

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/24/2018

Reviewed on 07/24/2018

## 1: Identification

· **1.1 Product identifier**

· **Trade name:** TOYOPEARL-TSKgel: group 21-1

· **Article number:** Please refer to ANNEX 1

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

No further relevant information available.

· **Application of the substance / the mixture** Resin

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer** / **Supplier:**

TOSOH CORPORATION  
3-8-2 Shiba, Minato-ku  
Tokyo 105 -8623  
JAPAN

TOSOH BIOSCIENCE LLC  
3604 Horizon Dr.; Suite 100  
King of Prussia, PA 19406 USA

Tel. : + 81 3 5427 5181  
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Phone : + 1 614 317 1934 or (800) 366 4875  
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· **Information department:** biosciencequality@tosoh.com

www.tosohbioscience.com

· **1.4 Emergency telephone number:** CHEMTREC 800-424-9300

## 2: Hazard(s) identification

· **2.1 Classification of the substance or mixture**

· **Classification according to 29 CFR 1910 (OSHAHCS)**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

· **Classification according to 29CFR 1910**

Flammable.

· **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of international guidelines.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

· **Hazard pictograms**



GHS02

· **Signal word** Danger

· **Hazard-determining components of labeling:**

ethanol

· **Hazard statements**

H226 Flammable liquid and vapor.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P280 Wear protective gloves / eye protection / face protection.  
P240 Ground/bond container and receiving equipment.  
P233 Keep container tightly closed.

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- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
- P405 Store locked up.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**
**NFPA ratings (scale 0 - 4)**

**HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

**2.3 Other hazards**
**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3: Composition/information on ingredients

**3.2 Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 64-17-5	ethanol	10-<25%
EINECS: 200-578-6		

### 4: First-aid measures

**4.1 Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5: Fire-fighting measures

**5.1 Extinguishing media**
**Suitable extinguishing agents:**

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

**5.3 Advice for firefighters**
**Protective equipment:** No special measures required.

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## 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

## 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

### 8.1 Control parameters

- **Components with limit values that require monitoring at the workplace:**

<b>64-17-5 ethanol</b>	
PEL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

### 8.2 Exposure controls

- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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**Eye protection:**


Tightly sealed goggles

## 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**
**General Information**
**Appearance:**
**Form:** Suspension

**Color:** White

**Odor:** Alcohol-like

**Odour threshold:** Not determined.

**pH-value:** Not determined.

**Change in condition**
**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**Flash point:** 39 °C (102 °F)  
Not applicable.

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 425 °C (797 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**
**Lower:** 3.5 Vol %

**Upper:** 15.0 Vol %

**Vapor pressure at 20 °C (68 °F):** 59 hPa (44 mm Hg)

**Density:** Not determined.

**Relative density** Not determined.

**Vapour density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**
**Water:** Fully miscible.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**
**Dynamic:** Not determined.

**Kinematic:** Not determined.

**Solvent content:**
**Organic solvents:** 12.8 %

**Water:** 67.2 %

**VOC content:** 12.8 %

**Solids content:** 20.0 %

**9.2 Other information** No further relevant information available.

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### 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

64-17-5	ethanol	1
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

### 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.



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## 14: Transport information

<b>14.1 UN-Number</b> DOT, ADR, ADN, IMDG, IATA	Void
<b>14.2 UN proper shipping name</b> DOT, ADR, ADN, IMDG, IATA	Void
<b>14.3 Transport hazard class(es)</b> DOT, ADR, ADN, IMDG, IATA Class	Void
<b>14.4 Packing group</b> DOT, ADR, IMDG, IATA	Void
<b>14.5 Environmental hazards:</b> Marine pollutant:	No
<b>14.6 Special precautions for user</b>	Not applicable.
<b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>UN "Model Regulation":</b>	-

## 15: Regulatory information

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
Sara	
<b>Section 355 (extremely hazardous substances):</b>	
None of the ingredients is listed.	
<b>Section 313 (Specific toxic chemical listings):</b>	
None of the ingredients is listed.	
<b>TSCA (Toxic Substances Control Act):</b>	
64-17-5	ethanol
7732-18-5	water, distilled, conductivity or of similar purity
<b>Proposition 65</b>	
<b>Chemicals known to cause cancer:</b>	
None of the ingredients is listed.	
<b>Chemicals known to cause reproductive toxicity for females:</b>	
None of the ingredients is listed.	
<b>Chemicals known to cause reproductive toxicity for males:</b>	
None of the ingredients is listed.	
<b>Chemicals known to cause developmental toxicity:</b>	
64-17-5	ethanol
<b>Carcinogenic categories</b>	
<b>EPA (Environmental Protection Agency)</b>	
None of the ingredients is listed.	
<b>TLV (Threshold Limit Value established by ACGIH)</b>	
64-17-5	ethanol <span style="float: right;">A3</span>
<b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
None of the ingredients is listed.	
<b>Labelling according to Regulation (EC) No 1272/2008</b>	
The product is classified and labeled according to the CLP regulation.	

