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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Xanthan Gum Petroleum Grade	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

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

Product name	Xanthan Gum Petroleum Grade
Synonyms	No data available
CAS No.	11138-66-2
EC No.	234-394-2
Molecular formula	(C35H49O29)n
Molecular weight	No data available
Relevant identified uses	Oil-drilling fluid viscosifier and rheology modifier; Seawater-based drilling fluid rheology control, supported by 0.285% seawater rheology data.
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
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SECTION 2: Hazards identification

GHS Classification	Not classified as hazardous according to Regulation (EC) No 1272/2008
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	Xanthan Gum Petroleum Grade
CAS No.	11138-66-2
EC No.	234-394-2
Classification	Not classified as hazardous according to Regulation (EC) No 1272/2008
Concentration	Not applicable as a single assay

SECTION 4: First-aid measures

If inhaled	Inhalation: remove to fresh air

SECTION 4: First-aid measures

In case of skin contact	Skin: wash thoroughly with soap and water for at least 15 minutes, remove contaminated clothing and launder before reuse.
In case of eye contact	Eyes: flush with water for at least 15 minutes, lifting eyelids occasionally and removing contact lenses if easy
If swallowed	Ingestion: if conscious, give plenty of water and call a physician
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; do not use a solid water stream that may scatter burning material. Treat finely divided airborne product as combustible dust and as a Class A fire; it may smoulder. Firefighters should wear full protective equipment and approved SCBA. Thermal decomposition may produce carbon monoxide and carbon dioxide.
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	No data available
Advice for firefighters	Wear self-contained breathing apparatus and protective clothing appropriate for the surrounding fire.

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, wear PPE and avoid dust generation. Shovel, sweep, HEPA-vacuum or wet-sweep dry material into a container for recovery or disposal. Do not let product enter drains; wet spills are extremely slippery and must be cleaned until all traces and slip hazards are removed. Follow local requirements for any flushing water.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid ingestion and dust inhalation; minimise dust generation and avoid skin, eye and clothing contact. Wash thoroughly after handling. Store in well-closed/sealed containers in a ventilated, cool, dry place; Anmol specifies 2–40°C (36–104°F). Protect containers from physical damage and observe warnings for empty containers retaining dust.
Conditions for safe storage, including incompatibilities	Keep tightly closed in a dry, cool, well-ventilated place; keep away from heat and ignition sources

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.

SECTION 8: Exposure controls/personal protection	
Appropriate engineering controls	Use local exhaust ventilation. Anmol lists ACGIH recommendations of 10 mg/m³ TWA inhalable particles and 3 mg/m³ TWA respirable particles, and OSHA PELs of 15 mg/m³ TWA total dust and 5 mg/m³ TWA respirable fraction. CP Kelco gives a 10 mg/m³ total-inhalable-dust OES (8 h TWA). Use an approved dust respirator if limits are exceeded or irritation occurs, splash-proof goggles, gloves for extended contact, normal work clothing/lab apron, and access to eyewash and safety shower.
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	Free flowing powder or particles
Colour	White or yellowish-white in the Ph Eur specification; SDS sources describe cream to light yellow or white to light yellowish-brown.
Odour	Slight, characteristic odour.
Melting point / freezing point	Not applicable — high-molecular-mass polysaccharide; the Anmol SDS reports melting point as N/A.
Boiling point / boiling range	Not applicable as a true boiling point — the Anmol SDS states Decomposes.
Flammability	Finely divided, air-suspended product should be treated as combustible dust (CP Kelco). It burns on contact with flame, tends to self-extinguish when the ignition source is removed and may smoulder.
Explosion / flammability limits	Not applicable as numerical vapour limits; the Anmol SDS states N/A but warns that sufficient quantities of reduced-particle-size material can create a dust explosion.
Flash point	Not applicable — solid polysaccharide powder; the Anmol SDS reports N/A.
Auto-ignition temperature	>200°C (>392°F) in the Anmol SDS; CP Kelco likewise states above 200°C.
Decomposition temperature	No numerical decomposition temperature reported. CP Kelco states that the product does not undergo spontaneous decomposition; the Anmol SDS identifies boiling point as Decomposes.
pH	6.0–8.0 for a 10.0 g/L solution (Ph Eur specification); the SDS describes the product/solutions as approximately neutral.
Viscosity	Not less than 600 cP at 24 ± 1°C by the USP/NF rotational method: 3.0 g xanthan gum plus 3.0 g potassium chloride dispersed in 250 mL water with an additional 44 mL rinse, mixed for 2 h, No. 3 spindle at 60 rpm. Ph Eur also specifies minimum 600 mPa·s.
Solubility	Soluble in cold and hot water forming high-viscosity solutions
Partition coefficient n-octanol/water	Not applicable as a single high-molecular-mass polysaccharide value; no n-octanol/water partition coefficient is reported.
Vapour pressure	Not applicable — high-molecular-mass solid polysaccharide; no vapour-pressure value is reported.
Density and/or relative density	ca.0.7-0.9 g/cm3, grade dependent
Relative vapour density	Not applicable — solid polysaccharide powder.

