

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 03/17/2016 Reviewed on 03/17/2016

1 Identification

- · Product Identifier
- · Trade name: Sodium Hydroxide, 0.1%
- Relevant identified uses of the substance or mixture and uses advised against:
- · Product Description pH adjustment kit
- · Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier:

ANDalyze, Inc.

2109 S.Oak Street

Suite 102

Champaign, IL 61820 Phone: +1 857-453-6740 Fax: +1 847-386-1277

· Emergency telephone number: +1 217-328-0045

2 Hazard(s) Identification

· Classification of the substance or mixture:

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements:
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: Non-Regulated Material
- Signal word: Warning
- Hazard statements:

H320 Causes eye irritation.

· Precautionary statements:

P264 Wash thoroughly after handling.

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.

Unknown acute toxicity:

0 % of the mixture consists of component(s) of unknown toxicity.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of substances listed below with non-hazardous additions.

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Trade name: Sodium Hydroxide, 0.1%

Dangerous Components:
 1310-73-2 Sodium Hydroxide
 ♦ Skin Corr. 1A, H314 0.1%

4 First-Aid Measures

- · Description of first aid measures:
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: If swallowed and symptoms occur, consult a doctor.
- · 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.

5 Fire-Fighting Measures

- · Extinguishing media:
- · Suitable extinguishing agents:

CO₂, extinguishing 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:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures: Not required.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

· 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: No special precautions are necessary if used correctly.
- Information about protection against explosions and fires: 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 receptacle tightly sealed.
- Specific end use(s): No further relevant information available.

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8 Exposure Controls/Personal Protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters:
- Components with occupational exposure limits:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- · Protection of hands: Not required.
- Material of gloves: Not required.
- · Penetration time of glove material: Not applicable.
- · Eye protection:



Tightly sealed goggles

9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Clear
Odor: Odorless
Odor threshold: Not determined.

· pH-value @ 20 °C (68 °F): 7

Change in condition

Melting point/Melting range: Not determined. Boiling point/Boiling range: 100 °C (212 °F)

· Flash point: None

Flammability (solid, gaseous): Not applicable.
 Ignition temperature: Not determined.
 Decomposition temperature: Not determined.

· **Auto igniting:** Product is not self-igniting.

• Danger of explosion: Product does not present an explosion hazard.

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· Explosion limits:

Lower: Not determined. Not determined.

Vapor pressure @ 20 °C (68 °F): 23 hPa (17 mm Hg)

• **Density @ 20 °C (68 °F):** 1.011 g/cm³ (8.437 lbs/gal)

Relative density: Not determined.
 Vapor density: Not determined.
 Evaporation rate: Not determined.

· Solubility in / Miscibility with:

Water: Fully miscible.Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

· Solvent content:

Organic solvents: 0.0 % Water: 99.9 % O.1 %

• Other information: No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- · 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:
- · Primary irritant effect:
- On the skin: No irritating effect.
- · On the eye: Irritating effect.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· Carcinogenic categories:

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

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Trade name: Sodium Hydroxide, 0.1%

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

12 Ecological Information

- · Toxicity:
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability: No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water.
- · 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:

Observe all federal, state and local environmental regulations when disposing of this material.

- · Uncleaned packagings
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

· UN-Number:

· DOT, ADR, ADN, IMDG, IATA Non-Regulated Material

· UN proper shipping name:

· DOT, ADR, ADN, IMDG, IATA Non-Regulated Material

· Transport hazard class(es):

· DOT, ADR, ADN, IMDG, IATA

· Class: Non-Regulated Material

· Packing group:

· **DOT, ADR, IMDG, IATA** Non-Regulated Material

Environmental hazards: Not applicable.Special precautions for user: Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

UN "Model Regulation": Non-Regulated Material

15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture:
- · SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

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Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

• TSCA (Toxic Substances Control Act):

All ingredients are listed or exempt from listing.

· California Proposition 65:

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· New Jersey Right-to-Know List:

1310-73-2 Sodium Hydroxide

New Jersey Special Hazardous Substance List:

1310-73-2 Sodium Hydroxide

CO, R1

· Pennsylvania Special Hazardous Substance List:

1310-73-2 Sodium Hydroxide

E

· Carcinogenic categories:

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

• TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: Non-Regulated Material
- · Signal word: Warning
- · Hazard statements:

H320 Causes eye irritation.

· Precautionary statements:

P264 Wash thoroughly after handling.

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.

· National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of



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Trade name: Sodium Hydroxide, 0.1%

this information and the suitability of the material or product for any particular purpose.

