

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/830

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product Name:** AATCC 1993 Standard Reference Detergent - all variants**1.2 Relevant identified uses of the substance or mixture and uses advised against:****Product Category:** Laundry**Relevant identified uses:** FOR INDUSTRIAL USE ONLY**1.3 Details of the Supplier of the Safety Data Sheet:****Company Name:** Korex Chicago

6200 W. 51st Street

Chicago, IL 60638 USA

Phone Number:

+1 (708)458-4890

Preparer Name: Crystal Maira**1.4 Emergency telephone number:****Emergency Contact:** CHEMTREC

+1 (800)424-9300

SECTION 2. HAZARDS IDENTIFICATION**2.1 Classification of the Substance or Mixture:****Skin Corrosion/Irritation, Category 2****Serious Eye Damage/Eye Irritation, Category 2****2.2 Label Elements:****GHS Signal Word:** **Warning****Hazard-determining components of labelling:**

Sodium carbonate

Sodium dodecylbenzene sulfonate

Sodium silicate

GHS Hazard Phrases:

H315 - Causes skin irritation. H319 - Causes serious eye irritation.

GHS Precautionary Phrases:

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/eye protection.

P234 - Keep only in original container.

GHS Response Phrases:

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention. P362+364 - Take off contaminated clothing and wash it before reuse.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, get medical advice/attention.

P390 - Absorb spillage to prevent material damage.

GHS Storage and Disposal Phrases:

P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.

UFI:

2.3 **Adverse Human Health** No data available.

Effects and Symptoms:

Additional Hazards Information Hazards not otherwise classified (HNOC) or not covered by GHS: None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
497-19-8	Sodium carbonate 01-2119485498-19	10.0 -30.0 %	207-838-8 011-005-00-2	Eye Damage 2A: H319
1344-00-9	Silicic acid, aluminum sodium salt 01-2119429887-22	20.0 -40.0 %	215-684-8 NA	No GHS classifications apply.
25155-30-0	Sodium dodecylbenzene sulfonate 01-2120088038-51	10.0 -30.0 %	246-680-4 NA	Eye Damage 1: H318 Skin Corr. 2: H315 Acute Tox.(O) 4: H302 Aquatic (A) 2: H401
1344-09-8	Sodium silicate 01-2119448725-31	0.1 -1.0 %	215-687-4 NA	Acute Tox.(O) 4: H302 Skin Corr. 2: H315 Eye Damage 1: H318

SECTION 4. FIRST AID MEASURES

4.1 **Description of First Aid**

Measures:

In Case of Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get immediate medical advice/attention.

In Case of Skin Contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical aid if symptoms occur.

In Case of Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with water for at least 15 minutes. Get medical aid if irritation develops or persists.

In Case of Ingestion: Give large amounts of water or milk. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Note for the Doctor: Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE FIGHTING MEASURES

5.1 **Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

5.2 **Flammable Properties and Hazards:** No data available.

Hazardous Combustion Products: High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: sodium.

Flash Pt: NA

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

5.3 **Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:** Use proper personal protective equipment as indicated in Section 8. Avoid contact with eyes, skin, and clothing.
- 6.2 Environmental Precautions:** Dispose of material in compliance with regulations indicated in Section 13.
- 6.3 Methods and Material For Containment and Cleaning Up:** For small quantities wear gloves, wipe up with damp cloth, rinse cloth thoroughly and allow cloth to dry before laundering.
- For larger spills, contain the spill. Use an inert substance to contain and absorb spilled material. Shovel or pump to properly identified waste containers. Seal waste container for disposal. Flush residuals thoroughly as spilled product creates extremely slippery conditions.
- Never return spills to original container for re-use.

SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions To Be Taken in Handling:** Use as directed. Avoid contact with eyes, skin, and clothing.
- 7.2 Precautions To Be Taken in Storing:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep container closed when not in use. Protect containers against damage. Never return spills to original container for re-use.
- Other Precautions:** Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
497-19-8	Sodium carbonate	ACGIH TLV OSHA PELs	TLV: 10 mg/m ³ PEL: 10 mg/m ³	
25155-30-0	Sodium dodecylbenzene sulfonate	ACGIH TLV	TLV: 10 mg/m ³	

Derived No-Effect Levels / Predicted No Effect Concentrations:

497-19-8 Sodium carbonate

DNEL Worker	Value	Remarks
Acute - Inhalation, local effects	10.000 mg/m ³	assessment factor.

