Richest Group
No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Tel: 0086 21 5017 5386
E-mail: inquiry@richest-group.com
Web: www.richest-group.com

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Ethoxylated Castor Oil EL-40 / EL-20 / EL-10 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	Ethoxylated Castor Oil EL-40 / EL-20 / EL-10 Series
Synonyms	Ethoxylated Castor Oil EL-10; Ethoxylated Castor Oil EL-20; Ethoxylated Castor Oil EL-40; Polyoxyethylene Castor Oil; Castor Oil Ethoxylate; PEG-10 Castor Oil; PEG-20 Castor Oil; PEG-40 Castor Oil
CAS No.	61791-12-6 (common CAS for non-hydrogenated ethoxylated castor oil EL grades)
EC No.	500-151-7 (public SDS identifier; confirm in final supplier SDS)
Molecular formula	Not applicable (mixture)
Molecular weight	Not applicable (ethoxylated castor-oil composition and EO distribution vary by EL grade)
Relevant identified uses	EL-10 and EL-20: synthetic-fiber spin-finish components with emulsifying and antistatic functions; emulsifiers for pharmaceutical liniments/creams/emulsions and pesticide formulations; EL-40: emulsifier for printing inks, pharmaceutical formulations and organophosphorus pesticides; EL-40: O/W emulsifier for vegetable, animal and mineral oils, textile processing and crude-oil dehydration; No pharmaceutical, cosmetic or food compliance status is implied by these application descriptions
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	0086 21 5017 5386
E-mail	inquiry@richest-group.com
Website	www.richest-group.com
Emergency telephone number	0086 21 5017 5386

SECTION 2: Hazards identification

GHS Classification	Warning; Eye Irrit. 2 H319 (causes serious eye irritation) in the cited public Cremophor EL / CAS 61791-12-6 SDS. Other public suppliers may classify differently; final EL-10/EL-20/EL-40 classifications require the Richest grade-specific SDS.
Pictogram(s)	See cited public SDS classification
Signal word	Warning
Hazard statement(s)	H319 Causes serious eye irritation
Precautionary statement(s)	No data available
Other hazards	No other hazards were identified in the reviewed sources.

SECTION 3: Composition/information on ingredients

Component	Ethoxylated Castor Oil EL-40 / EL-20 / EL-10 Series
CAS No.	61791-12-6 (common CAS for non-hydrogenated ethoxylated castor oil EL grades)

SECTION 3: Composition/information on ingredients	
EC No.	500-151-7 (public SDS identifier; confirm in final supplier SDS)
Classification	Warning; Eye Irrit. 2 H319 (causes serious eye irritation) in the cited public Cremophor EL / CAS 61791-12-6 SDS. Other public suppliers may classify differently; final EL-10/EL-20/EL-40 classifications require the Richest grade-specific SDS.
Concentration	Assay is not stated in the selected public specification; moisture is controlled at ≤1.0% for all three grades

SECTION 4: First-aid measures	
If inhaled	Inhalation: move to fresh air.
In case of skin contact	Skin contact: remove contaminated clothing immediately and rinse skin with water/shower.
In case of eye contact	Eye contact: rinse with plenty of water, remove contact lenses and obtain medical advice if irritation persists.
If swallowed	Ingestion: rinse mouth and consult a doctor if unwell.
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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide as appropriate to surroundings. Firefighters should use suitable protective equipment and self-contained breathing apparatus where needed; combustion may produce carbon oxides.
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Combustion can produce carbon oxides and irritating decomposition products; cool exposed containers with water spray if safe.
Advice for firefighters	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): 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	Use personal protective equipment and avoid eye/skin contact. Prevent further leakage if safe and do not let product enter drains. Contain and collect in suitable closed containers for authorized disposal; do not release contaminated washings to the environment.

