

SECTION 1: Identification**1.1. Identification**

Product form : Mixture
Name : BOIL OUT 881

1.2. Recommended use and restrictions on use

Recommended use : Boiler/Loop Precleaner

1.3. Supplier

Kurita America Inc.
6600 94th Ave North
Minneapolis, MN 55445 - USA
T 866-663-7632
kai_sds@kurita-water.com - www.kuritaamerica.com

1.4. Emergency telephone number

Emergency number : CHEMTEL, For Chemical Emergency Call 800-255-3924 24hr/day 7days/week
Kurita America: 866-663-7633 International: +01-813-248-0585

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS US classification**

Skin corrosion/irritation, Category 2 H315 Causes skin irritation.
Serious eye damage/eye irritation, Category 2 H319 Causes serious eye irritation.

2.2. GHS Label elements, including precautionary statements**GHS US labelling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (GHS US) : P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

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3.2. Mixtures

Name	Product identifier	%	GHS US classification
Tribasic sodium phosphate dodecahydrate	(CAS-No.) 10101-89-0	10 – 30	Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335
Potassium Carbonate	(CAS-No.) 584-08-7	10 – 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400
Sodium nitrate	(CAS-No.) 7631-99-4	1 – 5	Ox. Sol. 3, H272 Eye Irrit. 2, H319
Tetrasodium ethylenediaminetetraacetate	(CAS-No.) 64-02-8	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 STOT RE 1, H372 Aquatic Acute 3, H402
Sodium Hydroxide	(CAS-No.) 1310-73-2	0.1 – 1	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : 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/attention.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable.
- Explosion hazard : Not explosive.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BOIL OUT 881	
No additional information available	
Tribasic sodium phosphate dodecahydrate (10101-89-0)	
No additional information available	
Potassium Carbonate (584-08-7)	
No additional information available	
Sodium nitrate (7631-99-4)	
No additional information available	
Tetrasodium ethylenediaminetetraacetate (64-02-8)	
No additional information available	
Sodium Hydroxide (1310-73-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Sodium hydroxide
ACGIH OEL C	2 mg/m ³
Remark (ACGIH)	TLV® Basis: URT, eye, & skin irr
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Sodium hydroxide
OSHA PEL TWA [1]	2 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Respiratory protection:

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In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid	
Appearance	: Green to yellow. watery liquid.	
Colour	: Yellow-green	
Odour	: No data available	
Odour threshold	: No data available	
pH	: 11.9 – 12.9 (10%)	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: > 100 °C (212 °F)	
Flash point	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Flammability (solid, gas)	: Not applicable.	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: 1.26	
Solubility	: Water: 100 %	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
No data available	Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available	
Explosive limits	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Oxidizing agent.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Nitrogen oxides.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Tribasic sodium phosphate dodecahydrate (10101-89-0)	
LD50 oral rat	7400 mg/kg Source: National Library of Medicine
LD50 dermal rat	> 2000 mg/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 0.83 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (dust), 14 day(s))
ATE US (oral)	7400 mg/kg bodyweight
ATE US (dust,mist)	0.5 mg/l/4h

Potassium Carbonate (584-08-7)	
LD50 oral rat	1870 mg/kg Source: NLM/HSDB
LD50 dermal rabbit	> 2000 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.96 mg/l (4.5 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))
ATE US (oral)	1870 mg/kg bodyweight
ATE US (dust,mist)	1.5 mg/l/4h

Sodium nitrate (7631-99-4)	
LD50 oral rat	≈ 3430 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Tetrasodium ethylenediaminetetraacetate (64-02-8)	
LD50 oral rat	1700 – 1913 mg/kg Source: EU RAR
ATE US (oral)	1700 mg/kg bodyweight

Sodium Hydroxide (1310-73-2)	
LD50 oral rat	140 – 340 mg/kg Source: ECHA
LD50 dermal rabbit	1350 mg/kg Source: HSDB
ATE US (oral)	140 mg/kg bodyweight
ATE US (dermal)	1350 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
pH: 11.9 – 12.9 (10%)
Serious eye damage/irritation : Causes serious eye irritation.
pH: 11.9 – 12.9 (10%)
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Tribasic sodium phosphate dodecahydrate (10101-89-0)	
STOT-single exposure	May cause respiratory irritation.

Potassium Carbonate (584-08-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Sodium nitrate (7631-99-4)	
NOAEL (oral, rat, 90 days)	≥ 1500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

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Tetrasodium ethylenediaminetetraacetate (64-02-8)	
LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.015 mg/l air Animal: rat, Animal sex: female, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Animal sex: male
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit. . Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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Tribasic sodium phosphate dodecahydrate (10101-89-0)	
CERCLA RQ	5000 lb
Sodium Hydroxide (1310-73-2)	
CERCLA RQ	1000 lb

15.2. International regulations

CANADA

No additional information available

Potassium Carbonate (584-08-7)
Listed on the Canadian DSL (Domestic Substances List)
Sodium nitrate (7631-99-4)
Listed on the Canadian DSL (Domestic Substances List)
Tetrasodium ethylenediaminetetraacetate (64-02-8)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Sodium Hydroxide (1310-73-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Tribasic sodium phosphate dodecahydrate(10101-89-0)	U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) List
Sodium nitrate(7631-99-4)	U.S. - Pennsylvania - RTK (Right to Know) List
Sodium Hydroxide(1310-73-2)	U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

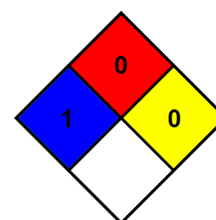
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NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Kurita - SDS US (GHS HazCom 2012)

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Author: Kurita Water Industries Ltd.

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