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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Polyethylene-Polypropylene Glycol L-64 / L-61 / L-62 Series	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

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

Product name	Polyethylene-Polypropylene Glycol L-64 / L-61 / L-62 Series
Synonyms	L-61 / Poloxamer 181; L-62 / Poloxamer 182; L-64 / Poloxamer 184; Polyethylene-Polypropylene Glycol; EO/PO Block Copolymer; Polyoxyethylene Polyoxypropylene Block Copolymer; PEG-PPG-PEG Triblock Copolymer
CAS No.	9003-11-6 (common CAS for L-64, L-61 and L-62)
EC No.	618-355-0 (CAS-level public SDS identifier; confirm in final supplier SDS)
Molecular formula	Not applicable (mixture)
Molecular weight	L-61: 2000; L-62: 2500; L-64: 2900 (average molecular weight in the selected public typical specification)
Relevant identified uses	Low-foam detergents and defoamers; L-61 and L-64 are used in low-foam, high-detergency formulations; L-61: defoaming/foam-control use in paper and fermentation industries; L-62 and L-64: pesticide emulsifiers and coolant/lubricant components for metal cutting and grinding; L-64: crude-oil emulsion breaking and prevention of hard deposits in oil pipelines; rubber-vulcanization lubricant
Uses advised against	No specific uses advised against were identified in the reviewed sources.
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SECTION 2: Hazards identification

GHS Classification	Not classified in the cited CAS-level public SDS; no pictogram, no signal word and no hazard statements. This is a series-level reference only; final L-61/L-62/L-64 classifications require the Richest grade-specific SDS.
Pictogram(s)	None
Signal word	None
Hazard statement(s)	None
Precautionary statement(s)	None
Other hazards	No other hazards were identified in the reviewed sources.

SECTION 3: Composition/information on ingredients

Component	Polyethylene-Polypropylene Glycol L-64 / L-61 / L-62 Series
CAS No.	9003-11-6 (common CAS for L-64, L-61 and L-62)

SECTION 3: Composition/information on ingredients	
EC No.	618-355-0 (CAS-level public SDS identifier; confirm in final supplier SDS)
Classification	Not classified in the cited CAS-level public SDS; no pictogram, no signal word and no hazard statements. This is a series-level reference only; final L-61/L-62/L-64 classifications require the Richest grade-specific SDS.
Concentration	Industrial grade; public commercial listing states 99% for the L61/L62/L64 series, while the selected technical table controls water at ≤1.0%

SECTION 4: First-aid measures	
If inhaled	Move to fresh air after inhalation.
In case of skin contact	Remove contaminated clothing and wash skin with soap and plenty of water.
In case of eye contact	Rinse eyes with clean water for at least 15 minutes.
If swallowed	After ingestion rinse mouth, do not induce vomiting and contact a doctor or poison center.
Most important symptoms and effects	No data available
Indication of immediate medical attention	Treat symptomatically. Show this safety data sheet to medical personnel.

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Use dry chemical, carbon dioxide or alcohol-resistant foam. Firefighters should wear self-contained breathing apparatus if necessary.
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	L-61 (historical BASF PLURONIC L61 SDS, 1991): Combustible materials soaked with the product should be disposed of properly to avoid spontaneous combustion.
Advice for firefighters	L-61 (historical BASF PLURONIC L61 SDS, 1991): Self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Avoid contact with the material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Environmental precautions	Prevent uncontrolled release to drains, soil and watercourses.
Methods for containment and cleaning up	Ventilate, avoid inhalation and skin/eye contact, and wear suitable protective equipment. Prevent entry to drains and collect the material in suitable closed containers for authorized disposal.

SECTION 7: Handling and storage	
Precautions for safe handling	Handle in a well-ventilated place with suitable protective clothing. Avoid skin and eye contact and aerosol formation. Keep the container tightly closed in a dry, cool and well-ventilated place away from food and incompatible materials.
Conditions for safe storage, including incompatibilities	Keep tightly closed in a dry, cool and well-ventilated place, separated from food and incompatible materials. Public manufacturer shelf life: two years.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	No data available

SECTION 8: Exposure controls/personal protection

Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	No occupational or biological exposure limits are stated in the public SDS. Provide adequate ventilation; wear tightly fitting safety goggles and suitable impervious gloves. Use respiratory protection if exposure limits or irritation are encountered.
Eye/face protection	Use safety eyewear appropriate to the risk of exposure.
Skin and body protection	Wear suitable protective gloves and clothing appropriate to the risk of exposure.
Respiratory protection	Use suitable respiratory protection if exposure limits may be exceeded or dust, mist or vapour is generated.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties

