



## PRODUCT SPECIFICATION

Product Name	Kelzan® S
Alternative Name	Xanthan Gum
Specification Reference	KES/4 (15/05/0029770)

## SALES SPECIFICATION

Property	Requirement
Particle size:	Tyler Standard Screen Scale
-28 mesh (600µm)	Not less than 98% through
-42 mesh (355 µm)	Not less than 92% through
Loss on drying	6-16%
Powder colour	Not less than 71
Dispersibility	
-1% gum in Synthetic Tap Water	0 lumps
Viscosity	
- 1% gum in DI water (60rpm)	800-1200 mPa.s (cP)
Solution pH	
- 1% gum in DI water	5.0-7.6

## NOTES

### Description

Kelzan S is an industrial grade of xanthan gum that can be dispersed in water easily.

### Applications

Household, institutional and industrial cleaners, jet printing of carpets, textured coatings, pesticide suspension concentrates, pigment and mineral suspensions, silicone emulsions.

### Storage conditions

Stored in a roofed and well-ventilated area in the unopened original package. Functional properties of the product are guaranteed to conform with the stated sales specifications for 1095 days from the date of manufacture when stored under these conditions. Product quality should be re-evaluated prior to use if this "Best Before" date has been exceeded.

### Exclusion of Liability

Information contained in this publication is accurate to the best of the knowledge and belief of Tennants.

Any information or advice obtained from Tennants otherwise than by means of this publication and whether relating to Tennants materials or other materials, is also given in good faith. However, it remains at all times the responsibility of the customer to ensure that Tennants materials are suitable for the particular purpose intended.

Tennants accepts no liability whatsoever (except as otherwise provided by law) arising out of the use of information supplied, the application, adaptation or processing of the products described herein, the use of other materials in lieu of Tennants materials or the use of Tennants materials in conjunction with such other materials.

### Health and Safety

A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on the handling precautions and emergency procedures. This must be consulted fully before handling, storage and use.



## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

#### 1.1 Product Identifier

Product Name Kelzan® S  
HMRC Tariff Number  
Reach Registration Number

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

Identified use(s): Rheology modifier, Stabilizer and thickener. Cleaners, Paint, Coatings, Mineral and pigment suspensions, Agriculture chemicals.

#### 1.3 Details of the supplier of the safety data sheet

Tennants Distribution Limited  
Hazelbottom Road  
Cheetham  
Manchester  
M8 0GR  
Tel: 44(0)161 205 4454  
Fax: 44(0) 161 203 4298  
Email: [msds@tennantsdistribution.com](mailto:msds@tennantsdistribution.com)

#### 1.4 Emergency telephone number

Tel: 44(0)844 335 0001 (24 hours)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

OSHA Hazard: Warning: Combustible dust. Ensure appropriate electrical classification and avoidance of ignition sources in dusty environments. Handle in a manner consistent with good industrial hygiene practices--avoid creating or inhaling aerosols of this or any other material.

**Principle Routes of Exposure:** Inhalation. Skin contact.

#### Non-classified Hazards

**Slip Hazard:** Slip hazard when spilled material becomes wet.

**Eyes:** Dry powder may cause foreign body irritation in some individuals.

**Skin:** Prolonged contact with the dry powder may cause drying or chapping.

**Inhalation:** Hygroscopic properties of the gum can form a paste or gel in the airway. Inhalation of dust may cause respiratory tract irritation. Excessive inhalation of dust may cause coughing and sneezing.