SECTION 7: Handling and storage	
Precautions for safe handling	Use adequate ventilation and good industrial hygiene. Avoid eye and skin contact, wash thoroughly after handling and keep containers tightly closed in a dry, cool and well-ventilated place.
Conditions for safe storage, including incompatibilities	Keep tightly closed in a dry, cool and ventilated place. Public manufacturer shelf life: two years. Avoid strong heating and follow the final grade-specific SDS.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	No data available
Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Wear suitable eye protection and protective gloves; provide adequate ventilation. Grade-specific occupational exposure limits and biological limits: no data available in the selected public SDS. Select additional PPE from the workplace risk assessment.
Eye/face protection	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Safety glasses or chemical goggles, chemical-resistant gloves and suitable protective clothing are recommended by the supplier summary.
Skin and body protection	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Safety glasses or chemical goggles, chemical-resistant gloves and suitable protective clothing are recommended by the supplier summary.
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	Not established for EL-40/20/10
Colour	EL-10: Light yellow transparent oil (Sunwise); Croda Etocas 10 is a liquid at 25 deg C. EL-20: Light yellow transparent oil (Sunwise); Ataman Castor Oil 20 EO is a viscous yellowish liquid or paste at 20 deg C, AGNIQUE CSO 20 is a yellowish liquid, and Clariant Emulsogen EL 200 is a viscous liquid. EL-40: Light yellow oil to paste (Sunwise); Ataman Castor Oil 40 EO is a light yellow, slightly viscous liquid and its property table describes a pasty form at 20 deg C; AGNIQUE CSO 40 is a pasty liquid and Clariant Emulsogen EL 400 is a paste.
Odour	EL-40 (Ataman Castor Oil 40 EO): Mild fatty odour, also described as a faint characteristic odour.
Melting point / freezing point	No data available
Boiling point / boiling range	EL-20 (Ataman Castor Oil 20 EO): Greater than 150 deg C.
Flammability	No data available
Explosion / flammability limits	No data available
Flash point	EL-20 (Ataman Castor Oil 20 EO): Greater than 100 deg C. EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Approximately 290 deg C in the Atamankimya product summary.
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	Grade-specific appearance, saponification value, cloud point, moisture, pH and HLB are listed separately.
Viscosity	EL-20 (AGNIQUE CSO 20): Approximately 110 mPa.s; temperature is not stated in the source. EL-40 (AGNIQUE CSO 40): Approximately 120 mPa.s at 60 deg C.

SECTION 9: Physical and chemical properties	
Solubility	EL-10 (Sunwise): Soluble in most organic solvents and dispersible in water. EL-20 (Sunwise): Dispersible in water; Ataman Castor Oil 20 EO reports solubility in water and most polar and non-polar solvents and oils, while AGNIQUE CSO 20 forms an opaque emulsion in water. EL-40 (Sunwise): Readily soluble in water, fatty acids and other organic solvents; Ataman Castor Oil 40 EO reports solubility in water, xylene, ethanol, n-propanol, isopropanol, ethyl acetate and toluene, and AGNIQUE CSO 40 forms a clear aqueous solution.
Partition coefficient n-octanol/water	No data available
Vapour pressure	No data available
Density and/or relative density	EL-20 (AGNIQUE CSO 20): Approximately 1.03 g/cm3. EL-40 (AGNIQUE CSO 40): Approximately 1.06 g/cm3 at 20 deg C; Ataman Castor Oil 40 EO separately reports approximately 1.04 g/cm3 at 50 deg C.
Relative vapour density	No data available
Particle characteristics	No data available
Additional information	Grade-specific appearance, saponification value, cloud point, moisture, pH and HLB are listed separately. EL-10 has no cloud-point value in the selected manufacturer table, shown as '—', so none is assigned. No common molecular weight or fixed molecular formula is claimed.
Congealing point	EL-40 (AGNIQUE CSO 40): Approximately 14 deg C.

