

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 2020/878/EU Standards

SDS Revision: 1.0

SDS Revision Date: 8/12/2023

1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	K18® DAMAGE SHIELD PH PROTECTIVE SHAMPOO
1.2	Chemical Name:	Aqueous Solution
1.3	Synonyms:	K18 pH Shampoo
1.4	Product Uses & Restrictions:	Cosmetics
1.5	Distributor's Name:	K18 Biomimetic Hairscience
1.6	Distributor's Address:	621 Sansome Street, San Francisco, CA 94111 USA
1.7	Emergency Phone:	CHEMTREC: +1 (703) 527-3887 // +1 (800) 424-9300
1.8	Business Phone / Fax:	+1 (844) 564-0382 // +1 (800) 466-7379

2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	Prepared in accordance with UN Globally Harmonized standards. Intended to comply with OSHA 29 CFR 1910.1200. Canadian WHMIS and Australian Work Health and Safety standards. CAUSES EYE IRRITATION. Classification: Eye Irrit. 2B
2.2	Label Elements	Hazard Statements (H): H320 – Causes eye irritation. Precautionary Statements (P): P264 – Wash thoroughly after handling. P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P317 – If eye irritation persists: Get medical help. P332+P313 – If skin irritation occurs: Get medical advice or attention.
2.3	Additional Hazards:	KEEP OUT OF REACH OF CHILDREN.

3. COMPOSITION & INGREDIENT INFORMATION

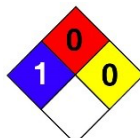
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m ³)									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
WATER (AQUA) (EAU)	7732-18-5	ZC0110000	231-791-2	NA	NA	NA	NF	NF	NF	NA	NA	NA		
SODIUM C14-16 OLEFIN SULFONATE	68439-57-6	NA	931-534-0	NA	NA	NA	NF	NF	NF	NA	NA	NA		
COCAMIDOPROPYL HYDROXSULTAINE	68139-30-0	NA	268-761-3	NA	NA	NA	NF	NF	NF	NA	NA	NA		
SODIUM METHYL 2-SULFOLAURATE	4337-75-1	NA	224-388-8	NA	NA	NA	NF	NF	NF	NA	NA	NA	Eye Irrit. 2A; H319	
SODIUM LAURYL SULFOACETATE	1847-58-1	NA	217-431-7	NA	NA	NA	NF	NF	NF	NA	NA	NA	Acute Tox. (oral) 4, Acute Tox. (dermal) 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3; H302, H312, H315, H318, H335	
SH-OLIGOPEPTIDE-78	147732-56-7	NA	NA	NA	NA	NA	NF	NF	NF	NA	NA	NA		
PANTHENOL	81-13-0	NA	201-327-3	NA	NA	NA	NF	NF	NF	NA	NA	NA		
GLYCERIN	56-81-5	MA8050000	200-289-5	NA	(10)	NA	NF	NF	NF	(5)	NA	NA		
SODIUM PHYTATE	14306-25-3	NA	238-242-6	NA	NA	NA	NF	NF	NF	NA	NA	NA		
GUAR HYDROXYPROPYL-TRIMONIUM CHLORIDE	65497-29-2	NA	NA	NA	NA	NA	NF	NF	NF	NA	NA	NA	Aq. Acute 1; Aq. Chronic 1; H400, H410	
DISODIUM 2-SULFOLAURATE	38841-48-4	NA	NA	NA	NA	NA	NF	NF	NF	NA	NA	NA		
CAPRYLYL GLYCOL	1117-86-8	NA	214-254-7	NA	NA	NA	NF	NF	NF	NA	NA	NA		
CAPRYLHYDROXAMIC ACID	7377-03-9	NA	230-936-7	NA	NA	NA	NF	NF	NF	NA	NA	NA		
BENZOIC ACID	65-85-0	NA	200-618-2	NA	NA	NA	NF	NF	NF	NA	NA	NA	Skin Irrit. 2, Eye Dam. 1, STOT RE 1; H315, H318, H372	
CITRIC ACID	77-92-9	GE7350000	201-069-1	NA	NA	NA	NF	NF	NF	NA	NA	NA		
SODIUM HYDROXIDE	1310-73-2	WB4900000	215-185-5	NA	(2)	NA	NF	2	NF	(2)	NA	(10)	(2) NIOSH Skin Corr. 1A; H314	
FRAGRANCE (PARFUM)	NA	NA	NA	≤ 1	NA	NA	NF	NF	NF	NA	NA	NA		
LIMONENE	138-86-3	GW6360000	205-341-0	≤ 1	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1; H226, H315, H317, H400, H410	