**Ingestion:** Not toxic if swallowed (less than a mouthful) based on available information.

**Additional toxicological hazards:** Refer to Section 11

#### Other precautions

Xanthan gum – 11138-66-2

Avoid dust formation, keep away from heat, flame sparks and other ignition sources. Wet material on walking surfaces is slippery.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Xanthan gum  
CAS Number: 11138-66-2  
EC Number 234-394-2

Glyoxal  
CAS Number: 107-22-2  
EC Number: 203-474-9

Xanthan gum – 11138-66-2  
Regulation (EC) 1907/2006: REACH exempt

Glyoxal – 107-22-2  
Regulation (EC) 1907/2006: REACH 01-2119461733-37-XXXX  
\*Registered with an “OR” (EU REACH “Only Representative”)



<b>4. FIRST AID MEASURES</b>
<b>4.1 Description of first aid measures</b>
<b>General Advice</b> Remove material from eyes, skin and clothing. In case of doubt or when symptoms persist, seek medical attention. Wash heavily contaminated clothing before reuse.
<b>Inhalation</b> Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
<b>Skin contact</b> Wash off with soap and plenty of water.
<b>Eye contact</b> Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes. If eye irritation persists, seek medical attention.
<b>Ingestion</b> No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.
<b>5. FIRE FIGHTING MEASURES</b>
<b>5.1 Extinguishing Media</b> Treat as "Class A" fire. Product will burn when in contact with a flame. Self-extinguishes when ignition source is removed. Tends to smoulder. Suitable extinguishing media: Water, Dry chemical, Carbon dioxide (CO <sub>2</sub> ).
<b>5.2 Hazardous combustion products</b> Carbon dioxide, Carbon monoxide.
<b>5.3 Dust explosion hazard</b> Can contain sufficient fines to cause a combustible dust explosion. Do not breathe smoke, gases or vapours generated.
<b>5.3 Advice for fire-fighters</b> As in any fire, wear self-contained breathing apparatus (SCBA) pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. NFPA: Health:1, Flammability: 1, Instability: 0. HMIS: Health: 1, Flammability: 1, Physical Hazard (Reactivity): 0.
<b>6. ACCIDENTAL RELEASE MEASURES</b>
<b>6.1 Personal precautions, protective equipment and emergency procedures</b> Wet material on walking surfaces will be extremely slippery. Avoid dust formation. In case of exposure to high levels of airborne dust, wear a personal respirator in compliance with national legislation.
<b>6.2 Methods and material for containment and cleaning up</b> Use vacuum equipment designed specifically for combustible dust. Take precautionary measures against static discharges. The use of water wash down is not recommended unless the spilled material is already wet. Disposal information -Refer to Section 13
<b>6.4 References to other sections</b> For instructions on waste treatment, see section 13.
<b>7. HANDLING AND STORAGE</b>
<b>7.1 Precautions for safe handling and storage</b> Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid conditions that generate airborne dust in handling, transfer and clean up. Product may form combustible dust-air mixtures. Keep away from heat, flame sparks and other ignition sources. Avoid emptying package in or near flammable vapours. Static charges may cause flash fire. Remove material from eyes, skin and clothing.
<b>7.2 Conditions for safe storage, including possible incompatibilities</b> Store in a roofed and well-ventilated area in the unopened original package.
<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
<b>8.1 Engineering controls</b> Ventilation: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits in this section. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.
<b>Personal protective equipment</b> Nuisance particles/nuisance dust: If not specified dusts are: ACGIH: 10 mg/g3 (total dust), 3 mg/m3 (respirable fraction) OSHA PEL: 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction)



