

## TDS – KeraSoy Pillar

### Information

---

#### Product Description

KeraSoy Pillar is a blend specifically developed for the production of Pillar candles. It is suitable for further blending with fragrances and oil soluble dyestuffs. Kerasoy Pillar blend is biodegradable and vegan friendly. No animal products are used, and no animal testing has been carried out in its manufacture.

Due to the prevalence of genetically modified soybean crop in the market we are unable to guarantee entirely non-GMO sources, but we aim to source non-GMO wherever possible.

#### Physical Properties

Test	Method	Specification	Typical
Congealing Point °C	ASTM D938	43-52	47.0
Melting Point °C	IP371	57-63	60.0
Viscosity @ 100°C	ASTM D445	7-10	8.4cSt
Penetration @ 25°C	ASTM D1321	25-40	32 dmm
Colour	ASTM D1500	1 Max	0.7

#### Manufacturers Notes

KeraSoy Pillar does not require additives, other than fragrance and colour required by the Candle maker. Old or partial candles may be remelted and the wax reused but it is advisable not to heat the wax above 85°C or heating for extended lengths of time. Waxes should be stored in a cool, dry location away from direct heat, sunlight and moisture.

#### Moulds

Moulds should be clean and free of contaminants. They should be at least at room temperature, although pre-heating to approx. 45 - 50°C can be beneficial.

*The information and recommendations in this publication are, to the best of our knowledge, reliable. Users must make their own tests to determine the suitability of these products for their own particular purposes. The company makes no warranty of any kind, expressed or implied, including those of merchantability or fitness for a particular purpose, other than that the material conforms to its applicable current Standard Specifications.*

Date Prepared: 28FEB17

Date Revised: 26AUG20

Version: 5.0

### Colour

Most dyes work with KeraSoy Pillar; powder, liquid, chips, blocks, etc. When using powder dyes, heat the wax to approx. 75°C, add the dye and mix until dissolved. Powder dyes may also be dissolved in fragrance and then added to the melted wax, be sure that the dye has dissolved completely before adding. When using powder dyes dissolved in fragrance, liquid dyes, or colour blocks heat the wax to 70°C. If you wish to make your candle darker or “richer”, add a little black dye to the colour you are using.

### Fragrance

KeraSoy Pillar has been designed for fragrance at levels between 5 - 10%. Fragrance which is specifically developed for use with natural waxes is highly recommended. Burn pool size and depth greatly affect fragrance throw so correct wicking is paramount. Some fragrances may react poorly with the wax causing bleeding, objectionable surface finishes or poor flame quality. This has been found to be exaggerated when using fragrances specifically designed for use in Paraffin wax candles.

### Wicking

Natural waxes tend to require larger wick sizes than traditional paraffin waxes. Fragrance, colour and candle configuration have a great impact on the best wick choice. Too large of a wick may cause sooting, accelerated burn times and guttering (wax leaking through the side of the candle). Too small a wick will cause tunneling and produce a smaller flame. Keep wicks trimmed to ¼ inch. If you experience poor flame quality or stability, try a different type of wick. Test burning should be done after the candle has had a chance to sit for 48 hours after pouring.

### Melting

Temporary high temperatures (up to 90°C) have no adverse effect as long as the wax is cooled back down quickly. Higher temperatures may cause the wax to discolour. Allow the wax to cool to your desired pour temperature, add the fragrance and mix well. Be sure to stir/mix the wax while melting. Avoid using Pillars containing copper and zinc as this may accelerate discolouration. Stainless Steel is the material of choice although mild steel is acceptable. Digital temperature probes are readily available and are a safer choice than the traditional Mercury in glass type.

*The information and recommendations in this publication are, to the best of our knowledge, reliable. Users must make their own tests to determine the suitability of these products for their own particular purposes. The company makes no warranty of any kind, expressed or implied, including those of merchantability or fitness for a particular purpose, other than that the material conforms to its applicable current Standard Specifications.*

Date Prepared: 28FEB17

Date Revised: 26AUG20

Version: 5.0

### Pouring

Pour temperatures may vary according to mould type & size, fragrance & dye used and the effects the candle maker wishes to achieve. Greater release from the moulds may be achieved by pouring at temperature of around 55 - 65°C, although this will be dependent upon the size and shape of the candle being produced. Fragrance should be added and mixed immediately prior to pouring where practical. If you experience difficulties with your pour temperature, try a lower or higher temperature in increments of 5 - 10°C. Consider pouring into pre heated moulds for enhanced release properties

### Double-Pour

KeraSoyPillar is formulated to require only a single pour, however for some large Pillars; a top-up is required to achieve the best candle surface. A small amount of wax at a slightly warmer temperature than the candle was poured at can be used to top-up the candle before the candle is fully cool (pouring the top-up once the candle is completely cool may result in a reduction of adhesion to the Pillar).