DNEL Consumer	Value	Remarks
Long-term - Inhalation, local effects	10.000 mg/m ³	assessment factor.

1344-00-9 Silicic acid, aluminum sodium salt

DNEL Worker	Value	Remarks
Acute - Inhalation, local effects	4.000 mg/m ³	assessment factor.

1344-09-8 Sodium silicate

DNEL Worker	Value	Remarks
Long-term - Eyes, local effects		medium hazard (no threshold derived)
Long-term - Inhalation, local effects		medium hazard (no threshold derived)

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Long-term - Inhalation, systemic effects			no hazard identified.
Long-term - Dermal, local effects			medium hazard (no threshold derived)
Long-term - Dermal, systemic effects			no hazard identified.
Acute - Inhalation, local effects			medium hazard (no threshold derived)
Acute - Inhalation, systemic effects	140.250	mg/m ³	DNEL (Derived No Effect Level)
Acute - Dermal, local effects			medium hazard (no threshold derived)
Acute - Dermal, systemic effects	159.000	mg/kg bw/day	DNEL (Derived No Effect Level)
DNEL Consumer	Value		Remarks
Long-term - Eyes, local effects			medium hazard (no threshold derived)
Long-term - Inhalation, local effects			medium hazard (no threshold derived)
Long-term - Inhalation, systemic effects			no hazard identified.
Long-term - Oral, systemic effects			no hazard identified.
Long-term - Dermal, local effects			medium hazard (no threshold derived)
Long-term - Dermal, systemic effects			no hazard identified.
Acute - Inhalation, local effects			medium hazard (no threshold derived)
Acute - Inhalation, systemic effects	69.000	mg/m ³	DNEL (Derived No Effect Level)
Acute - Oral, systemic effects	160.000	mg/kg bw/day	DNEL (Derived No Effect Level)
Acute - Dermal, local effects			medium hazard (no threshold derived)
Acute - Dermal, systemic effects	160.000	mg/kg bw/day	DNEL (Derived No Effect Level)

25155-30-0 Sodium dodecylbenzene sulfonate

DNEL Worker	Value		Remarks
Long-term - Eyes, local effects			no hazard identified.
Long-term - Inhalation, local effects	260.000	mg/m ³	assessment factor.
Long-term - Inhalation, systemic effects	260.000	mg/m ³	assessment factor.
Long-term - Dermal, local effects	7.850	mg/cm ²	assessment factor.
Long-term - Dermal, systemic effects	400.000	mg/kg bw/day	ECHA REACH Guidance.
Acute - Inhalation, local effects	260.000	mg/m ³	PNEC air.
Acute - Inhalation, systemic effects	260.000	mg/m ³	assessment factor.
Acute - Dermal, local effects	7.850	mg/cm ²	ECHA REACH Guidance.
Acute - Dermal, systemic effects	286.000	mg/kg bw/day	ECHA REACH Guidance.

DNEL Consumer	Value		Remarks
Long-term - Eyes, local effects			medium hazard (no threshold derived)
Long-term - Inhalation, local effects	260.000	mg/m ³	no potential for bioaccumulation.
Long-term - Inhalation, systemic effects	260.000	mg/m ³	no hazard identified.
Long-term - Oral, systemic effects	130.000	mg/kg bw/day	ECHA REACH Guidance.
Long-term - Dermal, local effects	7.870	mg/cm ²	ECHA REACH Guidance.
Long-term - Dermal, systemic effects	400.000	mg/kg bw/day	ECHA REACH Guidance.
Acute - Inhalation, local effects	260.000	mg/m ³	no hazard identified.
Acute - Inhalation, systemic effects	260.000	mg/m ³	no hazard identified.
Acute - Oral, systemic effects	130.000	mg/kg bw/day	ECHA REACH Guidance.
Acute - Dermal, local effects	7.870	mg/cm ²	ECHA REACH Guidance.
Acute - Dermal, systemic effects	286.000	mg/kg bw/day	ECHA REACH Guidance.

