

Section 1: Product and Company information

Product Identification: **Scrap Wax**

Emergency Contact: CHEMTREC (Tel: 800 424 9300; 24 hour)

Intended use: Material to be repurposed in industrial uses.

Section 2: Hazards Identification

HMIS Rating: Health: 2
Fire: 1
Reactivity: 0
PPE: See section 8.
[4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum]

Solid Form

As supplied in the solid form, the material presents a minimal hazard. As with all petroleum based products, care should be taken to avoid unnecessary skin contact. Take care when handling heavy packages. If any product dust is present, avoid inhalation and eye contact and be aware of the risks associated with dust cloud ignition. Product will burn in a fire and release toxic fumes.

Liquid Form

The product is intended for use in the hot, molten state. Care should be taken to minimize or avoid exposure to product vapors when melting. The molten material can cause severe thermal burns if it contacts the eyes and skin.

Potential Health Effects

- Ingestion: Not believed to be toxic but may cause discomfort if swallowed.
- Skin contact: The product is petroleum based so repeated skin contact may cause irritation and even dermatitis and sensitization in some individuals. Seek medical advice in this situation. Molten product can burn the skin.
- Inhalation: Inhalation of solid product dust may lead to respiratory irritation. Inhalation of fumes from molten product can cause respiratory tract irritation, sore throats, dizziness, headache and nausea.
- Eye contact: In a finely divided form, i.e. dust or fragments, the product will act as a physical irritant to the eye. Molten product will cause burns to the eye. Fumes from the molten product may irritate the eye.

Chronic / other effects

None known

Section 3: Composition information

Spent investment casting wax with hydrocarbon & natural waxes, hydrocarbon and natural resins, stearic acid, metal stearates, polymers, cross-linked polystyrene, bisphenol A, oil soluble dye & fragrance.

As supplied, the component(s) listed below can present physical or health hazards;

Component	CAS number	OSHA PEL	SARA 313 listed?	Amount (% w/w)
Bisphenol A	80-05-7	Not established	Yes	0 - 30%
Styrene	100-42-5	100 ppm (TWA)	Yes	<0.05%
Paraffin Wax	8002-74-2	Not Established	No	10 - 30%

Synonyms for Bisphenol A: Bisphenol, BPA, 4,4'-isopropylidenediphenol

Section 4: First aid measures

Eyes: Solid product – Flush affected eye with clean running water for at least 10 minutes, holding eyelid open. Seek medical attention if pain/irritation persists.

Molten product - Flush affected eye with clean running water for at least 10 minutes, holding eyelid open. Do not remove adhering material. Seek medical attention immediately.

Skin: Solid product – Wash affected areas with mild soap and water. Remove contaminated clothing and launder before re-use.

Molten product – Cool affected areas with running water to remove heat. In general, do not remove adhering material - it may be necessary to cut through material surrounding a limb to prevent a tourniquet effect. Seek medical attention urgently.

Ingestion: Do not induce vomiting. Seek medical attention in severe cases.

Inhalation: Remove from exposure to fresh air. If breathing is difficult, a trained individual may administer oxygen. If the casualty is not breathing, a trained person should begin CPR. Get medical attention immediately.

Section 5: Fire Fighting Measures

Combustion: If heated above its flash point (over 185°C/ 365°F, COC) in the presence of air, this product will support combustion. The product contains hydrocarbon waxes and will burn on a suitable hot, organic substrate, i.e. wood, packaging, etc.

Fire Fighting: If the fire is small and it is safe to do so, fight the fire from a safe distance, using the correct extinguisher and taking extreme care to avoid exposure to combustion products. Do not fight a large fire – obtain immediate professional assistance. Do not enter an enclosed area containing a product fire without proper protective equipment and training in its use, i.e. self contained breathing apparatus.

Extinguishing: Use water based foam, dry powder or carbon dioxide extinguishers. The use of Media liquid water is not recommended since molten wax floats and will disperse.

Combustion: Intense heat, smoke, carbon dioxide, carbon monoxide and complex Products hydrocarbons.

Other Hazards: As with most solid organic compounds, a high dust concentration of this product may form an explosive atmosphere, subject to ignition by heat and static discharge. This is an unlikely scenario but users should be aware of the risk.

Section 6: Accidental Release Measures

Solid Product: Sweep up the spilled material. If it is clean, place in a suitable container for use. If it is contaminated, collect in a suitable container for disposal. Note that pelletized product can travel some distance when spilled. Prevent the spillage entering drainage channels. Spilled pellets also present a significant slip hazard.

