

Justeq07

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 05/27/2015

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Justeq07
Product code : 9380

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

Use of the substance/mixture : Microbicide

1.3. Details of the supplier of the safety data sheet

Justeq, LLC
8271 Crimson Ct.
Northbrook, IL 60061
T (847) 656-8626

1.4. Emergency telephone number

Emergency number : For help in chemical emergencies, call Chemtrec day or night
Chemtrec 1-800-424-9300

SECTION 2: Hazard(s) Identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1A H314 - Causes severe skin burns and eye damage

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H314 - Causes severe skin burns and eye damage
H290 - May be corrosive to metals

Precautionary statements (GHS-US) :

P260 - Do not breathe dust, mist, spray
P264 - Wash all exposed body parts thoroughly after handling
P280 - Wear eye protection, face protection, protective clothing, protective gloves
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
P310 - Immediately call a POISON CENTER, a doctor
P321 - Specific treatment - see First Aid measures on this label
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container to proper treatment facilities in accordance with all applicable local, state & federal regulations
Do not mix with acid or ammonia - may release dangerous chlorine gas.
Do not mix with other products

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
sodium hypochlorite, solution, conc active chlorine=12.5%	(CAS No) 7681-52-9	40 - 70	Skin Corr. 1A, H314
sodium hydroxide, conc=50%, aqueous solution	(CAS No) 1310-73-2	1 - 10	Skin Corr. 1A, H314
sodium bromide	(CAS No) 7647-15-6	1 - 10	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general** : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). If exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation** : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact** : Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.
- First-aid measures after eye contact** : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Cover eyes aseptically. Take victim to an ophthalmologist. Do not apply neutralizing agents. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion** : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Do not give chemical antidote. Immediately call a POISON CENTER or doctor/physician. Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital.

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

- Symptoms/injuries** : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation** : EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung oedema. Respiratory difficulties.
- Symptoms/injuries after skin contact** : Caustic burns/corrosion of the skin. Slow-healing wounds.
- Symptoms/injuries after eye contact** : Corrosion of the eye tissue. Permanent eye damage.
- Symptoms/injuries after ingestion** : Vomiting. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Bleeding of the gastrointestinal tract. Shock. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Tumours of the gastrointestinal tract.
- Chronic symptoms** : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract.

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** : Adapt extinguishing media to the environment.
- Unsuitable extinguishing media** : No unsuitable extinguishing media known. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard** : INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity Hazard".
- Explosion hazard** : INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".
- Reactivity** : On burning: release of toxic and corrosive gases/vapours (chlorine, hydrogen chloride). Decomposes slowly on exposure to air: oxidation which increases fire hazard and release of toxic and corrosive gases/vapours (chlorine). This reaction is accelerated on exposure to light, on exposure to temperature rise and on exposure to (some) metals. Reacts violently with (some) acids/bases: release of toxic and corrosive gases/vapours (chlorine).

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Incompatible materials	: Sources of ignition. Direct sunlight.
Maximum storage period	: 1 year
Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources.
Prohibitions on mixed storage	: KEEP SUBSTANCE AWAY FROM: reducing agents. (strong) acids. metals.
Storage area	: Store in a cool area. Keep out of direct sunlight. Store in a dry area. Store in a dark area. Keep locked up. Provide for a tub to collect spills. Keep only in the original container. Meets the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: hermetical. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: polyethylene. polypropylene. glass. stoneware/porcelain. MATERIAL TO AVOID: lead. aluminium. copper. tin. zinc. bronze.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Justeq07		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³ (Sodium hydroxide; USA; Momentary value; TLV - Adopted Value)
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³ (Sodium hydroxide; USA; Momentary value; TLV - Adopted Value)
OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
OSHA	OSHA PEL (Ceiling) (mg/m ³)	2 mg/m ³
sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³ (Sodium hydroxide; USA; Momentary value; TLV - Adopted Value)

