Safety Data Sheet



SDS No. : 30302ES Revision : 3

Prepared Date : July 1, 2018

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : BioPro IEX Q75, BioPro IEX S75

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

Flammable liquid —Category 3

Use of the Substance/ Mixture : Packing for High Performance Liquid Chromatography

1.3 Details of the supplier of the safety data sheet

Manufacturer

Company : YMC CO., LTD.

Adress : 5-28 Kokufudai Komatsu-shi Ishikawa, 923-8557, Japan

Telephone : +81-761-47-8224

1.4 Emergency telephone number

+81-75-342-4515 (9:00-17:00, JST)

2. Hazards identification

2.1 GHS Classification

Classification

(REGULATION (EC) No

1272/2008)

2.2 Label elements

Hazard pictograms



Signal word Warning

Hazard statements H226 Flammable liquid and vapor

Precautionary statements < Prevention>

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

<Response>

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/

H226 Flammable liquid and vapor

shower.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

<Storage>

P403 + P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards

no data available

3. Composition/Information on ingredients

Substance/Mixture Mixture

Ingredient Chemical Name Chemical Formula % by weight CAS No

Ethanol (Ethyl alcohol) C_2H_5OH 10-15 64-17-5

4. First aid measures

4.1 Description of first aid measures

General advice If you feel unwell, seek medical advice (show the label where possible). First aider needs to protect himself. Move out of dangerous

area. Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes immediately.

If inhaled If breathed in, move person into fresh air. If symptoms persist, call a physician. Keep patient warm and at rest. If not breathing, give

artificial respiration. If breathing is difficult, give oxygen. If unconscious place in recovery position and seek medical advice.

In case of skin contact In case of contact, immediately flush skin with soap and plenty of water. Do NOT use solvents or thinners. If skin irritation persists,

call a physician.

Protect unharmed eye. If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse immediately with plenty of In case of eye contact

water and seek medical advice.

If swallowed If swallowed, seek medical advice immediately and show this container or label. If swallowed, DO NOT induce vomiting. If a

person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

Water, Dry chemical, Alcohol-resistant foam, Carbon dioxide (CO2)

Unsuitable extinguishing

media

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products may be formed under fire

conditions (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Special protective

In the event of fire, wear self-contained breathing apparatus.

equipment for firefighters

Use personal protective equipment.

Further information Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the

> surrounding environment. In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated

fire extinguishing water must be disposed of in accordance with local regulations. Pay attention to flash back.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Use personal protective equipment. Remove all sources of ignition. Avoid contact with skin and eyes. Ensure adequate ventilation, especially in confined areas. Immediately evacuate personnel to safe areas. Avoid inhalation of vapor or mist. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Clean contaminated surface thoroughly.

6.4 Reference to other sections

see chapter: 7, 8, 11, 12 and 13

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling For personal protection see section 8. Do not breathe vapors or spray mist. Avoid contact with skin and eyes. Prevent the creation

of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure

limits. Take precautionary measures against static discharges.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Keep away from heat and sources of ignition. Do not smoke. No sparking tools should be used.

Electrical equipment should be protected to the appropriate standard.

Dust explosion class not applicable

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away

from direct sunlight.

Advice on common storage Keep away from food, drink and animal feedingstuffs. Do not store together with oxidizing and self-igniting products. Incompatible

with oxidizing agents.

Other data No decomposition if stored and applied as directed.

7.3 Specific end uses

no data available

8. Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Control parameters	Basis	Update
ethanol	64-17-5	TWA: 1.920 mg/m3, 1.000 ppm	GB EH40	2005-04-06
		*: see chapter 16		

Other information on limit

values

see chapter 16

8.2 Exposure controls

Engineering measures Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Material

Rubber gloves

Remarks

Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and

specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned

protective gloves with the glove manufacturer.

Eye protection Tightly fitting safety goggles

Skin and body protection

Flame retardant antistatic protective clothing

Antistatic boots

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

General industrial hygiene practice. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing. When using do not eat, drink or smoke.

Wash hands before breaks and at the end of workday.

Follow the skin protection plan.

Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.

Environmental exposure controls

General advice Do not flush into surface water or sanitary sewer system.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

Physical state Liquid (particle suspension)
Color White (in suspension)

Odor(threshold)

pH

Not available

Melting Point

Boiling Point

Flash Point

Evaporation Rate

Not available

Not available

Not available

Not available

Not available

Not available

LEL/UEL (Upper)Not available (Lower)Not available

Vapor Pressure Not available
Vapor Density Not available
Specific Gravity (relative density) Not available

Solubility Not available /Easily suspended to water (hot/cold) and organic solvent (alcohol, etc.)

Partition Coefficient octanol/water Not available
Decomposition Temperature Not available
Autoignition temperature Not available
Viscosity Not available
Other data None

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Stability No decomposition if stored and applied as directed.

