

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 10/15/2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Klor Kleen Chlorinating Sanitizer- 1212, 1214, 1215

Product code : 20114

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Advantage Chemical, LLC Temecula, CA, 92590 T 1-855-238-2436

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 ChemTrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

 Skin Corr. 1A
 H314

 Eye Irrit. 2A
 H319

 Aquatic Acute 1
 H400

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Signal word (GHS-US)

Hazard pictograms (GHS-US)





GHS05 : Danger

Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage

H319 - Causes serious eye irritation H400 - Very toxic to aquatic life

Precautionary statements (GHS-US) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash hands, forearms and face thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

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+P313 - If eye irritation persists: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

P391 - Collect spillage P405 - Store locked up

P501 - Dispose of contents/container to a licensed hazardous waste facility in accordance with

state and local agencies

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
sodium hypochlorite, solutions, 14.5% <conc available="" chlorine<18.5%<="" td=""><td>(CAS No) 7681-52-9</td><td>35 - 70</td><td>Aquatic Acute 1, H400</td></conc>	(CAS No) 7681-52-9	35 - 70	Aquatic Acute 1, H400
sodium hydroxide, conc=50%, aqueous solution	(CAS No) 1310-73-2	1 - 10	Skin Corr. 1A, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.

Get immediate medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage

Symptoms/injuries after eye contact : Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity : Thermal decomposition generates : Corrosive vapours.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing.

Hygiene measures : 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

Technical measures : Comply with applicable regulations.

Storage conditions : Keep only in original container in a cool well ventilated area. Keep container closed when not in

use

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 (5 - 42) °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Klor Kleen Chlorinating Sanitizer- 1212, 1214, 1215		
ACGIH	Not applicable	
OSHA	Not applicable	

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	
ACGIH	Not applicable
OSHA	Not applicable

sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>		
ACGIH	ACGIH TWA (ppm)	0.5 ppm
ACGIH	ACGIH STEL (ppm)	0.5 ppm
OSHA	Not applicable	

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or face shield. Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

 Physical state
 : Liquid

 Colour
 : Yellow

 Odour
 : characteristic

 Odour threshold
 : No data available

 pH
 : 12 (11.5 - 12.5)

 Melting point
 : No data available

 Freezing point
 : <= 0 °C</td>

Boiling point : >= 100 °C
Flash point : None

Polytike evaporation rate (but least ten1) : No data as

Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : No data available Explosive limits : No data available Explosive properties : No data available

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Oxidising properties : No data available

Vapour pressure : No data available

Relative density : No data available

Relative vapour density at 20 °C : No data available

Density : >= 1.1 (1.095 - 1.12) g/ml

Solubility : Soluble in water.

Water: Solubility in water of component(s) of the mixture :

• sodium hydroxide, conc=50%, aqueous solution: Complete • sodium hypochlorite, solutions,

14.5%<conc available chlorine<18.5%: Complete

Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

VOC content : <= 10 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
	pH: 12 (11.5 - 12.5)
Serious eye damage/irritation	: Causes serious eye irritation.
	pH: 12 (11.5 - 12.5)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>		
IARC group	3 - Not classifiable	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	

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Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after eye contact : Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>	
LC50 fish 1	0.19 mg/l (96 h; Pimephales promelas; Pure substance)
EC50 Daphnia 1	2.1 mg/l (96 h; Daphnia magna; Pure substance)
LC50 fish 2	5.9 mg/l (96 h; Pimephales promelas; Solution <50%)
EC50 Daphnia 2	52 mg/l (96 h; Palaemonetes sp.; Pure substance)

12.2. Persistence and degradability

Klor Kleen Chlorinating Sanitizer- 1212, 1214, 1215		
Persistence and degradability	Not established.	
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.	
sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>		
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test)data on mobility of the components available.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	

12.3. Bioaccumulative potential

Klor Kleen Chlorinating Sanitizer- 1212, 1214, 1215	
Bioaccumulative potential	Not established.
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).
sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" td=""></conc>	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Triple rinse containers with water and offer for recycling. Chemical concentrate, contaminated liquid or residues, needs to be collected safely and offered up to a public chemical recycling

facility and or hazardous chemical waste facility. Submit SDS along with chemical to be

disposed. Dispose of in accordance with state and local regulations.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1791 Hypochlorite solutions, 8, III

UN-No.(DOT) : UN1791

Proper Shipping Name (DOT) : Hypochlorite solutions

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) 8 - Corrosive



Packing group (DOT) III - Minor Danger

Dangerous for the environment Yes Marine pollutant Yes



: 203

: 241

DOT Packaging Non Bulk (49 CFR 173.xxx) DOT Packaging Bulk (49 CFR 173.xxx) DOT Special Provisions (49 CFR 172.102)

: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP24 - The portable tank may be fitted with a device to prevent the build up of excess pressure due to the slow decomposition of the hazardous material being transported. The device must be in the vapor space when the tank is filled under maximum filling conditions. This device must also prevent an unacceptable amount of leakage of liquid in the case of overturning.

DOT Packaging Exceptions (49 CFR 173.xxx)

DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25

passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 26 - Stow "away from" acids

Additional information

Other information : Consumer Commodity ORM-D for 128oz or less.

No additional information available

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Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists) 1000 lb	
sodium hypochlorita solutions 44.5% cons available chloring 19.5% (7594.52.9)	

sodium hypochlorite, solutions, 14.5% <conc (7681-52-9)<="" available="" chlorine<18.5%="" th=""></conc>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

No additional information available

15.3. US State regulations

sodium hydroxide, conc=50%, aqueous solution (1310-73-2)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

$sodium\ hypochlorite,\ solutions,\ 14.5\% < conc\ available\ chlorine < 18.5\%\ (7681-52-9)$

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

SECTION 16: Other information

Revision date : 10/15/2015 Other information : None.

Full text of H-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

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NFPA health hazard	:	2 - Intense or continued exposure could cause temporary
		incapacitation or possible residual injury unless prompt

medical attention is given.

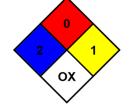
NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with

some release of energy, but not violently.

NFPA specific hazard : OX - This denotes an oxidizer, a chemical which can

greatly increase the rate of combustion/fire.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high

temperatures and pressures. Materials may react non-violently with water or undergo

hazardous polymerization in the absence of inhibitors.

Personal Protection : C

C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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