



Material Safety Data Sheet

1. Product and company identification

Product name : BE SQUARE™ 195 Amber Wax
™ a trademark of Baker Hughes, Inc.

Supplier : BAKER PETROLITE POLYMERS DIVISION
A Division of Baker Petrolite Corporation
A Baker Hughes Company
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/MSDSs Call: 800-231-3606
(8:00 a.m.-5:00 p.m. cst, Monday - Friday)

Material Uses : Special: Numerous uses.

Code : 10026015

Validation date : 1/6/2010.

Print date : 1/6/2010.

Version : 5

Responsible name : Global Regulatory Affairs - Telephone 281-276-5400 or 800-231-3606

In case of emergency : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606 (North America 24 hour)
CANUTEC: 613-996-6666 (Canada 24 hours)
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

2. Hazards identification

Physical state : Solid.

Odor : Little or none.

Color : White to amber.

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Emergency overview : Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations. Heated material can cause thermal burns.
Avoid prolonged contact with eyes, skin and clothing. Heated material can cause thermal burns.

Routes of entry : Dermal contact. Eye contact. Inhalation.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Potential chronic health effects

Over-exposure signs/symptoms

Inhalation : None known.

Ingestion : None known.

Skin : None known.

Eyes : None known.

See toxicological information (section 11)

2 . Hazards identification

Additional information

If this product is heated, avoid inhalation of fumes. Caution should be taken to prevent generation of fumes or mists. Paraffin wax fumes are considered hazardous according to the OSHA hazard communication standard. This product has a low vapor pressure and is not expected to present a fume inhalation hazard at ambient temperatures.

3 . Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Hydrotreated microcrystalline wax	64742-60-5	60 - 100
1-Propene, polymer with ethene	9010-79-1	5 - 10
Ethene homopolymer	9002-88-4	5 - 10

Additional information

4 . First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** : Heated material can cause thermal burns. For skin contact with the hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate the heat. Cover the affected area with sheeting or gauze and get immediate medical attention. No attempt should be made to remove material from the skin or to remove contaminated clothing as the damaged flesh can be easily torn. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

Additional information

5 . Fire-fighting measures

Flammability of the product : No specific fire or explosion hazard.

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products : carbon dioxide, carbon monoxide

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards : As with most solid particulate organic materials, high concentrations of dusts from this product suspended in air are an explosion hazard in the presence of sparks, flames, and heat. Do not allow dust to accumulate on equipment and surfaces where this product is used. In the National Fire Protection Association (NFPA) Code 499, a "combustible dust" is any finely divided solid material 420 microns or less in diameter that presents a fire or explosion hazard when dispersed in air.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Hazard of slipping on spilled product. Product forms slippery surface when combined with water. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up

- Small spill** : Move containers from spill area. Allow product to solidify and then scrape up for disposal. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Allow product to solidify and then scrape up for disposal. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. To clean the floor and all objects contaminated by this material, use detergent solution. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Additional information

Spilled material can produce a slipping hazard. Spilled material is slippery if walked upon. Additionally if material is walked on, it will put a waxed finish on the floor that makes a slippery surface. If water is mixed with the spilled material, the walking surface becomes very slippery. Sweep up spilled material and place in an appropriate disposal container. Use sweeping compound or other cleaning aids to pick up residues. Wash down area thoroughly with water. Ensure that walking surfaces are not slippery before walking on them.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Storage** : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Additional information

Packaged material (boxes, bags) should be stored in conditions that avoid extremes of temperature. When temperature extremes are avoided, this product has an expiration date of three years from the date of manufacture. The expiration date can be extended for an additional three year interval if the batch is recertified by Baker Petrolite Quality Assurance. When the product is melted for use, care must be taken to avoid overheating the molten wax and causing oxidation of the product.

8 . Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredients:	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	Notations
Hydrotreated microcrystalline wax	US ACGIH	-	2	-	-	-	-	-	-	-	[a]
	OSHA PEL 1989	-	2	-	-	-	-	-	-	-	[a]
1-Propene, polymer with ethene	US ACGIH	-	10	-	-	-	-	-	-	-	[b]
	US ACGIH	-	3	-	-	-	-	-	-	-	[c]
	OSHA PEL	-	5	-	-	-	-	-	-	-	[d]
	OSHA PEL	-	15	-	-	-	-	-	-	-	[e]
Ethene homopolymer	US ACGIH	-	10	-	-	-	-	-	-	-	[b]
	US ACGIH	-	3	-	-	-	-	-	-	-	[f]
	US ACGIH	-	5	-	-	-	-	-	-	-	[d]
	US ACGIH	-	15	-	-	-	-	-	-	-	[e]

Form: [a]Fume [b]Inhalable [c]Respirable [d]Respirable fraction [e]Total dust [f]Respirable dust

Consult local authorities for acceptable exposure limits.

8 . Exposure controls/personal protection

Only components of this product with established exposure limits appear in the box above.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Take off contaminated clothing and wash before re-use.
- Personal protection**
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant gloves.
When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.
- Eyes** : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.
- Skin** : Wear long sleeves and other protective clothing to prevent repeated or prolonged skin contact.

9 . Physical and chemical properties

- Physical state** : Solid.
- Flash point** : Open cup: >176.67°C (>350°F) [Cleveland.]
- Auto-ignition temperature** : Not available.
- Flammable limits** : Not available.
- Color** : White to amber.
- Odor** : Little or none.
- pH** : Not available.
- Boiling/condensation point** : Not available.
- Initial Boiling Point** : Not available.
- Melting/freezing point** : 89.4 to 93.9°C (192.9 to 201°F)
- Relative density** : 0.9 to 1 (25°C)
- Density** : 7.497 to 8.33 (lbs/gal)
- Vapor density** : >1 [Air = 1]
- Odor threshold** : Not available.
- Evaporation rate** : Not available.
- VOC** : 0 g/l
- Viscosity** : Dynamic (98.9°C): 14 to 21 cP
- Solubility (Water)** : Insoluble
- Vapor pressure** : <0.013 kPa (<0.1 mm Hg)
- Pour Point** : Not available.

