

## Section 1. Identification

**Product name** : BAKERLOK PART A (RESIN)  
**Product code** : 5145DF

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

**Identified uses** : Two component epoxy based adhesive.

**Print date** : 2/14/2024

**Validation date** : 2/14/2024

**Version** : 1.03

**Supplier's details** : Baker Hughes  
 12645 W. Airport Blvd.  
 Sugar Land, TX 77478

**Emergency telephone number (with hours of operation)** : CHEMTREC 800-424-9300 (U.S. 24 hour)  
 (001)713-439-8900  
 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 2A  
 SKIN SENSITIZATION - Category 1  
 GERM CELL MUTAGENICITY - Category 2  
 AQUATIC HAZARD (LONG-TERM) - Category 2

### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Causes skin irritation.  
 May cause an allergic skin reaction.  
 Causes serious eye irritation.  
 Suspected of causing genetic defects.  
 Toxic to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves: > 8 hours (breakthrough time): Butyl rubber gloves.. Wear protective clothing. Wear eye or face protection. Avoid release to the environment. Avoid breathing dust. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

## Section 2. Hazards identification

<b>Response</b>	: Collect spillage. IF exposed or concerned: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 advice or attention.
<b>Storage</b>	: Store locked up.
<b>Disposal</b>	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazards not otherwise classified</b>	: None known.
<b>Hazard statements (Code)</b>	: H315, H317, H319, H341, H411
<b>Precautionary statements (Code)</b>	: P201, P202, P280, P273, P261, P264, P272, P391, P308 + P313, P362 + P364, P363, P302 + P352, P333 + P313, P305 + P351 + P338, P337 + P313, P405, P501

Mixing of chemicals may create a reaction hazardous to one's health, to the environment, or a potential fire hazard.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Epoxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	40 - 50	25085-99-8
2,3-epoxypropyl o-tolyl ether	10 - 20	2210-79-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: 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.
<b>Inhalation</b>	: 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.
<b>Skin contact</b>	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	: 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. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

## Section 4. First aid measures

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness
- Inhalation** : No specific data.
- Skin contact** : irritation, redness
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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** : This material is toxic to aquatic life with long lasting effects. 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

**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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

## Section 6. Accidental release measures

- For emergency responders** : If specialized 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. Collect spillage.

### Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. 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. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	None.
2,3-epoxypropyl o-tolyl ether	None.

Consult local authorities for acceptable exposure limits.

## Section 8. Exposure controls/personal protection

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.

### Biological exposure indices

No exposure indices known.

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Individual protection measures

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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

**Hand protection** : Chemical-resistant gloves: Butyl rubber gloves.

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

**Respiratory protection** : Use a properly fitted, particulate filter 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.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

<b>Physical state</b>	: Solid. [Paste.]
<b>Color</b>	: Gray.
<b>Odor</b>	: Mild.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not applicable.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial Boiling Point</b>	: Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	: >260°C (>500°F)
<b>Flash point</b>	: Closed cup: 121°C (249.8°F) [PMCC]
<b>Burning time</b>	: Not available.
<b>Burning rate</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Flammability</b>	: Not available.
<b>Lower and upper explosion limit/flammability limit</b>	: Not applicable.
<b>Vapor pressure</b>	: Not available.
<b>Relative vapor density</b>	: Not applicable.

## Section 9. Physical and chemical properties and safety characteristics

**Relative density** : 1.4 (16°C)  
**Density** : Not available.  
**Solubility(ies)** :

Media	Result
cold water hot water	Not soluble Not soluble

**Partition coefficient: n-octanol/water** : Not applicable.  
**Auto-ignition temperature** : Not applicable.  
**Decomposition temperature** : Not available.  
**Viscosity** : Not available.  
**VOC** : Not available.  
**Pour Point** : Not available.  
**Particle characteristics**  
**Median particle size** : 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** : Not available.  
**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
2,3-epoxypropyl o-tolyl ether	LC50 Inhalation Dusts and mists	Rat	6090 mg/m <sup>3</sup>	4 hours

#### Irritation/Corrosion

No available toxicity data.

#### Sensitization

No available toxicity data.

#### Mutagenicity

No available toxicity data.

#### Carcinogenicity

#### Classification

## Section 11. Toxicological information

No available toxicity data.

### Reproductive toxicity

No available toxicity data.

### Teratogenicity

No available toxicity data.

### Specific target organ toxicity (single exposure)

Not applicable.

### Specific target organ toxicity (repeated exposure)

Not applicable.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness  
**Inhalation** : No specific data.  
**Skin contact** : irritation, redness  
**Ingestion** : No specific data.

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

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : Suspected of causing genetic defects.  
**Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
2,3-epoxypropyl o-tolyl ether	Not available.	Not available.	Not available.	Not available.	6.09

## Section 12. Ecological information

### Toxicity

No available toxicity data.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil









Soil/water partition coefficient ( $K_{oc}$ ) : 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
<b>UN number</b>	UN3077	UN3077	UN3077	UN3077
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: Epoxy resins)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: Epoxy resins)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: Epoxy resins)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: Epoxy resins)
<b>Transport hazard class(es)</b>	9  	9  	9  	9  
<b>Packing group</b>	III	III	III	III



## Section 14. Transport information

<b>Environmental hazards</b>	Yes.	Yes.	Yes.	Yes.
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### Additional information

- DOT Classification** : Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
- 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 to IMO instruments** : Not available.
- DOT Reportable Quantity** : Not applicable.
- Marine pollutant** : Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer 2,3-epoxypropyl o-tolyl ether
- North-America NAERG** : 171

## 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 active or exempted.  
**Clean Water Act (CWA) 307:** No products were found.  
**Clean Water Act (CWA) 311:** No products were found.

### 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** : No products were found.
- SARA 311/312 Classification** : SKIN IRRITATION - Category 2  
 EYE IRRITATION - Category 2A  
 SKIN SENSITIZATION - Category 1  
 GERM CELL MUTAGENICITY - Category 2
- SARA 313 Supplier notification** : No products were found.
- California Prop. 65**

## Section 15. Regulatory information

This product does not require a Safe Harbor warning under California Prop. 65.

### Canada

Canada (CEPA DSL): : Not determined.

### Inventory list

Australia : All components are listed or exempted.  
 Canada : Not determined.  
 China : Not determined.  
 Eurasian Economic Union : **Russian Federation inventory**: Not determined.  
 Japan : **Japan inventory (CSCL)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.  
 New Zealand : Not determined.  
 Philippines : Not determined.  
 Republic of Korea : Not determined.  
 Taiwan : Not determined.  
 Thailand : Not determined.  
 Turkey : Not determined.  
 United States : All components are active or exempted.  
 Viet Nam : Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		1
Physical hazards		0
Personal protection		B

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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



### History

Date of printing : 2/14/2024

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 N/A = Not available  
 SGG = Segregation Group  
 UN = United Nations

Indicates information that has changed from previously issued version.

## Section 16. Other information

### [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.