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: GIVE EXCELLENT RESISTANCE: nitrile rubber. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: chlorinated polyethylene. styrene-butadiene rubber. nitrile rubber/PVC. GIVE POOR RESISTANCE: PVA. natural fibres.
Hand protection	: Gloves. Wear eye protection, face protection, protective clothing, protective gloves protective gloves.
Eye protection	: Chemical goggles or face shield. Face shield.
Skin and body protection	: Corrosion-proof clothing. Wear suitable protective clothing.
Respiratory protection	: Wear gas mask with filter type B if conc. in air > exposure limit. 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
Appearance	: Clear liquid.
Colour	: Light yellow to yellow-brown
Odour	: chlorine-like
Odour threshold	: No data available
pH	: 12 - 13
pH solution	: 11 - 12
Melting point	: No data available
Freezing point	: < 0 °C
Boiling point	: > 100 °C
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available

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Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available.
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	: 1.24 g/ml
Solubility	: Soluble in water. Water: 100 %
Log Pow	: 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 : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

On burning: release of toxic and corrosive gases/vapours (chlorine, hydrogen chloride). Decomposes slowly on exposure to air: oxidation which increases fire hazard and release of toxic and corrosive gases/vapours (chlorine). This reaction is accelerated on exposure to light, on exposure to temperature rise and on exposure to (some) metals. Reacts violently with (some) acids/bases: release of toxic and corrosive gases/vapours (chlorine).

10.2. Chemical stability

Unstable on exposure to light.

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. Do not mix with acid or ammonia - may generate dangerous chlorine gas. May be corrosive to metals.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; Ingestion; Inhalation; oral; Skin and eye contact

Acute toxicity : Not classified

sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Literature study)
sodium bromide (7647-15-6)	
LD50 oral rat	2500 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
ATE US (oral)	2500.000 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 12 - 13

Serious eye damage/irritation : Not classified

pH: 12 - 13

Respiratory or skin sensitisation : Not classified

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Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
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 inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung oedema. Respiratory difficulties.
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin. Slow-healing wounds.
Symptoms/injuries after eye contact	: Corrosion of the eye tissue. Permanent eye damage.
Symptoms/injuries after ingestion	: Vomiting. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Bleeding of the gastrointestinal tract. Shock. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Tumours of the gastrointestinal tract.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract.

SECTION 12: Ecological information

12.1. Toxicity

sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)	
LC50 fish 1	> 0.20 mg/l (LC50; 96 h; Pimephales promelas)
sodium bromide (7647-15-6)	
LC50 fish 1	> 1000 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	> 1000 mg/l (EC50; 48 h)

12.2. Persistence and degradability

Justeq07	
Persistence and degradability	Not established.
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	
Persistence and degradability	Biodegradability: not applicable. Not established.
sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)	
Persistence and degradability	Biodegradability: not applicable. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
sodium bromide (7647-15-6)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Justeq07	
Bioaccumulative potential	Not established.
sodium hydroxide, conc=50%, aqueous solution (1310-73-2)	
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

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sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)	
Bioaccumulative potential	Bioaccumulation: not applicable.

sodium bromide (7647-15-6)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)	
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 : Remove waste in accordance with local, state and/or national regulations. Remove for physico-chemical/biological treatment. Do not discharge into surface water. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to proper treatment facilities in accordance with all applicable local, state & federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14. Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1791 Hypochlorite solutions, 8, II

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) : II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

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- DOT Special Provisions (49 CFR 172.102) : A7 - Steel packagings must be corrosion-resistant or have protection against corrosion.
 B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.
 B15 - Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.
 IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.
 IP5 - IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions.
 N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.
 T7 - 4 178.274(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) : 154
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L
- 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
- Other information : No supplementary information available.

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Justeq07

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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

Not subject to reporting requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
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sodium hypochlorite, solution, conc active chlorine=12.5% (7681-52-9)

Not subject to reporting requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Justeq07

State or local regulations

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

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

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, solution, conc active chlorine=12.5% (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

Other information : None.

Full text of H-statements:

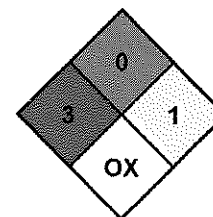
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H314	Causes severe skin burns and eye damage

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was 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 : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard - Materials that will not burn

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

: D
D - Face shield and eye protection, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

Terms and Conditions. This Safety Data Sheet (SDS) is designed only as guidance for the product to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantability or fitness for a particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special, or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishings of any information in this SDS, or in any other way related (directly or indirectly) to this SDS. The receipt and use of this information constitutes consent to these terms and conditions.