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**Trade name: TOYOPEARL-TSKgel: group 21-1**

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**Hazard pictograms**


GHS02 GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**

ethanol

**Hazard statements**

H226 Flammable liquid and vapor.

**Precautionary statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P280 Wear protective gloves / eye protection / face protection.
- P240 Ground/bond container and receiving equipment.
- P233 Keep container tightly closed.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.
- P405 Store locked up.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information contained herein is prepared based on the available information to Tosoh that is believed to be reliable: however the information is provided by Tosoh WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, AS TO ITS COMPLETENESS, COMPREHENSIVENESS AND ACCURACY.

Since the conditions of handling, storage and disposal of this material are beyond our control, it is the responsibility of the user to determine whether the material is fit for a particular purpose and/or suitable for the user's method of use or application, and to determine safe conditions for use of the material, and to assume full responsibility for loss, injury and expense arising out of or in connection with the use of material. NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE MATERIAL DESCRIBED HEREIN SHALL BE CREATED BY OR INFERRED FROM ANY STATEMENT OR OMISSION FROM THIS SDS.

Various government agencies and local authorities may have general or specific regulations applicable to the material which may not be covered in this SDS. It is sole responsibility of the user to examine and confirm for its full compliance with any such regulations.

When the revision of this SDS is received, please dispose of the old one.

**Date of preparation / last revision** 07/07/2015 / -

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals ACGIH:  
 American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA:  
 National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA) VOC:  
 Volatile Organic Compounds (USA, EU)  
 Flam. Liq. 3: Flammable liquids, Hazard Category 3 Carc. 1A:  
 Carcinogenicity, Hazard Category 1A





# ANNEX 1:

# Group 21-1

Revised 7/24/18

Item	Description
0007448	TOYOPEARL HW-40F, 500ML
0007449	TOYOPEARL HW-40C, 500ML
0007451	TOYOPEARL HW-40S, 250ML
0007453	TOYOPEARL HW-50F, 500ML
0007455	TOYOPEARL HW-50S, 250ML
0007457	TOYOPEARL HW-55F, 500ML
0007459	TOYOPEARL HW-55S, 250ML
0007465	TOYOPEARL HW-65F, 500ML
0007466	TOYOPEARL HW-65C, 500ML
0007467	TOYOPEARL HW-65S, 250ML
0007469	TOYOPEARL HW-75F, 500ML
0007472	TOYOPEARL DEAE-650S, 250ML
0007473	TOYOPEARL DEAE-650M, 250ML
0007474	TOYOPEARL CM-650S, 250ML
0007475	TOYOPEARL CM-650M, 250ML
0007476	TOYOPEARL Butyl-650S, 100ML
0007477	TOYOPEARL Butyl-650M, 100ML
0007478	TOYOPEARL Butyl-650C, 100ML
0007967	TOYOPEARL HW-40S, 5L
0007968	TOYOPEARL HW-40F, 5L
0007969	TOYOPEARL HW-40C, 5L
0007971	TOYOPEARL CM-650S, 5L
0007972	TOYOPEARL CM-650M, 5L
0007973	TOYOPEARL DEAE-650S, 5L
0007974	TOYOPEARL DEAE-650M, 5L
0007975	TOYOPEARL Butyl-650S, 5L
0007976	TOYOPEARL Butyl-650M, 5L
0007977	TOYOPEARL Butyl-650C, 5L
0007988	TOYOPEARL DEAE-650C, 250ML
0007989	TOYOPEARL DEAE-650C, 5L
0007991	TOYOPEARL CM-650C, 250ML
0007992	TOYOPEARL CM-650C, 5L
0007994	TOYOPEARL SP-650C, 250ML
0007995	TOYOPEARL SP-650C, 5L
0007997	TOYOPEARL SP-650M, 250ML
0007998	TOYOPEARL SP-650M, 5L
0008002	TOYOPEARL AF-Amino-650M, 25ML
0008006	TOYOPEARL AF-Carboxy-650M, 25ML
0008039	TOYOPEARL AF-Amino-650M, 100ML
0008041	TOYOPEARL AF-Carboxy-650M, 100ML
0008059	TOYOPEARL HW-50S, 5L
0008060	TOYOPEARL HW-50F, 5L
0008062	TOYOPEARL HW-55S, 5L
0008063	TOYOPEARL HW-55F, 5L
0008068	TOYOPEARL HW-65S, 5L
0008069	TOYOPEARL HW-65F, 5L
0008070	TOYOPEARL HW-65C, 5L