1344-09-8 Sodium silicate

PNEC	Value	Remarks
aquatic, sediment, freshwater		no hazard identified.
aquatic, sediment, marine water		no hazard identified.

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aquatic, freshwater	7.500	mg/L	ECHA REACH Guidance.
air			no hazard identified.
aquatic, marine water	1.000	mg/L	ECHA REACH Guidance.
predators, secondary poisoning			no potential for bioaccumulation.
soil			no hazard identified.
aquatic, STP	348.000	mg/L	assessment factor.

25155-30-0 Sodium dodecylbenzene sulfonate

PNEC	Value		Remarks
aquatic, sediment, freshwater	27.500	mg/kg sediment	assessment factor.
aquatic, sediment, marine water	2.750	mg/kg sediment	assessment factor.
aquatic, freshwater	0.693	mg/L	assessment factor.
air	10.000	mg/m ³	PNEC air.
aquatic, marine water	1.000	mg/L	assessment factor.
predators, secondary poisoning	20.000	mg/kg food	ECHA REACH Guidance.
soil	25.000	mg/kg soil dw	assessment factor.
aquatic, STP	50.000	mg/L	assessment factor.

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

8.2.2 Personal protection equipment:

Eye Protection: Chemical safety goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Clothing:

Respiratory Equipment (Specify Type): Not required under normal use conditions.

Work/Hygienic/Maintenance Practices:

Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling the material and before eating, drinking, and/or smoking.

No data available.

Exposure Scenarios: No data available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[] Gas [] Liquid [X] Solid	
Appearance and Odor:	Appearance: Solid. Powder.	
pH:	10.5 - 11.5	
Melting Point:	NA	
Boiling Point:	NA	
Flash Pt:	NA	
Evaporation Rate:	NA	
Saturated Vapor Concentration:	NA	
Flammability (solid, gas):	No data available.	
Explosive Limits:	LEL: No data.	UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	NA	
Vapor Density (vs. Air = 1):	NA	
Specific Gravity (Water = 1):	NA	
Density:	NA	
Solubility in Water:	Complete	
Octanol/Water Partition Coefficient:	No data.	
Autoignition Pt:	No data.	
Decomposition Temperature:	No data.	
Viscosity:	NA	