<b>Respiratory protection</b> Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposures exceeds established guidelines. Consult the respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer.
<b>8.2 Exposure limits</b>
<b>Xanthan gum – 11138-66-2</b> Exposure limits: Not established OSHA – TWA: Not established
<b>Glyoxal – 107-22-2</b> Canada – British Columbia – OEL – Sensitizer Designated substances Canada – British Columbia – OEL – 0.1 mg/m <sup>3</sup> TWAs *Dust: OSHA has not established specific exposure limits for this material. However, OSHA has established limits for particulates not otherwise regulated (PNOR) which are the least stringent exposure limits applicable to dusts.
<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
9.1 Information on basic physical and chemical properties
Appearance White to tan
Odour Odourless
Physical state Powder
pH Approximately neutral (1% solution)
Flash point Not applicable
Water solubility Soluble, forms viscous solutions
<b>Note:</b> These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.
<b>10. STABILITY AND REACTIVITY</b>
<b>10.1 Stability</b> Stable under recommended storage conditions. Hazardous polymerization does not occur.
<b>10.2 Conditions to avoid</b> Avoid dust formation.
<b>10.3 Incompatible materials</b> Strong oxidizing agents.
<b>10.4 Hazardous decomposition products</b> Thermal decomposition products: Carbon monoxide, Carbon dioxide (CO <sub>2</sub> )
<b>10.5 Possibility of Hazardous Reactions</b> Hazardous polymerization will not occur
<b>11. TOXICOLOGICAL INFORMATION</b>
<b>11.1 Information on toxicological effects</b> <b>Toxicological data sources:</b> Data from laboratory studies conducted by CP Kelco and/or from the scientific literature on components are summarized below.
<b>Xanthan gum – 11138-66-2</b> LD50 Oral, >5000 mg/kg (rat) Chronic effects: No adverse effects observed in long-term feeding studies with rats (up to 1,000 mg/kg/day) Allergy: No skin allergy observed in guinea pig following repeated skin exposure Irritation: Non-irritating skin (rabbit), Non irritating eye (rabbit) Reproductive effects: No adverse effects were observed in a 3-generation reproduction study with rats (up to 500 mg/kg/day)/
<b>Glyoxal – 107-22-2</b> LD50 Oral, 3000 mg/kg (rat) Sensitization: May cause sensitization of susceptible persons
<b>12. ECOLOGICAL INFORMATION</b>
<b>12.1 Toxicity</b> Ecotoxicity: Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Persistence/Degradability: This product is biodegradable Bioaccumulative potential: Inherently biodegradable <b>Xanthan gum – 11138-66-2</b> BOD: BOD≈~200mg O <sub>2</sub> /gram



**PRODUCT: KELZAN® S - XANTHAN GUM (KES) REVISION: 4 DATED: 02/06/15 PAGE 5 OF 5**

COD: COD≈1600mg O<sub>2</sub>/gram  
96-Hour LC50: Rainbow trout: 490 mg/L  
48-Hour EC50: Daphnia magna: 980 mg/L  
Germany – Water Classification (VwVwS) – Annex 3 5156: 1  
**Glyoxal – 107-22-2**  
Germany – Water Classification (VwVwS) – Annex 2 1130: 1

**13. DISPOSAL CONSIDERATIONS**

**13.1 Methods for waste treatment**

Dispose in accordance with local, state and national regulations.

**Xanthan gum – 11138-66-2**

European Waste Catalogue (EWC): 160306

**14. TRANSPORT INFORMATION**

This material is NOT classed as hazardous for transport by ADR/RID, IMDG, ICAO and IATA

**15. REGULATORY INFORMATION**

**15.1 Components of the product are on the following inventory lists**

Canada (DSL) - Listed  
Australia (AICS) - Listed  
China (IECSC) - Listed  
Japan (ENCS) - Listed  
Korea (KECL) - Listed  
New Zealand (NZIoC) - Listed  
Philippines (PICCS) - Listed  
USA (TSCA) – Listed

**16. OTHER INFORMATION**

**Key abbreviations and acronyms:**

ADR: International Carriage of Dangerous Goods by Road  
BOD: Biochemical Oxygen Demand  
CLP: Classification, Labelling and Packaging  
COD: Chemical Oxygen Demand  
D.O.T: U.S. Department of Transportation  
ICAO: International Civil Aviation Organisation  
IATA: International Air Transport Association  
IMOL International Maritime Organisation  
IMDG: International Maritime Dangerous Goods  
INCI: International Nomenclature of Cosmetic Ingredients  
OES: Occupational Exposure Standard  
OR: EU REACH Only Representative  
PPE: Personal Protective Equipment  
RID: International Carriage by Rail  
SCBA: Self-contained breathing apparatus  
TLV-STEL: Threshold Limit Values – Short Term Exposure Limits  
TWA: Time Weighted Averages

**Source of key data used to compile the data sheet**

Supplier information

**Modifications from last revision**

The Specification has been reviewed and updated. The Safety Data Sheets have been revised throughout in accordance with current requirements

**Date:** 02/06/15

**Copyright© Tennants Distribution Ltd (2015)**