Item	Description
0008072	TOYOPEARL HW-75F, 5L
0008437	TOYOPEARL SP-650S, 250ML
0008438	TOYOPEARL SP-650S, 5L
0014026	TOYOPEARL QAE-550C, 250ML
0014027	TOYOPEARL QAE-550C, 5L
0014028	TOYOPEARL SP-550C, 250ML
0014029	TOYOPEARL SP-550C, 5L
0014475	TOYOPEARL AF-Chelate-650M, 25ML
0014477	TOYOPEARL Phenyl-650S, 100ML
0014478	TOYOPEARL Phenyl-650M, 100ML
0014479	TOYOPEARL Phenyl-650C, 100ML
0014681	TOYOPEARL HW-40S, 1L
0014682	TOYOPEARL HW-40F, 1L
0014683	TOYOPEARL HW-40C, 1L
0014684	TOYOPEARL HW-50S, 1L
0014685	TOYOPEARL HW-50F, 1L
0014686	TOYOPEARL HW-55S, 1L
0014687	TOYOPEARL HW-55F, 1L
0014688	TOYOPEARL HW-65S, 1L
0014689	TOYOPEARL HW-65F, 1L
0014690	TOYOPEARL HW-65C, 1L
0014691	TOYOPEARL HW-75F, 1L
0014692	TOYOPEARL DEAE-650S, 1L
0014693	TOYOPEARL DEAE-650M, 1L
0014694	TOYOPEARL DEAE-650C, 1L
0014695	TOYOPEARL CM-650S, 1L
0014696	TOYOPEARL CM-650M, 1L
0014697	TOYOPEARL CM-650C, 1L
0014698	TOYOPEARL SP-650S, 1L
0014699	TOYOPEARL SP-650M, 1L
0014700	TOYOPEARL SP-650C, 1L
0014701	TOYOPEARL Butyl-650S, 1L
0014702	TOYOPEARL Butyl-650M, 1L
0014703	TOYOPEARL Butyl-650C, 1L
0014704	TOYOPEARL QAE-550C, 1L
0014705	TOYOPEARL SP-550C, 1L
0014710	TSKgel DEAE-5PW(20), 250ML
0014711	TSKgel DEAE-5PW(20), 1L
0014712	TSKgel DEAE-5PW(30), 250ML
0014713	TSKgel DEAE-5PW(30), 1L
0014714	TSKgel SP-5PW(20), 250ML
0014715	TSKgel SP-5PW(20), 1L
0014716	TSKgel SP-5PW(30), 250ML
0014717	TSKgel SP-5PW(30), 1L
0014718	TSKgel Phenyl-5PW(20), 250ML
0014719	TSKgel Phenyl-5PW(20), 1L
0014720	TSKgel Phenyl-5PW(30), 250ML