### Candle Cooling

Cool undisturbed candles at room temperature (about 25°C). Candles should be allowed to sit undisturbed for 48 hours before test burning.

### Test Burn:

Check wicking. Test burn the candle for burn pool diameter and “mushrooming” after it has cooled for 48 hours. Mushrooming is when carbon and/or other substances build up on the end of the wick interfering with combustion. Mushrooming can cause sooting and poor odours. Try different wicks until you have your desired burn pool diameter and a good clean flame.

**Every combination of size, wax, dye, fragrance and wick must be tested for burn quality**

*The information and recommendations in this publication are, to the best of our knowledge, reliable. Users must make their own tests to determine the suitability of these products for their own particular purposes. The company makes no warranty of any kind, expressed or implied, including those of merchantability or fitness for a particular purpose, other than that the material conforms to its applicable current Standard Specifications.*

## SDS – Kerasoy Pillar

### Information

---

#### 1. Identification of the Substance/Preparation and the Company/Undertaking

##### 1.1 Product identifier:

<b>Product name:</b>	Kerasoy Pillar
<b>REACH registered name:</b>	Not determined
<b>REACH registered No:</b>	Not determined
<b>CAS Number:</b>	Not determined

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

**Identified use(s): Sectors of Use:-** SU3, SU5, SU7, SU8, SU10, SU11, SU12, SU17, SU19  
specially formulated for the manufacture of Pillar Candles

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

Kerax Limited  
Moorland Gate House  
Cowling Road  
Chorley  
Lancashire, PR6 9DR  
Telephone: +44 (0) 1257 237350

##### 1.4 Emergency telephone number: +44 (0) 7811 262958 (24 Hours)

**Email address:** laboratory@kerax.co.uk

---

#### 2. Hazards Identification

##### 2.1 Classification of the Substance or Mixture:

Does not contain any components which are hazardous according to DSD [67/548/EC] or CLP Regulation 1272/2008/EC

##### 2.2 Label Elements:

Does not require a hazard warning label in accordance with DSD [67/548/EC] or CLP Regulation 1272/2008/EC

### 2.3 Other Hazards:

- **PBT:** This product is not identified as a PBT / vPvB substance
- Hot liquid may cause thermal burns.

## 3. Composition

### 3.1 Substances: N/A

**3.2 Mixtures:** Saturated and unsaturated vegetable lipids predominantly containing triglycerides, diglycerides and monoglycerides

CAS-No:	Substance Name	Mass % Range	EC Number	REACH Reg No
-	-	-	-	-
-	-	-	-	-

There are no ingredients present which, within current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section in accordance with Regulation (EC) No. 1272/2008

## 4. First aid measures

### 4.1 Description of First Aid Measures

**General Information:** Remove contaminated / saturated clothing immediately. In case of accident or illness seek medical advice immediately.

**Inhalation:** Remove the affected person to fresh air, keep warm and rest. If recovery is not rapid, obtain medical attention

**Skin Contact:** Wash the affected parts of the body with soap and water. No emergency measures are necessary but if adverse skin effects follow, refer for medical attention.

**Eye Contact:** Flush eyes immediately with fresh water for at least 5 minutes while holding the eyelids open. No emergency measures are necessary but if adverse eye effects follow, refer for medical attention.

**Ingestion:** Do not induce vomiting. No emergency measures are needed but if adverse health effects follow or large amounts are swallowed, refer for medical attention.

**Self-Protection of First Aider:** First aider, pay attention to self-protection.

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

**Inhalation:** Over-heated oil can produce fumes which may be irritant when breathed in.

**Skin Contact:** May cause slight irritation to skin.

**Ingestion:** No known significant effects or critical hazards

**Eye Contact:** May cause slight irritation to eyes.

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

In contact with or splashed by hot liquid:

**Skin Contact** Cool the skin immediately with cool water. Treat burns according to their severity. Obtain medical attention. Never try to remove the material with solvents.