9 . Physical and chemical properties

Partition coefficient (LogKow) : Not available.

10 . Stability and Reactivity

- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Conditions of reactivity** : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
As with most solid particulate organic materials, high concentrations of dusts from this product suspended in air are an explosion hazard in the presence of sparks, flames, and heat. Do not allow dust to accumulate on equipment and surfaces where this product is used. In the National Fire Protection Association (NFPA) Code 499, a "combustible dust" is any finely divided solid material 420 microns or less in diameter that presents a fire or explosion hazard when dispersed in air.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethene homopolymer	LD50 Oral	Rat	>3000 mg/kg	-

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Ethene homopolymer	-	3	-	-	-	-

Chronic toxicity Remarks

1) Hydrotreated microcrystalline wax

Not available.

2) 1-Propene, polymer with ethene

Not available.

3) Ethene homopolymer

An ethene homopolymer (polyethylene) is a component of this product. Polyethylene in its solid form is not expected to have any significant toxicological effect, except intestinal blockage if swallowed. The only chronic effects seen in humans has been with exposure to polyethylene pyrolysis products. Workers exposed to these pyrolysis products had symptoms of eye, mucous membrane, and skin irritation, headaches, nausea, coughing, shortness of breath, and flu-like complaints (Robinson et al, 1982), indicative of polymer fume fever. Rats after inhaling polyethylene dust developed mild inflammatory changes in the lungs (Kochetkova et al, 1971). Prolonged inhalation of thermal degradation products from polyethylene caused neurological effects in rats (Zitting & Savolainen, 1979).

12 . Ecological information

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

Additional information

This product would be expected to biodegrade slowly, depending upon the conditions to which it is exposed. Under OECD Method 310D, the biodegradability is less than 25% after five days.

Ecotoxicological data on analogous hydrocarbons demonstrates that the hydrocarbon in this product has a low aquatic toxicity to fish, algae, and daphnia. Under OECD guidelines this product is classed as inherently biodegradable. The product is unlikely to bioaccumulate due to the carbon number being >14. Classification according to German Umweltbundesamt.de is "nwg".

Ecotoxicological data on analogous polymeric materials demonstrates that the polymers in this product have a low aquatic toxicity to fish, algae, and daphnia. Under OECD guidelines this product is classed as inherently biodegradable. The product is unlikely to bioaccumulate due to the large polymeric nature of the polymers. Classification according to German Umweltbundesamt.de is "nwg".

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		Remarks If transported in bulk above 100C (212F), product must be shipped as "Elevated temperature liquid, n.o.s., (contains *)", 9, UN3257, III * insert the active ingredient(s) (2 of them) in the product
TDG Classification	Not regulated.	-	-	-		Remarks If transported in bulk above 100C (212F), product must be shipped as "Elevated temperature liquid, n.o.s., (contains *)", 9, UN3257, III * insert the active ingredient(s) (2 of them) in the product

14 . Transport information

IMDG Class	Not regulated.	-	-	-	-
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PG* : Packing group

DOT Reportable Quantity : Not applicable.

Marine pollutant : Not applicable.

North-America NAERG : Not available.

15 . Regulatory information

HCS Classification : Not regulated.

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.**SARA 302/304/311/312 extremely hazardous substances**: No products were found.**SARA 302/304 emergency planning and notification**: No products were found.**SARA 302/304/311/312 hazardous chemicals**: No products were found.**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: No products were found.

CERCLA: Hazardous substances.: No products were found.

Clean Water Act (CWA) 307: No products were found.**Clean Water Act (CWA) 311**: No products were found.**Clean Air Act (CAA) 112 accidental release prevention**: No products were found.**Clean Air Act (CAA) 112 regulated flammable substances**: No products were found.**Clean Air Act (CAA) 112 regulated toxic substances**: No products were found.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Canada (CEPA DSL): : All components are listed or exempted.

Canadian NPRI : None of the components are listed.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.**EU regulations**

Hazard symbol or symbols :

Hazard symbol or symbols : Not available.

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : Not applicable.

International regulationsInternational lists : **Australia inventory (AICS)**: All components are listed or exempted.**China inventory (IECSC)**: All components are listed or exempted.**Japan inventory**: All components are listed or exempted.**Korea inventory**: All components are listed or exempted.**New Zealand Inventory of Chemicals (NZIoC)**: Not determined.**Philippines inventory (PICCS)**: All components are listed or exempted.**Additional information**

15 . Regulatory information

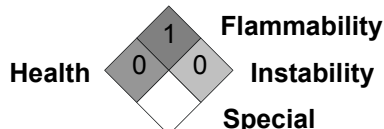
The components of this product meet the requirements of 21 CFR § 172.886 and/or § 172.888 - U.S.A. food additive regulations.

No chemicals that deplete the ozone are contained or used in the manufacture of this product.

16 . Other information

Label requirements : Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations. Heated material can cause thermal burns.

National Fire Protection Association (U.S.A.) :



Date of printing : 1/6/2010.

▣ Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this MSDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This MSDS was prepared and is to be used for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Because it has become common for purchasers of our products to file patents for specific end uses of our products, Baker Hughes advises its customers to research their particular end use for possible intellectual property issues with respect to third party patents.