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Item	Description
0014721	TSKgel Phenyl-5PW(30), 1L
0014783	TOYOPEARL Phenyl-650M, 1L
0014784	TOYOPEARL Phenyl-650S, 1L
0014785	TOYOPEARL Phenyl-650C, 1L
0014907	TOYOPEARL AF-Chelate-650M, 1L
0014908	TOYOPEARL AF-Chelate-650M, 5L
0014935	TOYOPEARL Phenyl-650S, 5L
0014943	TOYOPEARL Phenyl-650M, 5L
0014944	TOYOPEARL Phenyl-650C, 5L
0016050	TSKgel Ether-5PW(30), 250ML
0016051	TSKgel Ether-5PW(30), 1L
0016052	TSKgel Ether-5PW(20), 250ML
0016053	TSKgel Ether-5PW(20), 1L
0016172	TOYOPEARL Ether-650S, 100ML
0016173	TOYOPEARL Ether-650M, 100ML
0016174	TOYOPEARL Ether-650S, 1L
0016175	TOYOPEARL Ether-650M, 1L
0016176	TOYOPEARL Ether-650S, 5L
0016177	TOYOPEARL Ether-650M, 5L
0017210	TSKgel Phenyl-5PW(30), (30) 1500G (5L)
0017223	TOYOPEARL SuperQ-650S, 250ML
0017224	TOYOPEARL SuperQ-650S, 1L
0017225	TOYOPEARL SuperQ-650S, 5L
0017227	TOYOPEARL SuperQ-650M, 250ML
0017228	TOYOPEARL SuperQ-650M, 1L
0017229	TOYOPEARL SuperQ-650M, 5L
0017231	TOYOPEARL SuperQ-650C, 250ML
0017232	TOYOPEARL SuperQ-650C, 1L
0017233	TOYOPEARL SuperQ-650C, 5L
0018074	TOYOPEARL AF-Amino-650M, 1L
0018316	TOYOPEARL AF-Amino-650M, 5L
0018355	TOYOPEARL Butyl-650M, 50L
0018364	TOYOPEARL Phenyl-650M, 50L
0018365	TOYOPEARL QAE-550C, 50L
0018366	TOYOPEARL SP-550C, 50L
0018367	TOYOPEARL DEAE-650M, 50L
0018368	TOYOPEARL HW-50F, 50L
0018369	TOYOPEARL SP-650M, 50L
0018370	TSKgel DEAE-5PW(30), 5L
0018384	TSKgel SP-5PW(30), 5L
0018435	TSKgel SP-5PW(20), 5L
0018436	TSKgel DEAE-5PW(20), 5L
0018437	TSKgel Ether-5PW(20), 5L
0018438	TSKgel Phenyl-5PW(20), 5L
0018439	TSKgel Ether-5PW(30), 5L
0018535	TSKgel SuperQ-5PW(20), 250ML
0018536	TSKgel SuperQ-5PW(30), 250ML

Item	Description
0018546	TSKgel SuperQ-5PW(20), 1L
0018547	TSKgel SuperQ-5PW(20), 5L
0018548	TSKgel SuperQ-5PW(30), 1L
0018549	TSKgel SuperQ-5PW(30), 5L
0018564	TSKgel Phenyl-5PW(30) PC, 1L
0018826	TOYOPEARL Butyl-650S, 50L
0018827	TOYOPEARL AF-Carboxy-650M, 1L
0018828	TOYOPEARL AF-Carboxy-650M, 5L
0019026	TOYOPEARL Hexyl-650C, 100ML
0019027	TOYOPEARL Hexyl-650C, 1L
0019028	TOYOPEARL Hexyl-650C, 5L
0019329	TOYOPEARL CM-650C, 50L
0019679	TOYOPEARL SuperQ-650S, 50L
0019684	TSKgel Phenyl-5PW(30) PC, 5L
0019800	TOYOPEARL AF-Chelate-650M, 100ML
0019802	TOYOPEARL Butyl-650M, 25ML
0019803	TOYOPEARL CM-650S, 25ML
0019804	TOYOPEARL DEAE-650S, 25ML
0019805	TOYOPEARL Ether-650M, 25ML
0019806	TOYOPEARL LabPak HICPAK, 25ML*3(Ether, Phenyl, Butyl- 650M), 65µm
0019807	TOYOPEARL HW-40C, 150ML
0019808	TOYOPEARL HW-40F, 150ML
0019809	TOYOPEARL HW-40S, 150ML
0019810	TOYOPEARL HW-50F, 150ML
0019811	TOYOPEARL HW-50S, 150ML
0019812	TOYOPEARL HW-55F, 150ML
0019813	TOYOPEARL HW-55S, 150ML
0019814	TOYOPEARL HW-65F, 150ML
0019815	TOYOPEARL HW-65S, 150ML
0019816	TOYOPEARL HW-75F, 150ML
0019817	TOYOPEARL LabPak IEXPAK HP, 25ML*4 (DEAE-650S, SP-650S, CM-650S, Super Q-650S), 35µm
0019818	TOYOPEARL Phenyl-650M, 25 ML
0019819	TOYOPEARL LabPak SECPAK HMW, HW-(55, 65, 75)F, 45µm, 150*3
0019820	TOYOPEARL LabPak SECPAK HP, HW(40, 50, 55, 65)S, 30µm, 150*4
0019821	TOYOPEARL LabPak SECPAK LMW, HW(40, 50, 55)F, 45µm, 150*3
0019822	TOYOPEARL SP-650S, 25ML
0019823	TOYOPEARL SuperQ-650S, 25ML
0019833	TOYOPEARL AF-Chelate-650M BPL, 5L
0019839	TOYOPEARL CM-650M, 50L
0019955	TOYOPEARL SuperButyl-550C, 25 ML
0019956	TOYOPEARL SuperButyl-550C, 100 ML
0019957	TOYOPEARL SuperButyl-550C, 1 L