**Contact with eyes** Cool the area immediately with cold water. Seek advice of an ophthalmologist.

**Specific Treatment:** First Aider, decontamination, treatment of symptoms.

**Notes to doctor:** Treat symptomatically.

---

## 5. Firefighting measures

**5.1 Extinguishing media:** Foam, dry chemical, carbon dioxide, water mist.

**5.2 Special hazards arising from the substance or mixture:** Slight flammability hazard when exposed to heat or flame. During a fire, toxic gases (carbon monoxide, nitrous gases) may be generated by thermal decomposition or combustion.

**5.3 Advice for firefighters:** Only suitably trained personnel should attempt to tackle fires. Do not stay in the danger zone without respiratory protective equipment and protective clothing.

---

## 6. Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** Surfaces may become slippery after spillage.

Date Prepared: 28FEB17

Date Revised: 22FEB18

Version: 3.0

**6.2 Environmental precautions:** Water may be used to flush spills away from sources of ignition. Do not allow the product to enter public drainage system or open water courses.

**6.3 Methods and material for containment and cleaning up:** Use Sand or active clay to absorb spilled substance and remove to containers for disposal

**6.4 Reference to other Sections:** See sections 8 and 13

---

## 7. Handling and storage

**7.1 Precautions for safe handling:** Avoid skin contact. Avoid inhalation of vapour, mist or fumes. Do not wear contaminated clothing. Avoid contact with the eyes – wear chemical protective goggles when handling the product. Protective clothing such as impervious gloves should be worn if skin contact is anticipated. Protective clothing should be regularly inspected and maintained, discard oil saturated leather articles. The use of barrier and after work creams may be beneficial. Wash hands after working with the material.

**7.2 Conditions for safe storage, including any incompatibilities:** Keep containers tightly closed. Avoid heat and sources of ignition. Store in original containers or in other mild steel or high density polyethylene containers which are closable and clearly labelled. Clean up any spilled material immediately

**7.3 Specific end use(s):** This material is formulated for various uses.

---

## 8. Exposure Controls/Personal Protection

**8.1 Control Parameters:** None specified under normal working conditions. However in all circumstances exposure should be kept as low as reasonably possible by good ventilation and safe working practices.

**DNEL Values:** - No Data Available

**PNEC Values:** - No Data Available

### 8.2 Exposure Controls:

**Appropriate engineering measures:** Facilities storing or utilising this material should be equipped with an eyewash facility.

**Respiratory protection:** Inhalation of the vapour, fumes or mists should be avoided by safe working practices and good ventilation.

**Eye protection:** Wear appropriate eye goggles.

**Skin protection:** No special precautions are needed beyond clean working conditions and safe handling practices. Change heavily contaminated clothing.

**Hand protection:** Use impervious gloves [conforming to EN374] PVC is suitable for casual contact. If direct contact for more than 2 hours then Neoprene or nitrile gloves recommended.

**8.3 Environmental Exposure Controls:** See sections 6, 7, 12 and 13

## 9. Physical and Chemical Properties

### 9.1 Information on basic chemical and physical properties:

<b>Appearance:</b>	Liquid (at elevated temperature) Cream/White Solid (at ambient temperature)
<b>Odour:</b>	Neutral
<b>Odour threshold:</b>	Not determined
<b>pH:</b>	Neutral
<b>Melting point/ Congealing point:</b>	~47°C
<b>Boiling point/ range:</b>	Initial boiling point >300 °C
<b>Flash Point:</b>	> 150 °C (ASTM D92, COC)
<b>Evaporation Point:</b>	Not determined
<b>Flammability (solid, gas):</b>	May be combustible at high temperature
<b>Explosion Limits:</b>	Not determined
<b>Vapour pressure:</b>	Negligible
<b>Vapour density:</b>	Not determined
<b>Relative density (at 15°C):</b>	0.89 – 0.92
<b>Solubility in water:</b>	<1 mg/l
<b>Solubility in other solvents:</b>	Pet Ether, Ethyl Acetate, Soluble in vegetable oils.
<b>Partition coefficient n-octanol/water:</b>	Not determined
<b>Auto-ignition temperature:</b>	>200 °C
<b>Decomposition temperature:</b>	Not determined
<b>Viscosity (Kinematic, at 100°C):</b>	~8.4 cst
<b>Explosive properties:</b>	Not determined
<b>Oxidizing properties:</b>	Not determined

**9.2 Other Information:** None

## 10. Stability and Reactivity

**10.1 Reactivity:** This product is not reactive under normal storage and handling conditions (see section 7).



**10.2 Chemical stability:** Under normal storage and handling conditions, this product is stable. May react with strong oxidising agents, especially at high temperatures.