Molten Product: Wear appropriate personal protective equipment – boots, eye protection & heat resistant gloves. Attempt to contain the spill by making dams with sand or earth. Water can be used to cool a spill but take extreme care when doing so. Allow the spill to solidify before collecting the material for disposal. Do not let molten product enter drainage channels.

Section 7: Handling and Storage

Storage: Keep product in its original packaging until used. Ideally, store indoors under dry conditions, avoiding extremes of temperature (keep between 5 & 30°C / 41 & 86°F) and direct sunlight. Keep away from sources of ignition, oxidizing agents and other chemicals.

Handling: Do not eat, drink or smoke whilst using this product. Use only in a well ventilated area and avoid breathing fumes and dust. Avoid skin and eye contact.

Section 8: Exposure Controls & Personal Protection

The following may be released from the product in the molten state.

Occupational Exposure limits:

Substance	CAS No.	OSHA PEL	ACGIH
Styrene	100-42-5	100 ppm (TWA) 200 ppm (Ceiling) 600 ppm (5 minutes in any 3 hours)	20 ppm BEI 40 ppm BEI
Bisphenol A	80-05-7	Not Established	Not Established
Paraffin Wax	8002-74-2	Not Established	2 mg/m ³ (TWA)

Engineering Control Measures:

The product should only be used in well ventilated areas. Local exhaust ventilation may be required, to minimise exposure to fume & vapour from the molten product. Mechanical methods to minimise exposure must take precedence over personal protective measures.

Personal Protective Equipment:

- Eyes & Face: Appropriate eye protection should be worn when handling slabs and pellets, when injecting the product and when assembling patterns. A full face shield is recommended for operations involving the transfer of molten product, i.e. refilling press reservoirs.
- Skin: The use of impermeable gloves is recommended to avoid long term skin exposure to the product.
- General: A good standard of industrial hygiene should be practiced when using this product. Wash hands thoroughly before eating, drinking or smoking. Contaminated clothing should be laundered before reuse.

Section 9: Physical & Chemical Properties (as supplied)

- Appearance: Waxy solid
Form: Blocks
Color: Dark Green/Blue/Brown
Odor (hot): Waxy, characteristic
Drop melting point: ~71°C (160°F)
Specific gravity: ~1.05
Solubility: Insoluble in water, soluble in common organic solvents.
Flash point: >185°C (365°F), Cleveland Open Cup

Section 10: Stability & Reactivity

- Stability: Stable as supplied. The product is organic, however, and will be subject to surface oxidation. Avoid holding the product in the molten state when not in use. Excessive thermal exposure will degrade the product.

Stir the molten product at all times to keep the solid filler in suspension.

Polymerization: Will not occur under normal processing conditions.

Reactivity: Not reactive under normal processing conditions.

Avoid: Sources of ignition, oxidizing agents, solvents.

Section 11: Toxicological Information

As supplied, the product is not considered to be toxic. In the molten state, the product will release potentially harmful vapors – care must be taken to observe applicable exposure limits. If the precautions advised elsewhere in the document are observed, the product presents little toxicological hazard.

The product does contain solid bisphenol A. Acute toxicity data for this material has been published;

Acute Oral LD50: 4.2g/kg (rat), 2.4g/kg (mouse)

However, the bisphenol A is encapsulated in wax so personal exposure should be very limited if the end user follows the guidelines presented in this MSDS.

Section 12: Ecological Information

No specific ecological information has been determined for this product. However, the product is insoluble in water and should not pose a serious threat to the environment.

Users of the product should, however, ensure that it is stored, handled and disposed of in such a manner that it is not released to the environment.

Section 13: Disposal Information

Dispose of used product, unwanted product and related packaging in strict accordance with Federal, State, Local or Provincial regulations.

Section 14: Transportation Information

This product is non-hazardous for transportation and is not regulated.

This product contains the following components which are subject to regulatory requirements;

Ingredient	CAS Number	SARA 302 (EHS) TPQ	SARA 304 (EHS) RQ	CERCLA RQ	SARA 313
Bisphenol A	80-05-7	No	No	No	Yes
Styrene	100-42-5	No	No	1000 lbs	Yes

SARA 311/312		Mixture			
Acute	Chronic	Fire	Pressure	Reactivity	
Yes	Yes	No	No	No	