : 32.04	Tox. dermal. 3; Acute Tox. inhal. 3; STOT SE 1 H225; H301; H311; H331; H370	

Component	Classification	Concentration
Acetic acid, For Molecular Biology		
CAS No. : 64-19-7 EC No. : 200-580-7 Index-No : 607-002-00-6 Molecular Formula : $C_2H_4O_2$ Molecular Weight : 60.05	**As Per EC Regulation 1272/2008** Flam. Liq. 3; Skin Corr. 1A H226; H314	>=5 - <=15%

4 First Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5 Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Sodium oxides

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary

5.4 Further information

No data available

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personnel protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see Section 13.

7 Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Liquids

Recommended Storage Temperature : Store at - 20°C

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products.

Personal protective equipment

Hygiene measure

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

Eye/face protection

Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environment exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Odour	No data available
Odour Threshold	No data available
pH	
Flash point	No data available
Evaporation rate	No data available
Flammability (Solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Water Solubility	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Thermal decomposition	No data available

9.2 Other safety information

No data available

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10 Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Metals, Oxidizing agents

10.6 Hazardous decomposition products

In the event of fire. Refer section 5

11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: 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

Aspiration hazard
No data available
Additional Information
RTECS **:** Not Applicable

12 Ecological Information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 PBT and vPvB assessment
No data available

12.6 Other adverse effects
No data available

13 Disposal Considerations

13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licenced disposal company.

13.2 Contaminated packaging

Dispose of as unused product.

14 Transport Information

14.1 UN-No

ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.2 UN proper shipping name

ADNR : Not dangerous goods
ADR : Not dangerous goods
IATA_C : Not dangerous goods
IATA_P : Not dangerous goods
IMDG : Not dangerous goods
RID : Not dangerous goods

14.3 Transport hazard class(es)

ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : -

14.4 Packaging group

ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.5 Environmental hazards

ADNR : No ADR : No IMDG : Marine pollutant : no IATA_C : No IATA_P : No RID : No

14.6 Special precautions for use

No data available

15 Regulatory Information

15.1 Safety health and environment regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

No data available

16 Other information

H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H228	Flammable solid
H301	Toxic if swallowed
H301+H331	Toxic if swallowed or if inhaled
H302	Harmful if swallowed
H302+H332	Harmful if swallowed or if inhaled
H310	Fatal in contact with skin
H311	Toxic in contact with skin
H312+H332	Harmful in contact with skin or if inhaled
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage

H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H350	May cause cancer
H361f	Suspected of damaging fertility
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
Acute Tox. 2	Acute toxicity, dermal, Category 2
Acute Tox. dermal. 3	Acute toxicity, dermal, Category 3
Acute Tox. inhal. 3	Acute toxicity, inhaled, Category 3
Acute Tox. Oral, dermal, inhal, 4	Harmful if swallowed, in contact with skin or if inhaled
Acute Tox. Oral, inhal, 3	Toxic if swallowed or if inhaled
Acute Tox. oral, inhal, 4	Harmful if swallowed or if inhaled
Acute Tox.inhal. 4	Acute toxicity, inhaled, Category 4
Acute Tox.oral 4	Acute toxicity, oral, Category 4
Acute Tox.oral. 3	Acute toxicity, oral, Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment, long term hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, long term hazard, Category 3
Carc. 1B	Carcinogenicity, Category 1B
Eye Dam. 1	Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 1	Flammable solids, Category 1
Mut. 1A, 1B	Germ cell mutagenicity, Category 1A, 1B
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Sensitisation, respiratory, Category 1
Skin Corr. 1A	Skin corrosion or irritation, Category 1A
Skin Irrit. 2	Skin corrosion or irritation, Category 2
Skin Sens. 1	Sensitisation, Skin, Category 1
STOT RE 1	Specific target organ toxicity, repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity, repeated exposure, Category 2
STOT SE 1	Specific target organ toxicity, single exposure, Category 1
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

Further Information

The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.