· Date of preparation / last revision: 03/17/2016 / 1

· Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value

PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

* * Data compared to the previous version altered.

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1 Identification

- · Product Identifier
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- Relevant identified uses of the substance or mixture and uses advised against:
- · Product Description pH adjustment kit
- · Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier:

ANDalyze, Inc. 2109 S.Oak Street

Suite 102

Champaign, IL 61820 Phone: +1 857-453-6740 Fax: +1 847-386-1277

· Emergency telephone number: +1 217-328-0045

2 Hazard(s) Identification

· Classification of the substance or mixture:



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements:
- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



· Signal word: Warning · Hazard statements:

H315+H320 Causes skin and eye irritation.

Precautionary statements:

P280 Wear protective gloves.

P264 Wash thoroughly after handling.

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 supplementary first aid instructions on this Safety Data Sheet).

P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

· Unknown acute toxicity:

0 % of the mixture consists of component(s) of unknown toxicity.

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OSHA HazCom Standard 29 CFR 1910.1200(a) and GHS Rev 03.

Issue date 03/17/2016 Reviewed on 03/17/2016

Trade name: Sodium Hydroxide, 1%

- · Classification system:
- NFPA ratings (scale 0 4)



Health = 1 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 0

· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture: consisting of non-regulated material.
- · Dangerous Components:

1310-73-2 Sodium Hydroxide

Skin Corr. 1A, H314

 $\leq 2.5\%$

4 First-Aid Measures

- · Description of first aid measures:
- · 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.

If skin irritation occurs, consult a doctor.

· After eye contact:

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If swallowed and symptoms occur, consult a doctor.
- · 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.

5 Fire-Fighting Measures

- · Extinguishing media:
- Suitable extinguishing agents:

CO₂, extinguishing 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:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures: Not required.
- · Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

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Trade name: Sodium Hydroxide, 1%

· 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: No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: 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 receptacle tightly sealed.
- · Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters:
- · Components with occupational exposure limits:

1310-73-2 Sodium Hydroxide

PEL Long-term value: 2 mg/m³
REL Ceiling limit value: 2 mg/m³
TLV Ceiling limit value: 2 mg/m³

- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- Breathing equipment: Not required.
- 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.

Select glove material based on penetration times, rates of diffusion and 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 cannot be calculated in advance and has therefore to be checked prior to the application.

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Trade name: Sodium Hydroxide, 1%

Penetration time of glove material:

The exact break-through time has to be determined and observed by the manufacturer of the protective

· Eye protection:



Tightly sealed goggles

Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid Color: Clear · Odor: Odorless · Odor threshold: Not determined.

· pH-value @ 20 °C (68 °F): 7

Change in condition

Melting point/Melting range: Not determined. 100 °C (212 °F) Boiling point/Boiling range:

· Flash point: None

· Flammability (solid, gaseous): Not applicable. · Ignition temperature: Not determined. · Decomposition temperature: Not determined.

· Auto igniting: Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

23 hPa (17 mm Hg) · Vapor pressure @ 20 °C (68 °F):

Density @ 20 °C (68 °F): 1.011 g/cm³ (8.437 lbs/gal)

Relative density: Not determined. · Vapor density: Not determined. · Evaporation rate: Not determined.

· Solubility in / Miscibility with:

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

· Solvent content:

0.0 % Organic solvents:

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Trade name: Sodium Hydroxide, 1%

 Water:
 99.0 %

 Solids content:
 1.0 %

· Other information: No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- 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 that are relevant for classification:

1310-73-2 Sodium Hydroxide

Oral LD50 2000 mg/kg (rat)

- Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- On the eye: Irritating effect.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- Carcinogenic categories:
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

12 Ecological Information

- · Toxicity:
- · Aquatic toxicity:

1310-73-2 Sodium Hydroxide

EC50 40 mg/l (daphnia)

- · Persistence and degradability: No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.

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Issue date 03/17/2016 Reviewed on 03/17/2016

Trade name: Sodium Hydroxide, 1%

- · 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:

Observe all federal, state and local environmental regulations when disposing of this material.

- · Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

· UN-Number:

· DOT, ADR, ADN, IMDG, IATA Non-Regulated Material

· UN proper shipping name:

DOT, ADR, ADN, IMDG, IATA Non-Regulated Material

· Transport hazard class(es):

· DOT, ADR, ADN, IMDG, IATA

· Class: Non-Regulated Material

· Packing group:

· **DOT, ADR, IMDG, IATA** Non-Regulated Material

Environmental hazards: Not applicable.Special precautions for user: Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

· UN "Model Regulation": Non-Regulated Material

15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture:
- · SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed or exempt from listing.

- · California Proposition 65:
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

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Trade name: Sodium Hydroxide, 1%

· Chemicals known to cause developmental toxicity:	
None of the ingredients are listed.	
· New Jersey Right-to-Know List:	
1310-73-2 Sodium Hydroxide	
· New Jersey Special Hazardous Substance List:	
1310-73-2 Sodium Hydroxide	CO, R1
· Pennsylvania Special Hazardous Substance List:	
1310-73-2 Sodium Hydroxide	E

- · Carcinogenic categories:
- · EPA (Environmental Protection Agency):

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



GHS07

- · Signal word: Warning
- · Hazard statements:

H315+H320 Causes skin and eye irritation.

· Precautionary statements:

P280 Wear protective gloves.

P264 Wash thoroughly after handling.

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 supplementary first aid instructions on this Safety Data Sheet).

P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

· National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.



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Trade name: Sodium Hydroxide, 1%

· Date of preparation / last revision: 03/17/2016 / 1

· Abbreviations and acronvms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

* * Data compared to the previous version altered.

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106



OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 03/17/2016 Reviewed on 03/17/2016

1 Identification

- · Product Identifier
- · Trade name: Hydrogen Peroxide, 30%
- Relevant identified uses of the substance or mixture and uses advised against:
- · Product Description Iron interference kit
- · Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier:

ANDalyze, Inc. 2109 S.Oak Street

Suite 102

Champaign, IL 61820 Phone: +1 857-453-6740 Fax: +1 847-386-1277

· Emergency telephone number: +1 217-328-0045

2 Hazard(s) Identification

· Classification of the substance or mixture:



GHS05 Corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- · Label elements:
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:





GHS05 GHS07

- · Signal word: Danger
- · Hazard-determining components of labeling:

Hydrogen Peroxide USP • Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

· Precautionary statements:

P260 Do not breathe dusts or mists.

P280 Wear eye protection / face protection.
P264 Wash thoroughly after handling.

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

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Trade name: Hydrogen Peroxide, 30%

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

Immediately call a POISON CENTER/doctor. P310

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P363 Wash contaminated clothing before reuse.

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

P405 Store locked up.

Dispose of contents/container in accordance with local/regional/national/international P501

regulations.

· Unknown acute toxicity:

0 % of the mixture consists of component(s) of unknown toxicity.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of substances listed below with non-hazardous additions.

Dangerous Components:

CAS: 7722-84-1 Hydrogen Peroxide USP RTECS: MX0887000 🚯 Ox. Liq. 1, H271; 🕎 Skin Corr. 1A, H314; 🕦 Acute Tox. 4, H302; Acute

25-50%

Tox. 4, H332

First-Aid Measures

- · Description of first aid measures:
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact:

Immediate medical treatment is necessary. Failure to treat burns can prevent wounds from healing. Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes.

If easy to do so, remove contact lenses if worn.

Get immediate medical attention.



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Trade name: Hydrogen Peroxide, 30%

After swallowing:

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- 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.

5 Fire-Fighting Measures

- · Extinguishing media:
- · Suitable extinguishing agents:

CO₂, extinguishing 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:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

· Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

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 protection against explosions and fires: 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 receptacle tightly sealed.
- · Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

· Additional information about design of technical systems: No further data; see section 7.

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Trade name: Hydrogen Peroxide, 30%

· Control parameters:

· Components with occupational exposure limits:

7722-84-1 Hydrogen Peroxide USP

PEL Long-term value: 1.4 mg/m³, 1 ppm REL Long-term value: 1.4 mg/m³, 1 ppm TLV Long-term value: 1.4 mg/m³, 1 ppm

- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:
- Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- 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.

Select glove material based on penetration times, rates of diffusion and 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 cannot 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 determined and observed by the manufacturer of the protective gloves.

· Eye protection:



Tightly sealed goggles

9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Clear
Odor: Pungent
Not detail

· Odor threshold: Not determined.

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Trade name: Hydrogen Peroxide, 30%

· pH-value @ 20 °C (68 °F): 3.3

· Change in condition

Melting point/Melting range: Not determined.
Boiling point/Boiling range: 108 °C (226 °F)

· Flash point: None

Flammability (solid, gaseous): Not applicable.
 Ignition temperature: Not determined.
 Decomposition temperature: Not determined.

· **Auto igniting:** Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

• Vapor pressure @ 20 °C (68 °F): 23 hPa (17 mm Hg)

• **Density @ 20 °C (68 °F):** 1.1 g/cm³ (9.18 lbs/gal)

Relative density: Not determined.
 Vapor density: Not determined.
 Evaporation rate: Not determined.

· Solubility in / Miscibility with:

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

Solvent content:

Organic solvents: 0.0 % Water: 70.0 %

Other information:
 No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- · Conditions to avoid: Heat, flame and ignition sources.
- · Incompatible materials: Strong acids, strong bases, strong oxidising agents and strong reducing agents.
- · Hazardous decomposition products: Toxic fumes.

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Trade name: Hydrogen Peroxide, 30%

11 Toxicological Information

- Information on toxicological effects:
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:				
7722-84-1 Hydrogen Peroxide USP				
Oral	LD50	2000 mg/kg (mouse)		
		820 mg/kg (rabbit)		
Dermal	LD50	4060 mg/kg (rat)		
Inhalative	LC50/96 hours	2000 mg/l (rat)		

- · Primary irritant effect:
- · On the skin: Strong caustic effect on skin and mucous membranes.
- · On the eye:

Strong irritant with the danger of severe eye injury.

Corrosive effect.

Causes serious eye irritation.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

Irritant

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

- Carcinogenic categories:
- · IARC (International Agency for Research on Cancer):

Group 1 - Carcinogenic to humans

Group 2A - Probably carcinogenic to humans

Group 2B - Possibly carcinogenic to humans

Group 3 - Not classifiable as to its carcinogenicity to humans

Group 4 - Probably not carcinogenic to humans

7722-84-1 Hydrogen Peroxide USP	3
· NTP (National Toxicology Program):	
None of the ingredients are listed.	
· OSHA-Ca (Occupational Safety & Health Administration):	
None of the ingredients are listed.	

12 Ecological Information

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

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

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Trade name: Hydrogen Peroxide, 30%

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 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 of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.

- · Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

· UN-Number:

· DOT, ADR, IMDG, IATA

UN2014

· UN proper shipping name:

· DOT, IATA

Hydrogen peroxide, aqueous solutions

· ADR · IMDG

UN2014 Hydrogen peroxide, aqueous solutions HYDROGEN PEROXIDE, AQUEOUS SOLUTION

· Transport hazard class(es):

DOT



· Class: 8 Corrosive substances

· Label:

· ADR, IMDG, IATA



· Class: 8 Corrosive substances

· Label: 8

· Packing group:

· DOT, ADR, IMDG, IATA

• Environmental hazards: Not applicable.

· Special precautions for user: Warning: Corrosive substances

• EMS Number: F-H,S-Q
• Segregation groups: Peroxides

· Stowage Category

Stowage Code SW1 Protected from sources of heat.
Segregation Code SG16 Stow "separated from" class 4.1

SG59 Stow "separated from" permanganates

SG72 See 7.2.6.3.2.

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Trade name: Hydrogen Peroxide, 30%

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

· Transport/Additional information:

· DOT

• **Quantity limitations:**On passenger aircraft/rail: Forbidden
On cargo aircraft only: Forbidden

· ADR

• Excepted quantities (EQ): Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS, 8,

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15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture:
- · SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

7722-84-1 Hydrogen Peroxide USP

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

7722-84-1 Hydrogen Peroxide USP

7732-18-5 Water, distilled water, deionized water

- · California Proposition 65:
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

New Jersey Right-to-Know List:

7722-84-1 Hydrogen Peroxide USP

· New Jersey Special Hazardous Substance List:

7722-84-1 Hydrogen Peroxide USP

CO, MU, R3

· Pennsylvania Special Hazardous Substance List:

7722-84-1 Hydrogen Peroxide USP

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- · Carcinogenic categories:
- · EPA (Environmental Protection Agency):

None of the ingredients are listed.

· TLV (Threshold Limit Value established by ACGIH):

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Trade name: Hydrogen Peroxide, 30%

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:





· Signal word: Danger

· Hazard-determining components of labeling:

Hydrogen Peroxide USP · Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

· Precautionary statements:

P260 Do not breathe dusts or mists. P280 Wear eye protection / face protection. P264 Wash thoroughly after handling.

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

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

shower.

P305+P351+P338 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. P310

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet). P321

IF INHALED: Remove person to fresh air and keep comfortable for breathing. P304+P340

Wash contaminated clothing before reuse. P363

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

Store locked up. P405

Dispose of contents/container in accordance with local/regional/national/international P501

regulations.

· National regulations:

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- Date of preparation / last revision: 03/17/2016 / -
- Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation



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IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

Ox. Liq. 1: Oxidising Liquids, Hazard Category 1 Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

*Data compared to the previous version altered.

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