SECTION 10: Stability and reactivity	
Reactivity	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): No hazardous reactions are expected under normal use conditions.
Chemical stability	The public SDS states that the product is chemically stable under standard ambient conditions. Avoid strong heating. Incompatible materials and detailed hazardous-decomposition information: no data available beyond fire-section guidance.
Possibility of hazardous reactions	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Hazardous polymerisation or dangerous reactions are not expected when handled properly.
Conditions to avoid	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Avoid excessive heat, open flames, sparks, moisture and overheated storage areas; keep containers tightly closed in a dry, cool, well-ventilated location. EL-20 (Ataman Castor Oil 20 EO): Store tightly closed in the original container in a cool, ventilated place.
Incompatible materials	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Strong oxidising agents.
Hazardous decomposition products	EL-20 (AGNIQUE CSO 20) and EL-40 (AGNIQUE CSO 40): Thermal decomposition or combustion can produce carbon oxides and irritating fumes.

SECTION 11: Toxicological information	
Toxicological summary	The public Cremophor EL SDS reports oral rat LD50 >5000 mg/kg and no skin irritation in a rabbit test, but these values are not claimed as separate EL-10/EL-20/EL-40 test results. Eye irritation is classified as H319; other grade-specific endpoints remain unconfirmed.
Serious eye damage irritation	GHS classification: Warning; Eye Irrit. 2 H319 (causes serious eye irritation) in the cited public Cremophor EL / CAS 61791-12-6 SDS. Other public suppliers may classify differently; final EL-10/EL-20/EL-40 classifications require the Richest grade-specific SDS.; H319

SECTION 12: Ecological information

Environmental fate	The public SDS reports ready biodegradability for its Cremophor EL product and aquatic test values, but no numerical ecological result is extrapolated here to all EL grades. Avoid release to drains and surface water; grade-specific ecological data require confirmation.

SECTION 13: Disposal considerations

Product disposal methods	Offer surplus and non-recyclable material to a licensed disposal company. Dispose of contents and contaminated packaging under applicable local regulations and do not discharge residues to sewer systems.
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-DGR: Not dangerous goods in the cited public SDS; no UN number, transport class or packing group and no transport environmental hazard/marine-pollutant indication. Final shipment classification is subject to the Richest SDS.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	No food, cosmetic or pharmaceutical compliance status is claimed. Confirm inventory status, residual ethylene oxide/1,4-dioxane controls and destination restrictions for each final EL grade; this item excludes hydrogenated-castor-oil CAS 61788-85-0.

SECTION 16: Other information

Full text of H-Statements	H319 Causes serious eye irritation
Revision date	2026-11-16
Version	1.0

SECTION 16: Other information

References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: EL-40 — EL-10, EL-20 and EL-40 technical indicators: http://www.kaidechem.com/product_detail_en/20.html | Cremophor EL Safety Data Sheet, CAS 61791-12-6: https://www.chemicalbook.com/msds/Cremophor-EL.htm | Castor Oil, Ethoxylated — CAS 61791-12-6 and SDS documentation: https://ebiz-newtest.merckmillipore.com/MK/en/product/sigma/c5135 | Castor Oil 36 EO — ethoxylated castor oil identity reference: https://www.ataman-chemicals.com/en/products/castor-oil-36-eo-1681.html | Castor Oil Polyoxyethylene Ether EL Series Specifications: https://www.sunwisechem.com/Castor-Oil-Polyoxyethylene-Ether-CAS-61791-12-6-pd579593758.html | Etocas 10 Product Page: https://www.crodaagriculture.com/en-gb/product-finder/product/152-etocas_1_10 | Castor Oil 20 EO Product Page: https://www.ataman-chemicals.com/en/products/castor-oil-20-eo-2041.html | Castor Oil 40 EO Product Page: https://www.ataman-chemicals.com/en/products/castor-oil-40-eo-1677.html | Emulsogen EL 200 Product Page: https://www.clariant.com/pt/Solutions/Products/2013/12/09/18/26/Emulsogen-EL-200 | Emulsogen EL 400 Product Page: https://www.clariant.com/de/Solutions/Products/2014/01/16/15/29/Emulsogen-EL-400 | AGNIQUE CSO 40 & 20 Product and Safety Summary: https://atamankimya.com/sayfalar.asp?LanguageID=2&cid=3&id=8&id2=13656
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.