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Item	Description
0019958	TOYOPEARL SuperButyl-550C, 5 L
0019959	TOYOPEARL SuperButyl-550C, 50 L
0021301	TOYOPEARL PPG-600M, 25 ML
0021302	TOYOPEARL PPG-600M, 100 ML
0021303	TOYOPEARL PPG-600M, 1 L
0021304	TOYOPEARL PPG-600M, 5 L
0021305	TOYOPEARL PPG-600M, 50 L
0021311	TOYOPEARL SuperQ-650M, 50L
0021448	TOYOPEARL Butyl-600M, 25ML
0021449	TOYOPEARL Butyl-600M, 100ML
0021450	TOYOPEARL Butyl-600M, 1L
0021451	TOYOPEARL Butyl-600M, 5L
0021452	TOYOPEARL Butyl-600M, 50L
0021477	TOYOPEARL SP-650S, 50L
0021481	TOYOPEARL HW-65C, 150ML
0021482	TOYOPEARL HW-65C, 50L
0021483	TOYOPEARL DEAE-650S, 50L
0021484	TOYOPEARL HW-40C, 50L
0021804	TOYOPEARL MegaCap II SP-550EC, 100ML
0021805	TOYOPEARL MegaCap II SP-550EC, 250ML
0021806	TOYOPEARL MegaCap II SP-550EC, 1L
0021807	TOYOPEARL MegaCap II SP-550EC, 5L
0021808	TOYOPEARL MegaCap II SP-550EC, 50L
0021833	TOYOPEARL GigaCap S-650M, 100ML
0021834	TOYOPEARL GigaCap S-650M, 250ML
0021835	TOYOPEARL GigaCap S-650M, 1L
0021836	TOYOPEARL GigaCap S-650M, 5L
0021837	TOYOPEARL GigaCap S-650M, 50L
0021852	TOYOPEARL HW-65F, 50L
0021854	TOYOPEARL GigaCap Q-650M, 100ML
0021855	TOYOPEARL GigaCap Q-650M, 250ML
0021856	TOYOPEARL GigaCap Q-650M, 1000ML
0021857	TOYOPEARL GigaCap Q-650M, 5000ML
0021858	TOYOPEARL GigaCap Q-650M, 50L
0021887	TOYOPEARL Phenyl-600M, 25 ML
0021888	TOYOPEARL Phenyl-600M, 100 ML
0021889	TOYOPEARL Phenyl-600M, 1 L
0021890	TOYOPEARL Phenyl-600M, 5 L
0021891	TOYOPEARL Phenyl-600M, 50 L
0021918	TOYOPEARL HW-55F, 50L
0021919	TSKgel SuperQ-5PW (20), 25L
0021920	TSKgel SuperQ-5PW (20), 50L
0021946	TOYOPEARL GigaCap CM-650M, 100ML
0021947	TOYOPEARL GigaCap CM-650M, 250ML
0021948	TOYOPEARL GigaCap CM-650M, 1000ML