4. FIRST AID MEASURES

4.1	First Aid:	<p>Ingestion: If ingested, do not induce vomiting. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.</p> <p>Eyes: Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.</p> <p>Skin: If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.</p> <p>Inhalation: Remove victim to fresh air at once.</p>
4.2	Effects of Exposure:	<p>Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea.</p> <p>Eyes: Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p>Skin: None expected. In some sensitive individuals, the product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in rare instances.</p> <p>Inhalation: None expected.</p>
4.3	Symptoms of Overexposure:	Overexposure in eyes may cause redness, itching and watering. In some sensitive individuals, symptoms of skin overexposure may include redness, itching, and irritation of affected areas.
4.4	Acute Health Effects:	Moderate irritation to eyes. In some sensitive individuals, moderate irritation to skin near affected areas.
4.5	Chronic Health Effects:	No harmful or chronic health effects are expected to occur from a single accidental ingestion.
4.6	Target Organs:	Eyes, Skin
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin).

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PROTECTIVE EQUIPMENT	A
EYES	

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	This product is non-flammable. When exposed to high temperatures, may produce hazardous decomposition products such as oxides of carbon (e.g., CO, CO ₂) and nitrogen (e.g., NO _x) and smoke.	
5.2	Extinguishing Methods:	Water, Foam, CO ₂ , Dry Chemical	
5.3	Firefighting Procedures:	As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personnel. Fight fire upwind. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.	

6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment (PPE).</p> <p>For <u>small spills</u> (e.g., < 1 gallon (3.8 L)) or <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), wear appropriate personal protective equipment (e.g., goggles, gloves). Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.</p>
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7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Do not eat, drink, or smoke while handling this product.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans). Keep away from excessive heat and open flames.
7.3	Special Precautions:	Spilled material may present a slipping hazard if left unattended. Clean all spills promptly.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m ³)		ACGIH		NOHSC			OSHA		OTHER	
		CHEMICAL NAME(S)	TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
		GLYCERIN	(10)	(10)	NA	NF	NF	NF	(5)	NA	NA
		SODIUM HYDROXIDE	(2)	NA	NF	2	NF	(2)	NA	(10)	(2) NIOSH
		LIMONENE	NA	NA	NF	NF	NF	NA	NA	NA	ALLERGEN

8. EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd

8.2	Ventilation & Engineering Controls:	When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.	
8.3	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, EU member states, or Australia.	
8.4	Eye Protection:	AVOID EYE CONTACT DUE TO IRRITATION POTENTIAL. Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling large quantities (e.g., ≥ 1 gallon (3.8 L)) of this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants.	
8.5	Hand Protection:	If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the EU member states.	
8.6	Body Protection:	However, no special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA.	

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Light yellow slightly hazy semi-viscous liquid
9.2	Odor:	Fragrant odor
9.3	Odor Threshold:	NA
9.4	pH:	4.5-5.5
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Specific Gravity	NA
9.12	Solubility:	Soluble
9.13	Partition Coefficient (log P _{ow}):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

10. STABILITY & REACTIVITY

10.1	Stability:	This product is stable.
10.2	Hazardous Decomposition Products:	Oxides of carbon (CO, CO ₂) and sulfur (SO ₂).
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Extreme temperatures.
10.5	Incompatible Substances:	None known.

11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: NO	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product, but is not presented in this document.		
11.3	Acute Toxicity:	See Section 4.4		
11.4	Chronic Toxicity:	See Section 4.5		
11.5	Suspected Carcinogen:	No		
11.6	Reproductive Toxicity:	This product is not reported to produce reproductive toxicity in humans.		
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.		
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.		
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.		
	Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.		
11.7	Irritancy of Product:	See Section 4.3		
11.8	Biological Exposure Indices:	NE		
11.9	Physician Recommendations:	Treat symptomatically.		

