

Safety Data Sheet

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier**

Product Name	• CleanAL 01
Synonyms	• TMAH/Surfactant Solution
Product Code	• 70036

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

Relevant identified use(s)	• Cleaner
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1.3 Details of the supplier of the safety data sheet

Manufacturer	• Air Liquide 2700 Post Oak Blvd. Houston, TX 77056 United States www.us.airliquide.com sds@airliquide.com
Telephone (Technical)	• 713-896-2896
Telephone (Technical)	• 800-819-1704

1.4 Emergency telephone number

Manufacturer	• 800-424-9300
Manufacturer	• +1 703-527-3887

Section 2: Hazards Identification**EU/EEC**

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP	• Not classified - Classification criteria not met
DSD/DPD	• Not classified - Classification criteria not met

2.2 Label Elements

CLP	Hazard statements • No label element(s) required
DSD/DPD	Risk phrases • No label element(s) required

2.3 Other Hazards

CLP	• According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
DSD/DPD	• According to European Directive 1999/45/EC this preparation is not considered

dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

- Not classified - Classification criteria not met

2.2 Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

2.3 Other hazards

OSHA HCS 2012

- This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Not classified - Classification criteria not met

2.2 Label elements

WHMIS

- No label element(s) required

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA



Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive

Methanaminium, N,N,N-trimethyl-, hydroxide	CAS:75-59-2 EINECS:200-882-9	< 0.5%	NDA	EU DSD/DPD: Self Classified - C, R34 EU CLP: Self Classified - Skin Corr. 1B, H314; Eye Dam. 1, H318 OSHA HCS 2012: Skin Corr. 1B; Eye Dam. 1
Water and other components	NDA	Balance	NDA	EU DSD/DPD: Data Lacking EU CLP: Data Lacking OSHA HCS 2012: Data Lacking

None of the other components contribute significant additional hazards at the concentrations present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, Canadian Workplace Hazardous Materials Identification System Standards (CPR 4), EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] and EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD).

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes.

Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes.

Ingestion

- If swallowed, rinse mouth with water (only if the person is conscious) If large quantities are swallowed, call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

- LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media

- No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Some may burn but none ignite readily.

Hazardous Combustion Products

- This material may decompose and produce irritating vapors, and toxic gases (e.g., carbon oxides, nitrogen oxides).

5.3 Advice for firefighters

- Move containers from fire area if you can do it without risk.
Wear positive pressure self-contained breathing apparatus (SCBA).
Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- | | |
|-----------------------------|---|
| Personal Precautions | <ul style="list-style-type: none">• Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. |
| Emergency Procedures | <ul style="list-style-type: none">• Keep unauthorized personnel away. Stay upwind. |

6.2 Environmental precautions

- Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

- | | |
|--------------------------------------|---|
| Containment/Clean-up Measures | <ul style="list-style-type: none">• Stop leak if you can do it without risk.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal. |
|--------------------------------------|---|

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

- | | |
|-----------------|---|
| Handling | <ul style="list-style-type: none">• Use only with adequate ventilation. Use good safety and industrial hygiene practices. Wear appropriate personal protective equipment, avoid direct contact. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. |
|-----------------|---|

7.2 Conditions for safe storage, including any incompatibilities

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|----------------|--|
| Storage | <ul style="list-style-type: none">• Store in a cool, dry, well-ventilated place. |
|----------------|--|

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

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|-----------------------------------|--|
| Exposure Limits/Guidelines | <ul style="list-style-type: none">• Currently there are no applicable exposure limits established for this material. |
|-----------------------------------|--|

8.2 Exposure controls

- | | |
|--------------------------------------|---|
| Engineering Measures/Controls | <ul style="list-style-type: none">• Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
|--------------------------------------|---|

Personal Protective Equipment

- | | |
|--------------------|---|
| Respiratory | <ul style="list-style-type: none">• In case of insufficient ventilation, wear suitable respiratory equipment. |
| Eye/Face | <ul style="list-style-type: none">• Wear safety glasses. |
| Skin/Body | <ul style="list-style-type: none">• Wear appropriate gloves. |

- | | |
|--|--|
| Environmental Exposure Controls | <ul style="list-style-type: none">• Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste. |
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Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear, colorless, solution with a mild amine odor.
Color	Colorless	Odor	Mild amine odor.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	100 C(212 F)	Melting Point	0 C(32 F)
Decomposition Temperature	Data lacking	pH	11 to 12
Specific Gravity/Relative Density	1.01 Water=1	Water Solubility	Miscible
Viscosity	Data lacking	Explosive Properties	Not relevant.
Oxidizing Properties:	Not relevant.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Excess heat.

10.5 Incompatible materials

- This product is incompatible with strong oxidizing agents, strong reducing agents, and materials that are incompatible with water.

10.6 Hazardous decomposition products

- Products of thermal decomposition include carbon oxides and nitrogen oxides.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

Potential Health Effects

Inhalation

- Acute (Immediate) • May cause mild irritation.
- Chronic (Delayed) • No data available.

Skin

- Acute (Immediate) • May cause mild irritation.
- Chronic (Delayed) • No data available.

Eye

- Acute (Immediate) • May cause mild irritation.
- Chronic (Delayed) • No data available.

Ingestion

- Acute (Immediate) • May cause mild irritation.
- Chronic (Delayed) • No data available.

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information

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

SARA Hazard Classifications

- None

State Right To Know				
Component	CAS	MA	NJ	PA
Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	No	Yes	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Yes	No	Yes	Yes	No

Inventory (Con't.)		
Component	CAS	TSCA
Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

Canada - WHMIS - Ingredient Disclosure List

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 1 %

Environment

Canada - CEPA - Priority Substances List

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

China - Ozone Depleting Substances - Second Schedule

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

China - Ozone Depleting Substances - Third Schedule

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

China - Dangerous Goods List

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 (solid or solution)

China - Export Control List - Part I Chemicals

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Methanaminium, N,N,N-trimethyl-, hydroxide 75-59-2 Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Germany**Environment****Germany - TA Luft - Types and Classes**

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Germany - Water Classification (VwVwS) - Annex 1

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Germany - Water Classification (VwVwS) - Annex 3

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	ID Number 6399, hazard class 1 - low hazard to waters (25% aqueous solution)
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Other**Germany - Specifically Regulated Chemicals in TRGS**

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Portugal**Other****Portugal - Prohibited Substances**

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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United Kingdom**Environment****United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to Air**

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Other**United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review**

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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United Kingdom - List of Dangerous Substances in Water

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - OSHA - Specifically Regulated Chemicals

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - California - Proposition 65 - Developmental Toxicity

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Methanaminium, N,N,N-trimethyl-, hydroxide	75-59-2	Not Listed
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15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage
R34 - Causes burns.

Last Revision Date

- 08/September/2014

Preparation Date

- 08/September/2014

Disclaimer/Statement of Liability

- To the best of Air Liquide's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

Key to abbreviations

NDA = No Data Available