Item	Description
0021949	TOYOPEARL GigaCap CM-650M, 5000ML
0021950	TOYOPEARL GigaCap CM-650M, 50000ML
0021973	TOYOPEARL Hexyl-650C, 50 L
0021976	TSKgel SP-3PW(30), 25mL
0021977	TSKgel SP-3PW(30), 250mL
0021978	TSKgel SP-3PW(30), 1L
0021979	TSKgel SP-3PW(30), 5L
0021985	TOYOPEARL Q-600C AR, 100ML
0021986	TOYOPEARL Q-600C AR, 250ML
0021987	TOYOPEARL Q-600C AR, 1L
0021988	TOYOPEARL Q-600C AR, 5L
0021989	TOYOPEARL Q-600C AR, 50L
0022817	TOYOPEARL MX-Trp-650M, 25ML
0022818	TOYOPEARL MX-Trp-650M, 100ML
0022819	TOYOPEARL MX-Trp-650M, 1L
0022820	TOYOPEARL MX-Trp-650M, 5L
0022826	TOYOPEARL Butyl-650C, 50L
0022853	TOYOPEARL DEAE-650C, 50L
0022865	TOYOPEARL GigaCap DEAE-650M, 100mL
0022866	TOYOPEARL GigaCap DEAE-650M, 250mL
0022867	TOYOPEARL GigaCap DEAE-650M, 1L
0022868	TOYOPEARL GigaCap DEAE-650M, 5L
0022869	TOYOPEARL GigaCap DEAE-650M, 50L
0022875	TOYOPEARL GigaCap S-650 S, 25 m L
0022876	TOYOPEARL GigaCap S-650 S, 250mL
0022877	TOYOPEARL GigaCap S-650 S, 1L
0022878	TOYOPEARL GigaCap S-650 S, 5L
0022879	TOYOPEARL GigaCap S-650 S, 50L
0022881	TOYOPEARL GigaCap Q-650S, 25mL
0022882	TOYOPEARL GigaCap Q-650S, 250mL
0022883	TOYOPEARL GigaCap Q-650S, 1L
0022884	TOYOPEARL GigaCap Q-650S, 5L
0022885	TOYOPEARL GigaCap Q-650S, 50L
0023438	TOYOPEARL NH2-750F, 100mL
0023439	TOYOPEARL NH2-750F, 250mL
0023440	TOYOPEARL NH2-750F, 1L
0023441	TOYOPEARL NH2-750F, 5L
0023442	TOYOPEARL NH2-750F, 50L
0023467	TOYOPEARL Sulfate-650F, 100mL
0023468	TOYOPEARL Sulfate-650F, 250mL
0023469	TOYOPEARL Sulfate-650F, 1L
0023470	TOYOPEARL Sulfate-650F, 5L
0023471	TOYOPEARL Sulfate-650F, 50L



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Item	Description
0043125	TOYOPEARL LabPak HICPAK-C, (Phenyl, Butyl, Hexyl-650C), 100µm, 25ML*3
0043126	TOYOPEARL Phenyl-650C, 25 ML
0043127	TOYOPEARL Butyl-650C, 25ML
0043150	TOYOPEARL LabPak HICPAK HP, 25ML*3(Ether, Phenyl, Butyl-650S), 35µm
0043151	TOYOPEARL Ether-650S, 25ML
0043152	TOYOPEARL Phenyl-650S, 25 ML
0043153	TOYOPEARL Butyl-650S, 25ML
0043175	TSKgel LabPak HICPAK PW(30), (30) 25ML*2(Ether-5PW, Phenyl- 5PW)
0043176	TSKgel Ether-5PW(30), 25ML
0043177	TSKgel Phenyl-5PW(30), 25ML
0043201	TOYOPEARL DEAE-650M, 100ML
0043202	TOYOPEARL SP-650M, 100ML
0043203	TOYOPEARL CM-650M, 100ML
0043205	TOYOPEARL SuperQ-650M, 100ML
0043210	TOYOPEARL LabPak AIEXPAK, 100ML*3(DEAE-650M, SuperQ-650M, QAE-550C) , 65/100µm
0043220	TOYOPEARL LabPak CIEXPAK, 100ML*3 ( SP-650M, CM-650M, SP-550C), 65/100µm
0043271	TOYOPEARL QAE-550C, 100 ML

Item	Description
0043272	TOYOPEARL SP-550C, 100ML
0043275	TOYOPEARL SuperQ-650C, 100ML
0043276	TSKgel Ether-5PW(20), 25ML
0043277	TSKgel Phenyl-5PW(20), 25ML
0043278	TSKgel LabPak HICPAK PW(20), (20)25ML*2(Ether-5PW(20), Phenyl-5PW(20))
0043280	TSKgel LabPak IEXPAK PW(30), (30) 25ML*3 ( DEAE-5PW, SP- 5PW, SuperQ-5PW)
0043281	TSKgel DEAE-5PW(30), 25ML
0043282	TSKgel SP-5PW(30), 25ML
0043283	TSKgel SuperQ-5PW(30), 25ML
0043380	TSKgel LabPak IEXPAK PW(20), (20) 25ML*3 (DEAE-5PW(20), SP- 5PW(20), SuperQ-5PW(20))
0043381	TSKgel DEAE-5PW(20), 25ML
0043382	TSKgel SP-5PW(20), 25ML
0043383	TSKgel SuperQ-5PW(20), 25ML
0043411	TOYOPEARL AF-Amino-650M, 10ML
0043412	TOYOPEARL AF-Carboxy-650M, 10ML
0044465	TOYOPEARL Hexyl-650C, 25ML