

SAFETY DATA SHEET

Section 1. Identification

Product name

: SpectraFloc™ 620B FLOCCULANT

™ a trademark of Baker Hughes Incorporated.

Product code

: SPC620B

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

Identified uses

: Flocculant.

Print date

: 10/3/2016 : 10/3/2016

Validation date Version

: 2

Supplier's details

: Baker Petrolite LLC 12645 W. Airport Blvd.

Sugar Land, TX 77478

For Product Information/SDSs Call: 800-231-3606 (8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone

number (with hours of

operation)

: CHEMTREC: 800-424-9300 (U.S. 24 hour)

Baker Petrolite: 800-231-3606

(001)281-276-5400

CANUTEC: 613-996-6666 (Canada 24 hours)

CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the

substance or mixture

: SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B

AQUATIC HAZARD (ACUTE) - Category 3

GHS label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: Causes skin and eye irritation.

Harmful to aquatic life.

Precautionary statements

Prevention

: Wear protective gloves. Avoid release to the environment. Wash hands thoroughly after handling.

Response

: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, Continue rinsing. If eye irritation persists: Get medical attention.

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Storage

: Not applicable.

Section 2. Hazards identification

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label

elements

: Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise

classified

: Prolonged or repeated contact may dry skin and cause irritation.

Additional information

Aqueous solutions or powders that become wet, renders surfaces extremely slippery.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number	
Petroleum distillates	30 - 40	64742-47-8	
Polyoxyalkylenes	1 - 5	Trade secret.	

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Get medical attention if adverse health effects persist or are severe. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

: Causes eye irritation.

Inhalation

: No known significant effects or critical hazards.

Skin contact

: Causes skin irritation. Defatting to the skin.

Ingestion

: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact

: pain or irritation, watering, redness

Inhalation

: No specific data.

Skin contact

: irritation,redness,dryness,cracking

Ingestion

: No specific data.

Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment,

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: carbon dioxide,carbon monoxide,nitrogen oxides,halogenated compounds

Special protective actions for fire-fighters

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.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note; see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802. Additional information

Spilled material becomes very slippery when wet. Sweep up spills and place in a waste disposal container. Flush the area thoroughly with water and scrub to remove residue. If area is still slippery, apply dry absorbent compound and sweep up the mixture and place in a waster disposal container. Do not flush large quantities of the material to the sewer.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

Advice on general occupational hygiene : 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Petroleum distillates	ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Polyoxyalkylenes	None.

Consult local authorities for acceptable exposure limits.

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.

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Section 8. Exposure controls/personal protection

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.

Appropriate techniques should be used to remove potentially contaminated clothing.

Wash contaminated clothing before reusing.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition

to chemical safety goggles.

Hand protection : Chemical-resistant gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or

supplied air respirator complying with an approved standard. 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.

Section 9. Physical and chemical properties

<u>Appearance</u>

Physical state : Liquid. [Hazy.]
Color : Colorless.

Odor : Petroleum-like.

Odor threshold : Not available.

pH : Not available.

Melting/freezing point : -17.8°C (-0.04°F)
Boiling point : 100°C (212°F)
Initial Boiling Point : Not available.

Flash point : Closed cup: >93.9°C (>201°F) [PMCC]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Slightly flammable in the presence of the following materials or conditions: open flames,

sparks and static discharge and heat.

Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : <0.13 kPa (<1 mm Hg) @ 20°C

Vapor density : >1 [Air = 1]
Relative density : 1.04 (25°C)
Density : 8.7 (lbs/gal)
Solubility in water : Dispersible
Partition coefficient: n- : Not available.

octanol/water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic: 400 to 1200 cP

VOC : Not available.

Pour Point : Not available.

Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: No specific data.

Incompatible materials

: 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.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Petroleum distillates	LD50 Oral	Rat	>5000 mg/kg	_
Polyoxyalkylenes	LD50 Oral	Rat	1350 mg/kg	-

Irritation/Corrosion

No applicable toxicity data

Sensitization

No applicable toxicity data

<u>Mutagenicity</u>

No applicable toxicity data

Carcinogenicity

No applicable toxicity data

Reproductive toxicity

No applicable toxicity data

Teratogenicity

No applicable toxicity data

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Petroleum distillates	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Name	Result
Petroleum distillates	ASPIRATION HAZARD - Category 1

Section 11. Toxicological information

Information on the likely routes of exposure

: Routes of entry anticipated: Dermal.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

General

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis.

Carcinogenicity
Mutagenicity
Teratogenicity
Developmental effects

No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Fertility effects

Section 12. Ecological information

Toxicity

Product/ingredient name Result		Species	Exposure	
Petroleum distillates	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days	
	Acute LC50 2900 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours	

Persistence and degradability

Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	_	-	-
Transport hazard class(es)	-	-	-	
Packing group	7	_	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	III.	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

DOT Reportable Not applicable.

Quantity

Marine pollutant Not available.

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 12(b) one-time export: No products were found.

TSCA 12(b) annual export notification: No products were found.

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

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Adipic acid

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Acrylamide	< 0.1	Yes.	1000 / 10000	-	5000	-

SARA 311/312

Section 15. Regulatory information

Classification

: Immediate (acute) health hazard

SARA 313

Supplier notification

: No products were found.

Canada

Canada (CEPA DSL):

: All components are listed or exempted.

Section 16. Other information

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



History

Date of printing

: 10/3/2016

Notice to reader

NOTE: The information on this SDS 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 SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.