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Version: 5.0



Information

Product Description

is a blend specifically developed for the production of container candles. It is suitable for further blending with fragrances and oil soluble dyestuffs. 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	34-42	39.0
Melting Point °C	IP371	42-48	45.5
Viscosity @ 100°C	ASTM D445	9-11	9.7cSt
Penetration @ 25°C	ASTM D1321	40-80	60dmm
Colour	ASTM D1500	1.0 Max	0.6

Manufacturers Notes

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 although 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.



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Containers

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

Colour

Most dyes work with; 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 the dye has dissolved completely before adding. When using powder dyes dissolved in fragrance, liquid dyes, colour blocks, chips or no dye 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

may be used with fragrance at levels up to 10-12%, however 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 tunnelling 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

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sure to stir/mix the wax while melting. Avoid using containers 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.

Pouring

Pour temperatures may vary according to mould type & size, fragrance & dye used and the effects the candle maker wishes to achieve. Greater adhesion to containers can be achieved by pouring at temperature close to congealing point (approximately 45 - 55°C). 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 better adhesion to glass containers.

Double-Pour

formulated to require only a single pour in most containers however, for some large containers; 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 container).

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 container, wax, dye, fragrance and wick must be tested for burn quality



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Information

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

1.1 Product identifier:

Product name:

REACH registered name: Not determined REACH registered No: Not determined CAS Number: 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 Container Candles

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



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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
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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.



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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.

Accidental release measures

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



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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.



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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:

Appearance: Liquid (at elevated temperature)

Cream/White Solid (at ambient temperature)

Odour: Neutral

Odour threshold: Not determined

pH: Neutral Melting point/ Congealing point: ~39°C

Boiling point/ range: Initial boiling point >300 °C **Flash Point:** > 150 °C (ASTM D92, COC)

Evaporation Point: Not determined

Flammability (solid, gas): May be combustible at high temperature

Explosion Limits:

Vapour pressure:

Negligible

Not determined

Negligible

Not determined

Solubility in other solvents: Pet Ether, Ethyl Acetate, Soluble in vegetable oils.

Partition coefficient n-octanol/water: Not determined

Auto-ignition temperature: >200 °C

Decomposition temperature: Not determined

Viscosity (Kinematic, at 100°C): ~9.7 cst

Explosive properties: Not determined Oxidizing properties: 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).



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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 $^{\circ}$ C). The product is combustible when heated >300 $^{\circ}$ 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

Skin Sensitisation:

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.

Non sensitising OECD 406

Skin Corrosive / Irritation: Not Irritant

Serious Eye Damage Irritation: Not Irritant

Respiratory Sensitisation: No data available

Repeated Dose Toxicity: No data available

Mutagenicity: No data available

Carcinogenicity: No data available

Reproductive Toxicity: No data available



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12. Ecological Information

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

Environmental Fate: Not established

Aquatic toxicity (fish): No data available

Aquatic toxicity (algae): No data available

Aquatic toxicity (invertebrate): No data available

Mobility: Data not available

Biodegradation: Expected to be fully biodegradable.

Bioaccumulation potential: Data not available

Other Ecological information: No other adverse effects are observed. Do

not allow uncontrolled leakage of product

into the environment.

Results of PBT and vPvB assessment: 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 Classified14.3 Transport Hazard Class(es): Not Classified

14.4 Packing Group: Not Classified14.5 Environmental Hazards: None14.6 Special Precautions for user: None

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not

Classified



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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. Section 9

V3.0 - Slight amendment to Congealing Point Specifications. Section 9

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

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