**10.3 Possibility of hazardous reactions:** No specific hazardous reactions are expected.

**10.4 Conditions to avoid:** Extremes of temperature (preferably, store between 5 & 39 °C). The product is combustible when heated >300°C.

**10.5 Incompatible materials:** May react with strong oxidants (e.g. chlorates, peroxides).

**10.6 Hazardous decomposition products:** Thermal decomposition or incomplete combustion may produce carbon monoxide, nitrous gases and irritating fumes.

## 11. Toxicological Information

**11.1 Information on toxicological effects** – CAS No 68334-28-1 Oils, vegetable, hydrogenated

### Acute Toxicity

Acute Toxicity (oral)	LD50 >2000mg/kg
Acute Toxicity (dermal)	LD50 >2000mg/kg
Acute Toxicity (inhalation)	Not volatile. It is not likely to be an inhalation hazard at normal ambient temperatures. If overheated, fumes and vapours are irritating to the breathing passages and lungs.

<b>Skin Corrosive / Irritation:</b>	Not Irritant
-------------------------------------	--------------

<b>Serious Eye Damage Irritation:</b>	Not Irritant
---------------------------------------	--------------

<b>Respiratory Sensitisation:</b>	No data available
-----------------------------------	-------------------

<b>Skin Sensitisation:</b>	Non sensitising OECD 406
----------------------------	--------------------------

<b>Repeated Dose Toxicity:</b>	No data available
--------------------------------	-------------------

<b>Mutagenicity:</b>	No data available
----------------------	-------------------

<b>Carcinogenicity:</b>	No data available
-------------------------	-------------------

<b>Reproductive Toxicity:</b>	No data available
-------------------------------	-------------------

## 12. Ecological Information

**12.1 Toxicity:** CAS No 68334-28-1 Oils, vegetable, hydrogenated

<b>Environmental Fate:</b>	Not established
<b>Aquatic toxicity (fish):</b>	No data available
<b>Aquatic toxicity (algae):</b>	No data available
<b>Aquatic toxicity (invertebrate):</b>	No data available
<b>Mobility:</b>	Data not available
<b>Biodegradation:</b>	Expected to be fully biodegradable.
<b>Bioaccumulation potential:</b>	Data not available
<b>Other Ecological information:</b>	No other adverse effects are observed. Do not allow uncontrolled leakage of product into the environment.
<b>Results of PBT and vPvB assessment:</b>	This substance does not fulfil the criteria for being classed as a PBT or vPvB substance.

---

## 13 Disposal Considerations

**13.1 Waste treatment methods:** Transport to authorised waste location, or incinerate under controlled conditions (EU Directives 2000/76/EC and 1999/31EC apply). European Waste Catalogue No. 050199/130899.

---

## 14. Transport Information

- 14.1 UN number:** Not Classified.
- 14.2 UN Proper shipping name:** Not Classified
- 14.3 Transport Hazard Class(es):** Not Classified
- 14.4 Packing Group:** Not Classified
- 14.5 Environmental Hazards:** None
- 14.6 Special Precautions for user:** None
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:** Not Classified
-

## 15. Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations	Directive 67/548/EC Regulation [EC] 1272/2008 Regulation [EC] 1907/2006
----------------	---

**15.2 Chemical Safety Assessment:** The supplier has not performed a chemical safety assessment of this substance.

---

## 16. Other Information

### Indication of changes:

- V2.0 - Slight amendment to Congealing Point & Viscosity Specifications
- V3.0 - Slight amendment to Congealing Point Specifications

### Abbreviations & Acronyms

PNEC	Predicted No Effect Level
DNEL	Derived No Effect Level
LD50	Median Lethal Dose
LC50	Median Lethal Concentration
CAS No	Chemical Abstract Services number
CLP	Classification Labelling and Packaging Regulation
ES	Exposure Scenario
EC	European Commission
EC No	European Chemical Number – EINECS - ELINCS
ECHA	European Chemical Agency
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances.
OECD	Organisation for Economic Cooperation and Development
DSD	Dangerous Substances Directive.
PBT	Persistent Bio accumulative Toxic
vPvB	very Persistent very Bio accumulative

### DISCLAIMER:

The information and recommendations contained herein are, to the best of Kerax Limited's knowledge and belief, accurate and reliable as of the date issued, but is offered without guarantee or warranty. They relate to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Conditions of use of the material are under the control of the user. Therefore, it is the user's responsibility to satisfy their self as to the suitability and completeness of such information for their own particular use.