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12. ECOLOGICAL INFORMATION

12.1	Environmental Stability:	There are no specific data available for this product.
12.2	Effects on Plants & Animals:	There are no specific data available for this product.
12.3	Effects on Aquatic Life:	There are no specific data available for this product. <u>WGK</u> : 1 (low hazard to waters)

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal:	Dispose of in accordance with federal, state and local regulations.
13.2	Special Considerations:	NA

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.



14.1	49 CFR (GND):	NOT REGULATED
14.2	IATA (AIR):	NOT REGULATED
14.3	IMDG (OCN):	NOT REGULATED
14.4	TDGR (Canadian GND):	NOT REGULATED
14.5	ADR/RID (EU):	NOT REGULATED
14.6	SCT (MEXICO):	NOT REGULATED
14.7	ADGR (AUS):	NOT REGULATED

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, Section 313 reporting requirements.
15.2	SARA Threshold Planning Quantity:	There are no specific Threshold Planning Quantities for the components of this product.
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity (RQ):	<u>Sodium Hydroxide</u> : 1,000 lbs (454 kg)
15.5	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics). This material does not contain any hazardous air pollutants. None of the components in this product are listed as priority pollutants under the CWA. None of the components in this product are listed as toxic pollutants under the CWA.
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR. The components of this product are listed on the DSL/NDL. None of the components of this product are listed on the Priorities Substances List. WHMIS D2B (Other Toxic Effects)
15.7	State Regulatory Information:	<u>Glycerin</u> is found on the following state criteria lists: MA, MN, PA, and WA. <u>Sodium Hydroxide</u> is found on the following state criteria lists: FL, MA, MN, NJ, PA, and WA <u>Limonene</u> is found on the following state criteria lists: MA, PA. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI). This product does not contain any chemicals known to the State of California to cause cancer or other reproductive harm. For more information go to www.P65Warnings.ca.gov .
15.8	Other Requirements:	This product is found on the following inventory lists: Australia - AICS, China - IECSC, Europe - ELINCS/EINEC, Japan - ENCS; Korea - KECI; New Zealand - NZIoC; Philippines - PICCS; USA - TSCA.



16. OTHER INFORMATION

16.1	Other Information:	<p>CAUSES EYE IRRITATION. For external use only. Use only as directed. 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 help. If skin irritation occurs: Get medical advice or attention. KEEP OUT OF REACH OF CHILDREN.</p>	
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	<p>This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & K18 Biomimetic HairScience's, knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.</p>	
16.4	Prepared for:	<p>K18 Biomimetic Hair Science 621 Sansome Street San Francisco, CA 94111 USA Tel: +1 (844) 564-0382 Tel: +1 (800) 466-7379 https://www.k18hair.com/</p>	
16.5	Prepared by:	<p>ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com</p>	

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
RTECS No.	Registry of Toxic Effects of Chemical Substances Number
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
IDLH	Immediately Dangerous to Life and Health
NOHSC	National Occupational Health and Safety Commission (Australia)
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.
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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A		G	
B		H	
C		I	
D		J	
E		K	
F		X	Consult your supervisor or SOPs for special handling directions.

Safety Glasses	Splash Goggles	Face Shield & Protective Eyewear	Gloves
Boots	Protective Apron	Protective Clothing & Full Suit	Dust Respirator
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

OTHER STANDARD ABBREVIATIONS:

Carc	Carcinogenic
Irrit	Irritant
NA	Not Available
NR	No Results
ND	Not Determined
NE	Not Established
NF	Not Found
SCBA	Self-Contained Breathing Apparatus
Sens	Sensitization
STOT RE	Specific Target Organ Toxicity – Repeat Exposure
STOT SE	Specific Target Organ Toxicity – Single Exposure

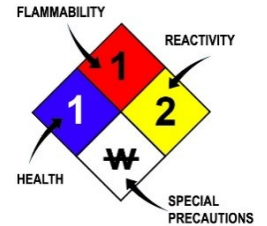
NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:

Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



TOXICOLOGICAL INFORMATION:

LD₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC₅₀	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD₀₁	Lowest dose to cause a symptom
TCLO	Lowest concentration to cause a symptom
TD₀₁, LD₀₁, & LD₀₁ or TC, TC₀₁, LC₀₁, & LC₀₁	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log Kow or log Koc	Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährdungsklassen (German Water Hazard Class)

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

CLP/GHS (1272/2008/EC) PICTOGRAMS:

GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment