

Safety data sheet according to CLASS 2013

Printing date 09.12.2016

Revision: 09.12.2016

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

• Product identifier

- Trade name: OPTISOLV OP7324US
- Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
 - Application of the substance / the mixture: Cleaning agent/ Cleaner

• Details of the supplier of the safety data sheet

• Manufacturer/Supplier:
KYZEN
430 Harding Industrial Drive
Nashville, TN 37211 USA
P: 1-800-845-5524

KYZEN
Sdn. Bhd (842490-K)
Plot 47, Hilir Sungai Keluang 2
Phase 4, Bayan Lepas,
11900, Penang, Malaysia
P: 604-630-3000

- Further information obtainable from: Product safety department
- Emergency telephone number:
CHEMTREC
Within the USA and Canada: 1-800-424-9300
Outside the USA and International: +1-703-527-3887

2 Hazards identification

• Classification of the substance or mixture



corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.

• Label elements

- GHS label elements
The product is classified and labelled according to the Globally Harmonised System (GHS).
 - Hazard pictograms



GHS05

- Signal word Danger

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- Hazard-determining components of labelling:
 - potassium hydroxide
 - sodium hydroxide
 - Ethoxylated Propoxylated Alcohols
- Hazard statements
 - Causes severe skin burns and eye damage.
- Precautionary statements
 - Do not breathe dust/fume/gas/mist/vapours/spray.
 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Immediately call a POISON CENTER/doctor.
 - Store locked up.
 - Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
 - Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Mixtures

- Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

1310-73-2	sodium hydroxide Skin Corr. 1A, H314	5-<10%
1310-58-3	potassium hydroxide Skin Corr. 1A, H314; Acute Tox. 4, H302	5-<10%
106-65-0	dimethyl succinate STOT RE 2, H373; Eye Irrit. 2, H319	1-≤2,5%
68603-25-8	Ethoxylated Propoxylated Alcohols Eye Dam. 1, H318	1-≤2,5%
25498-49-1	[2-(2-methoxymethylethoxy)methylethoxy]propanol	1-≤2,5%

4 First aid measures

· Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- Information for doctor:
 - Most important symptoms and effects, both acute and delayed No further relevant information available.
 - Indication of any immediate medical attention and special treatment needed
No further relevant information available.

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5 Firefighting measures

- **Extinguishing media**
 - Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - Protective equipment: No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
 - Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
 - Information about fire - and explosion protection: No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - Storage:
 - Requirements to be met by storerooms and receptacles: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

- Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

PEL	Ceiling limit: 2 mg/m ³
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1310-58-3 potassium hydroxide

PEL	Ceiling limit: 2 mg/m ³
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- Additional information: The lists valid during the making were used as basis.

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Exposure controls

- Personal protective equipment:
 - General protective and hygienic measures:
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
 - Respiratory protection:
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties

- General Information
 - Appearance:
 - Form: Fluid
 - Colour: According to product specification
 - Odour: Characteristic
 - Odour threshold: Not determined.
- pH-value at 20 °C: >12,5
- Change in condition
 - Melting point/Melting range: Undetermined.
 - Boiling point/Boiling range: > 104 °C
- Flash point: Not applicable.
- Flammability (solid, gaseous): Not applicable.

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· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1,17 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
 - Chemical stability
 - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity

· LD/LC50 values relevant for classification:

1310-73-2 sodium hydroxide

Oral	LD50	2000 mg/kg (rat)
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1310-58-3 potassium hydroxide

Oral	LD50	273 mg/kg (rat)
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· Primary irritant effect:

- Skin corrosion/irritation Strong caustic effect on skin and mucous membranes.
- Serious eye damage/irritation Strong caustic effect.

· Respiratory or skin sensitisation No sensitising effects known.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **Toxicity**
 - Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
 - Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- **Additional ecological information:**
 - General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- **Results of PBT and vPvB assessment**
 - PBT: Not applicable.
 - vPvB: Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
 - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- | | |
|----------------------------------|--|
| • UN-Number | |
| • ADR, IMDG, IATA | UN1719 |
| • UN proper shipping name | |
| • ADR | 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE) |
| • IMDG, IATA | CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE) |

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• Transport hazard class(es)

- ADR, IMDG, IATA



- Class
- Label

8 Corrosive substances.
8

• Packing group

- ADR, IMDG, IATA

II

• Environmental hazards:

- Marine pollutant:

No

• Special precautions for user

Warning: Corrosive substances.

- Danger code (Kemler):

80

- EMS Number:

F-A,S-B

- Segregation groups

Alkalis

• Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

• Transport/Additional information:

- ADR

- Limited quantities (LQ)

1L

- Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

- Transport category

2

- Tunnel restriction code

E

- IMDG

- Limited quantities (LQ)

1L

- Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

• UN "Model Regulation":

UN1719, CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE), 8, II

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture

- GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

- Hazard pictograms



GHS05

- Signal word Danger

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 - Causes severe skin burns and eye damage.
- Precautionary statements
 - Do not breathe dust/fume/gas/mist/vapours/spray.
 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Immediately call a POISON CENTER/doctor.
 - Store locked up.
 - Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained herein is based on available data from reliable sources and is accurate to the best of KYZEN Corporation's knowledge at the time of this publication. KYZEN makes no warranty, expressed or implied, of merchantability or fitness for a particular purpose, course of performance or usage of trade. The user is solely responsible for determining the suitability and completeness of such information for their particular application and for adopting appropriate safety precautions. Physical properties listed within are typical values based on samples tested and should not be construed as guaranteed analysis of any specific lot or as specifications for the product. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve additional safety or performance considerations. This data is not to be taken as a warranty or representation for which KYZEN assumes legal or financial responsibility.

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- **Department issuing SDS:** Product safety department
- **Contact:** MSDS Coordinator
 - Abbreviations and acronyms:
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - Acute Tox. 4: Acute toxicity – Category 4
 - Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 - * Data compared to the previous version altered.

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