Physical state	L-64 COA: colorless to yellowish transparent liquid; L-64 SDS: milk cream (conflict); L-61/L-62 missing
Colour	L-61 (TERGITOL L-61 / Poloxamer 181): Clear, colourless liquid. L-62 (TERGITOL L-62 / Poloxamer 182): Clear, colourless liquid. L-64 (TERGITOL L-64 / Poloxamer 184): Clear, colourless liquid.
Odour	L-61 (TERGITOL L-61): Mild odour. L-62 (TERGITOL L-62): Mild odour. L-64 (TERGITOL L-64): Odourless.
Melting point / freezing point	L-64 (TERGITOL L-64): -32 deg C.
Boiling point / boiling range	>180°C
Flammability	No data available
Explosion / flammability limits	No data available
Flash point	>100°C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	L-61 (TERGITOL L-61): 7.5-9.3 at 20 deg C. L-62 (TERGITOL L-62): 6.5. L-64 (TERGITOL L-64): 7.5-9.3; Spectrum/VWR separately specifies pH 5.0-7.5 for a 2.5% aqueous solution.
Viscosity	Average molecular weight, viscosity, cloud point and HLB are grade-specific and listed separately in the specifications.
Solubility	Water solubility and foaming behavior vary with the EO/PO composition
Partition coefficient n-octanol/water	No data available
Vapour pressure	No data available
Density and/or relative density	no shared fixed molecular weight, density or formula is claimed.
Relative vapour density	L-61, L-62 and L-64 (TERGITOL grades): Relative vapour density greater than 1.
Particle characteristics	Not applicable (liquid).
Additional information	Average molecular weight, viscosity, cloud point and HLB are grade-specific and listed separately in the specifications. Water solubility and foaming behavior vary with the EO/PO composition; no shared fixed molecular weight, density or formula is claimed.
[l-64 only] cloud point	57–61°C in SDS, versus COA 58–62 with unit column %; conflict unresolved
Freezing point	L-62 (TERGITOL L-62): Calculated freezing point -2 deg C.

SECTION 9: Physical and chemical properties

Pour point	L-61 (TERGITOL L-61): -32 deg C (Dow).

SECTION 10: Stability and reactivity

Reactivity	No data available
Chemical stability	L-61, L-62 and L-64 (TERGITOL product descriptions): High thermal and chemical stability.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	L-61 (historical BASF PLURONIC L61 SDS, 1991): No known hazardous decomposition products.

SECTION 11: Toxicological information

Toxicological summary	GHS health-hazard classification from the reviewed public SDS: Not classified in the cited CAS-level public SDS; no pictogram, no signal word and no hazard statements. This is a series-level reference only; final L-61/L-62/L-64 classifications require the Richest grade-specific SDS.; None

SECTION 12: Ecological information

Aquatic hazard classification	Not classified as hazardous to the aquatic environment in the reviewed public SDS.

SECTION 13: Disposal considerations

Product disposal methods	Send residues to a licensed chemical destruction facility or controlled incineration with flue-gas scrubbing where permitted. Do not discharge to sewer systems; manage contaminated packaging under local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards / Marine pollutant	See cited public SDS
Special precautions for user	ADR/RID, IMDG and IATA: Not dangerous goods in the cited public SDS, which states 'For reference only, please check'; no transport environmental hazard is indicated there. Final shipment classification is subject to the Richest SDS.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	The CAS-level public SDS reports US TSCA and several other inventory listings but does not establish food, cosmetic or pharmaceutical compliance. Confirm all destination inventories and application-specific requirements for the final supplied grades.

SECTION 16: Other information	
Full text of H-Statements	None
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: Propylene glycol block polyether L series — technical indicators: http://www.jshaishihua.com.cn/enPhoto_Show.asp?InfoId=186&ClassId=40&Topid=0 | Poloxamer 181, Surfactant — Pluronic L61 identity and SDS link: https://www.spectrumchemical.com/poloxamer-181-surfactant-p1162 | Poloxamer 182 — Pluronic L62 identity and SDS link: https://www.spectrumchemical.com/poloxamer-182-p1813 | Poloxamer 184, Surfactant — Pluronic L64 identity and SDS link: https://www.spectrumchemical.com/poloxamer-184-surfactant-p1163 | Propylene glycol block polyether Pluronic L61 L62 L63 L64 — commercial grade listing: https://www.echemi.com/produce/pr2309041200-propylene-glycol-block-polyether-pluronic-l61-l62-l63-l64.html | Ethylene oxide-propylene oxide copolymer Safety Data Sheet, CAS 9003-11-6: https://www.echemi.com/sds/polyether-polyol-pd20170105140233784.html | TERGITOL L-61 Product Details: https://www.univarsolutions.com/tergitol-l-61-5011848 | TERGITOL L-61 Surfactant Product Page: https://www.dow.com/en-us/pdp.tergitol-l-61-surfactant.80480z.html | TERGITOL L-62 Product Details: https://www.univarsolutions.com/tergitol-l-62-5011827 | TERGITOL L-64 Product Details: https://www.univarsolutions.com/tergitol-l-64-5011774 | Poloxamer 184 / PLURONIC L-64 / SYNPERONIC L64 Specifications: https://www.vwr.com/us/en/product/21573343/poloxamer-184-pluronic-l-64-synperonic-l64-surfactant | PLURONIC L61 Surfactant Historical Material Safety Data Sheet (1991): https://www.msdsreport.com/msds/BTMCG/PLURONIC%20L61%20SURFACTANT,%20NVS%20588290/
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.