Reaction with strong oxidizing agents. Vapours may form explosive mixtures with air.

10.4 Conditions to avoid

Heat, flames and sparks. Strong sunlight for prolonged periods.

10.5 Incompatible materials

Materials to avoid Oxidizing agents, Nitric acid, Ammonia

10.6 Hazardous decomposition products

Hazardous decomposition In case of fire hazardous decomposition products may be produced such as:

products Carbon monoxide, Carbon dioxide (CO2), nitrogen oxides (NOx)

Thermal decomposition no data available

11. Toxicological information

Acute Toxicity Data Ethanol Oral rat LD₅₀ 13.7 g/kg

Dermal Not available

Inhalation (vapor) rat LC_{50} 20,000ppm/10h (31,600ppm/4h) Inhalation (mist) rat LC_{50} 63,000ppm/4h (118 mg/l)

Irritancy (corrosive) Data No information available.

Eye effects Ethanol OECD TG404 rabbit moderate

Draiz test rabbit moderately

Damage to corneal epithelium. Conjunctival hyperemia can take 1 or 2 days to heal. Severe irritation.

Prolonged and/or repeated skin contact may cause irritations and possibly dermatitis. Inhalation of high vapor

concentrations may cause irritations to the respiratory system. In case of prolonged inhalation of high vapor

concentrations, narcotic effects may occur.

Respiratory/Skin effects No information available.

Ethanol

Germ cell mutagenicity Ethanol On rat and mouse, dominant lethality and aneuploidy induction in mice's germ cell have been reported.

Carcinogenicity Ethanol ACGIH: A4 (Not Classifiable as a Human Carcinogen)

Reproductive Effects Ethanol Chronic ingestion of large amounts of alcohol has been reported to cause teratogenic effects on unborn child

and other effects.

Single exposure Ethanol Oral ingestion in human may cause acute intoxication effects to central nervous system, and can be fatal.

Possible risks of irritation to respiratory tact, drowsiness, or dizziness have been reported.

Repeated exposure Ethanol Prolonged or repeated exposure can produce liver or nerve damage.

12. Ecological information

12.1 Toxicity

Toxicity to fish LC50 (Poecilia reticulata (guppy)): 11 g/l

Exposure time: 7 d

12.2 Persistence and degradability

Biodegradability Result: Readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Adsorbed organic bound

Remarks: not included

halogens (AOX)

Additional ecological information The product should not be allowed to enter drains, water courses or the soil.

13. Disposal considerations

13.1 Waste treatment methods

Advice on disposal and

Disposal: packaging

In accordance with local and national regulations. Do not dispose of waste into sewer. This material and its container must be

disposed of as hazardous waste. Do not dispose of together with household waste.

Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport information

ADR

UN 1170 **UN** number Description of the goods Ethanol Class 3 Packing group Ш Classification Code F1 Hazard identification No 30 Labels 3 Special Provision 144, 601

Limited quantity LQ4 Tunnel restriction code (D/E) Environmentally hazardous no

Remarks 144: Aqueous solutions with a maximum of 24% by volume of alcohol are not subject to the regulations.

RID

UN number UN 1170 Description of the goods Ethanol Class Packing group Ш Classification Code F1 Hazard identification No 30 Labels Special Provision 144, 601 Limited quantity I 04 Environmentally hazardous

144: Aqueous solutions with a maximum of 24% by volume of alcohol are not subject to the regulations. Remarks

IATA

UN number UN 1170 Description of the goods Ethanol Class 3 Ш Packing group Labels

Special Provision A3, A58, A180

Packing instruction (cargo

aircraft)

Environmentally hazardous no 353 Packing instruction

(passenger aircraft)

Packing instruction (LQ) Y341

A58: Aqueous solutions with a maximum of 24% by volume of alcohol are not subject to the regulations. Remarks

IMDG

UN number UN 1170 Description of the goods Ethanol Class Ш Packing group Labels 3 Special Provision 144, 223 EmSNumber 1 F-E EmSNumber 2 S-D Marine pollutant no

144: Aqueous solutions with a maximum of 24% by volume of alcohol are not subject to the regulations. Remarks

Special precautions for user

see chapter: 6, 7 and 8

15. Regulatory information

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

irective 199/13/EC VOC

95.5 %

VOC content less water: 778.36 g/l

Directive 96/82/EC Update: 2003 Quantity 1 Quantity 2

> 50,000 t Highly flammable 5,000 t

Further information Reserved for industrial and professional use.

15. 2 Chemical Safety Assessment

no data available

16. Other information

Full text of R-phrases referred to under sections 2 and 3

Flammable

Full text of H-Statements referred to under sections 2 and 3.

H226 Flammable liquid and vapor.

Other information

Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

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