

## Section 1. Identification

**Product name** : WAW273 WETTING AGENT  
**Product code** : WAW273

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

**Identified uses** : Waterflood/combination

**Print date** : 1/20/2023

**Validation date** : 1/20/2023

**Version** : 1.04

**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  
 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 CORROSION - Category 1  
 SERIOUS EYE DAMAGE - Category 1

### GHS label elements


**Hazard pictograms** :




**Signal word** : Danger

**Hazard statements** : Causes severe skin burns and eye damage.

### Precautionary statements

**Prevention** :  Wear protective gloves: > 8 hours (breakthrough time): Nitrile or Neoprene gloves. PVC gloves. Butyl rubber gloves. 4H gloves.. Wear protective clothing. Wear eye or face protection. Wash thoroughly after handling.

**Response** :  **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. **IF SWALLOWED:** Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** : Store locked up.

## Section 2. Hazards identification

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

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Water	90 - 100	7732-18-5
Hydrochloric acid	10 - 20	7647-01-0
Oxyalkylated alkylphenol	1 - 5	Trade secret.
Polyoxyalkylenes	0.1 - 1	Trade secret.

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

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

**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

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.
- Inhalation** : Call a poison center or physician. 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. 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** : Get medical attention immediately. Call a poison center or physician. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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 serious eye damage.
- Inhalation** : No known significant effects or critical hazards.

## Section 4. First aid measures

- Skin contact** : Causes severe burns.
- Ingestion** : No known significant effects or critical hazards.
- Over-exposure signs/symptoms**
- Eye contact** : Adverse symptoms may include the following: pain, watering, redness
- Inhalation** : No specific data.
- Skin contact** : pain or irritation, redness, blistering may occur
- Ingestion** : Adverse symptoms may include the following: stomach pains

### 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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** : In a fire or if heated, a pressure increase will occur and the container may burst.
- 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- 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".

## Section 6. Accidental release measures

**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).

### 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.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, 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.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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
Hydrochloric acid	<b>ACGIH TLV (United States, 1/2022).</b> C: 2 ppm <b>OSHA PEL 1989 (United States, 3/1989).</b> CEIL: 5 ppm CEIL: 7 mg/m <sup>3</sup> <b>NIOSH REL (United States, 10/2020).</b> CEIL: 5 ppm CEIL: 7 mg/m <sup>3</sup> <b>OSHA PEL (United States, 5/2018).</b> CEIL: 5 ppm

## Section 8. Exposure controls/personal protection

Oxyalkylated alkylphenol	CEIL: 7 mg/m <sup>3</sup>
Polyoxyalkylenes	None.
	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** : 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. 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. If inhalation hazards exist, a full-face respirator may be required instead.
- Hand protection** : Chemical-resistant gloves: Nitrile or Neoprene gloves. PVC gloves. Butyl rubber gloves. 4H gloves.
- Skin protection** : Wear long sleeves and chemical resistant apron 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

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

### Appearance

- Physical state** : Liquid. [Clear to slightly hazy. Moderately viscous.]
- Color** : Light yellow to Amber.
- Odor** : Pungent acid
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Initial Boiling Point** : Not available.
- Boiling point, initial boiling point, and boiling range** : Not available.
- Flash point** : Closed cup: >93.4°C (>200.1°F) [SFCC ASTM D-3828]
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability** : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
- Lower and upper explosion limit/flammability limit** : Not available.

## Section 9. Physical and chemical properties

Vapor pressure	: 3 psig @ 54.44°C (130 F) (Reid)
Relative vapor density	: >1 [Air = 1]
Relative density	: 1.07 (16°C)
Density	: 8.94 (lbs/gal)
Solubility in water	: Soluble
Partition coefficient: n-octanol/water	: <input checked="" type="checkbox"/> Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
VOC	: Not available.
Pour Point	: Not available.
<u>Particle characteristics</u>	
Median particle size	: <input checked="" type="checkbox"/> Not applicable.

## 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, organic materials, metals and alkalis. This material is highly corrosive and may react with metals to produce flammable hydrogen gas. Contains a strong mineral acid which is highly reactive with metals, metal oxides, hydroxides, amines, carbonate or other alkaline 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
<input checked="" type="checkbox"/> Hydrochloric acid	LC50 Inhalation Vapor	Mouse (as aerosol)	400 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Vapor	Rat	3124 ppm	1 hours
Polyoxyalkylenes	LD50 Oral	Rabbit	900 mg/kg	-
	LD50 Oral	Rat - Female	238 to 277 mg/kg	-
	LD50 Dermal	Rabbit	5000 mg/kg	-
	LD50 Oral	Rat	1000 mg/kg	-

#### Irritation/Corrosion

No available toxicity data.