SECTION 9: Physical and chemical properties

Particle characteristics	Free-flowing powder. Finely divided and air-suspended material is a combustible dust; sufficient quantities at reduced particle size can create a dust explosion. Wet product makes surfaces extremely slippery.
Decomposition	Decomposes on strong heating (>200 °C)

SECTION 10: Stability and reactivity

Reactivity	Avoid contact with strong oxidisers; Anmol additionally lists strong reducing agents, strong acids and strong bases as incompatible.
Chemical stability	Product is stable (CP Kelco and Anmol SDS). Store sealed in a cool, dry place.
Possibility of hazardous reactions	Hazardous polymerisation/reactions will not occur under normal conditions (CP Kelco/Anmol).
Conditions to avoid	Heat, humidity and dust generation; avoid excessive airborne dust and contact with incompatible materials.
Incompatible materials	Strong oxidisers; Anmol also lists strong reducing agents, strong acids and strong bases.
Hazardous decomposition products	No spontaneous decomposition; thermal decomposition may include carbon dioxide and carbon monoxide.

SECTION 11: Toxicological information

Acute toxicity	Anmol SDS: inhalation dust/mist LC50 21 mg/L (rat, 1 h); oral LD50 20,000 mg/kg (mouse) and 45,000 mg/kg (rat).
Skin corrosion irritation	Dry powder may cause irritation in some individuals; solutions are non-irritating (CP Kelco). Prolonged contact with dry powder may dry or chap skin.
Serious eye damage irritation	May cause mild eye irritation (Anmol SDS); flush with water and obtain advice if irritation develops or persists.
Carcinogenicity	No reliable product-specific carcinogenicity conclusion was available in the consulted CP Kelco SDS; no value is inferred.
Additional information	Anmol reports no known significant mutagenicity, teratogenicity, developmental or fertility effects. Excessive dust inhalation may be annoying and mechanically impede respiration because the hygroscopic gum can form a paste or gel in the airway (CP Kelco). Water-contaminated spills are extremely slippery.

SECTION 12: Ecological information

Ecotoxicity	Rainbow trout (Oncorhynchus mykiss) LC50 320–560 mg/L, 96 h (Anmol SDS).
Bioaccumulative potential	Does not bioaccumulate (Anmol SDS).
Other adverse effects	Avoid release into the environment; runoff from fire control or dilution water may cause pollution (Anmol SDS).

SECTION 13: Disposal considerations

Product disposal methods	Dispose of product and container in accordance with applicable federal, state and local regulations and local requirements in the country of use. Recover material for reclamation where practical; avoid uncontrolled environmental release.
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	No
Special precautions for user	Keep containers closed and secured during transport. Follow local transport requirements.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	Anmol: not regulated for DOT/ADR/RID, IMDG or IATA; TSCA and Canadian DSL listed; not a WHMIS-controlled product; no CERCLA RQ, SARA 302 TPQ or SARA 313 reporting; no listed Clean Air Act hazardous pollutants; not known to contain California Proposition 65 chemicals. CP Kelco states that it is unaware of regulations defining xanthan gum as dangerous and that a chemical safety assessment was not performed.

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: Xanthan Gum — SDS GHS / Material Safety Data Sheet: https://www.xanthangum.mubygroup.com/xanthangumSDS-GHS.html | Xanthan Gum Commercial Pure and BP/Ph Eur/USP-NF/FCC Food Grade — Specifications: https://www.xanthangum.mubygroup.com/ | KELTROL F (Xanthan Gum, Food Grade) — CP Kelco Safety Data Sheet, public SDS mirror: https://nextsds.com/sds/en/281331501263815/xanthan-gum-food-grade
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.