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

Percent Volatile: No data.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:	Not reactive at normal temperatures and pressures.
10.2 Stability:	Unstable [] Stable [X]
10.3 Conditions To Avoid - Hazardous Reactions:	No data available.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
10.4 Conditions To Avoid - Instability:	Incompatible materials, Stable under normal temperatures and pressures.
10.5 Incompatibility - Materials To Avoid:	Acids.
10.6 Hazardous Decomposition or Byproducts:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, and oxides of: sodium.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:	<p>Epidemiology: No information available.</p> <p>Teratogenicity: No information available.</p> <p>Reproductive Effects: No information available.</p> <p>Mutagenicity: No information available.</p> <p>Neurotoxicity: No information available.</p> <p>Other Studies: CAS# 1344-09-8: Acute toxicity, LD50, Oral, Rat, 1100 - 1600 mg/kg</p> <p>Other Studies: CAS# 1344-00-9: Acute toxicity, LD50, Oral, Rat, > 5,000 mg/kg.</p> <p>Other Studies: CAS# 497-19-8: Acute toxicity, LD50, Oral, Rat, 2800 mg/kg</p> <p>Other Studies: CAS# 25155-30-0: Acute toxicity, LD50, Oral, Rat, 438.0 mg/kg.</p>
Irritation or Corrosion:	May cause mild skin irritation. May cause moderate eye irritation.
Symptoms related to Toxicological Characteristics:	May cause mild skin irritation. May cause moderate eye irritation.
Sensitization:	Not expected.
Chronic Toxicological Effects:	No long term effects have been reported.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity:	<p>Environmental: No information available.</p> <p>Physical: No information available.</p> <p>Other Studies: CAS# 1344-00-9: LC50, Water Flea (<i>Daphnia magna</i>), 1,000,000 - 1,800,000 ug/L, 48H LC50, Medaka High Eyes (<i>Oryzias latipes</i>), 3,200,000 - 5,600,000 ug/L, 96H.</p> <p>Other Studies: CAS# 1344-09-8: LC50, Water Flea (<i>Daphnia magna</i>), 216000 ug/L, 96H LC50, Western Mosquitofish (<i>Gambusia affinis</i>), adult(s), 1800000 ug/L, 96H</p> <p>Other Studies: CAS# 25155-30-0: LC50, Bluegill (<i>Lepomis macrochirus</i>), 3450 ug/L, 24H, Mortality LC50, Water Flea (<i>Daphnia pulex</i>), 19870.0 ug/L, 48H, Mortality LC50, Minnow (<i>Phoxinus phoxinus</i>), 6000 ug/L, 24H, Mortality LC50, Catfish (<i>Rita rita</i>), 6000 ug/L, 96H, Mortality</p> <p>Other Studies: CAS# 497-19-8: LC50, Water Flea (<i>Daphnia magna</i>), 265,000 ug/L, 48H LC50, Fathead Minnow (<i>Pimephales promelas</i>), 850,000 ug/L, 96H LC50, Western Mosquitofish (<i>Gambusia affinis</i>), adult(s), 740000 ug/L, 96H</p>
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- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** During sewage treatment there is microbial degradation to carbon dioxide and also absorption to the particulate sludge. The absorbed portion is subsequently biodegraded when the sludge is disposed of.
- 12.4 Mobility in Soil:** No data available.
- 12.5 Results of PBT and vPvB assessment:** No data available.
- 12.6 Other adverse effects:** Under normal and foreseeable uses, there are no concerns for aquatic organisms exposed to product ingredients at the anticipated environmental concentrations.

SECTION 13. DISPOSAL CONSIDERATIONS

- 13.1 Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Dispose of contents and containers in accordance with local, regional, national, and international regulations.

SECTION 14. TRANSPORT INFORMATION

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not Regulated.

UN Number:

Hazard Class:

14.2 MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

UN Number:

Packing Group:

Hazard Class:

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

UN Number:

Packing Group:

Hazard Class:

SECTION 15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
497-19-8	Sodium carbonate	No	No	No
1344-00-9	Silicic acid, aluminum sodium salt	No	No	No
25155-30-0	Sodium dodecylbenzene sulfonate	No	Yes NA	No
1344-09-8	Sodium silicate	No	No	No

CAS # Hazardous Components (Chemical Name)

Other US EPA or State Lists

497-19-8	Sodium carbonate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; NC TAP: No; SC TAP: No
1344-00-9	Silicic acid, aluminum sodium salt	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; NC TAP: No; SC TAP: No
25155-30-0	Sodium dodecylbenzene sulfonate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; NC TAP: No; SC TAP: No
1344-09-8	Sodium silicate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; NC TAP: No; SC TAP: No

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CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
497-19-8	Sodium carbonate	Mexico INSQ: Yes; REACH: Yes - 01-2119485498-19: Full, (P)
1344-00-9	Silicic acid, aluminum sodium salt	Mexico INSQ: Yes; REACH: Yes - 01-2119429887-22: Full, (P)
25155-30-0	Sodium dodecylbenzene sulfonate	Mexico INSQ: Yes; REACH: Yes - 01-2120088038-51: Full, (P)
1344-09-8	Sodium silicate	Mexico INSQ: Yes; REACH: Yes - 01-2119448725-31: Full, (P)

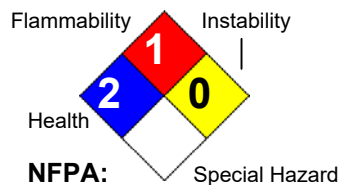
SECTION 16. OTHER INFORMATION

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Hazard Rating System:

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PPE	

HMIS:



NFPA:

Additional Information: 12/03/2020 - Routine review and updated for Mexican compliance.
01/26/2021 - Updated for REACH compliance.