#### Sensitization

## Section 11. Toxicological information

No available toxicity data.

### Mutagenicity

No available toxicity data.

### Carcinogenicity

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Hydrochloric acid	-	3	-

### 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** : Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : Causes serious eye damage.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes severe burns.  
**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, watering, redness  
**Inhalation** : No specific data.  
**Skin contact** : pain or irritation, redness, blistering may occur  
**Ingestion** :  Adverse symptoms may include the following: ,stomach pains

### 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** : No known significant effects or critical hazards.

## Section 11. Toxicological information

- Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Reproductive toxicity** :  No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<input checked="" type="checkbox"/> WAW273 WETTING AGENT	Not available.	Not available.	Not available.	21.9	Not available.
Hydrochloric acid	Not available.	Not available.	Not available.	3	Not available.
Polyoxyalkylenes	1000	5000	Not available.	Not available.	Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> Hydrochloric acid	Acute LC50 240000 µg/l Marine water	Crustaceans - Carcinus maenas	48 hours
	Acute LC50 282 ppm Fresh water	Fish - Gambusia affinis	96 hours
Polyoxyalkylenes	Acute EC50 0.22 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1400 to 1700 µg/l Fresh water	Crustaceans - Gammarus sp.	48 hours
	Acute LC50 700 µg/l Fresh water	Fish - Pimephales promelas - Fry	96 hours
	Chronic NOEC 77 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 160 µg/l Fresh water	Fish - Pimephales promelas - Adult	30 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<input checked="" type="checkbox"/> Hydrochloric acid	0.25	-	low

### Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** :  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>	UN3264	UN3264	UN3264	UN3264
<b>UN proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains: Hydrochloric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains: Hydrochloric acid)	Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains: Hydrochloric acid)	Corrosive Liquid, Acidic, Inorganic, n.o.s. (Contains: Hydrochloric acid)
<b>Transport hazard class(es)</b>	8 	8 	8 	8 
<b>Packing group</b>	II	II	II	II
<b>Environmental hazards</b>	No.	No.	No.	No.

### Additional information

**DOT Classification** : **Reportable quantity** 36491 lbs / 16566.9 kg [4090.2 gal / 15483.1 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).

**IMDG** : **Emergency schedules** F-A S-B

**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** Hydrochloric acid, 4082 gal of this product.

**Marine pollutant** Not available.

**North-America NAERG** : 154

## 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: ethylbenzene; naphthalene  
 Clean Water Act (CWA) 311: Hydrogen chloride; xylene; ethylbenzene; Formaldehyde, solution; naphthalene  
 Clean Air Act (CAA) 112 regulated toxic substances: Hydrogen chloride

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

List name	Status	Ingredient name	Name on list	Conc.
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Hydrochloric acid	Hydrochloric acid	10 - 20
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Methanol	Methanol	0.1 - 1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Xylene	Xylenes	0 - 0.1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Cumene	Cumene	0 - 0.1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Ethylbenzene	Ethyl benzene	0 - 0.1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Formaldehyde	Formaldehyde	0 - 0.1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Naphthalene	Naphthalene	0 - 0.1

### SARA 302/304

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Hydrochloric acid	10 - 30	Yes.	500	-	5000	-
Formaldehyde	< 0.01	Yes.	500	6.7	100	1.3

### SARA 311/312

- Classification** : SKIN CORROSION - Category 1  
 SERIOUS EYE DAMAGE - Category 1

### SARA 313

	Product name	CAS number	%
<b>Supplier notification</b>	<input checked="" type="checkbox"/> Hydrochloric acid Oxyalkylated alkylphenol	7647-01-0 Trade secret.	10 - 20 Trade secret.

### California Prop. 65

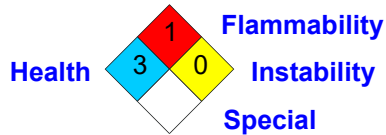
- ⚠ WARNING:** This product can expose you to chemicals including cumene, ethylbenzene, formaldehyde and naphthalene, which are known to the State of California to cause cancer, and methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### 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** : 1/20/2023

**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.

### 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.