

Section 1: IDENTIFICATION

Product Name: AR Kleen Concentrate
Synonyms: Not available.
Product Use: Concentrated lens cleaner.
Restrictions on Use: Not available.
Manufacturer/Supplier: Nomax, Inc./Amcon Laboratories
9735 Green Park Industrial Drive
Saint Louis Mo 63123
Phone Number: 314-815-5200
Emergency Phone: 314-815-5200
Date of Preparation of SDS: February 25, 2016

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification: Skin Irritation, Category 2
Eye Damage, Category 1
Sensitization - Skin, Category 1
Carcinogenicity, Category 1A
Toxic to Reproduction, Category 1B

LABEL ELEMENTS

Hazard

Pictogram(s):



Signal Word: Danger

Hazard Statements: Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
May cause cancer.
May damage fertility or the unborn child.

Precautionary Statements

Prevention: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing mist, vapours, or spray.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, protective clothing and eye protection.

Response: IF ON SKIN: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Immediately call a POISON CENTER or doctor.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 6% of this product mixture consists of ingredient(s) of unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations, 2015.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
2,4-Imidazolidinedione, 1,3-bis(hydroxymethyl)-5,5-dimethyl-	1,3-Dimethylol-5,5-dimethylhydantoin	6440-58-0	5 - 6
1-Decanamine, N,N-dimethyl-, N-oxide	Capric dimethyl amine oxide	2605-79-0	3 - 4
Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt (1:4)	Edetate Sodium	64-02-8	1 - 2
Methanol	Not available.	67-56-1	< 0.3
Formaldehyde	Not available.	50-00-0	< 0.2

Section 4: FIRST-AID MEASURES

- Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.
Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- Eye Contact:** If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.
- Skin Contact:** If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Acute and delayed symptoms and effects: May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Formaldehyde is a severe skin irritant and sensitizer. Contact causes white discoloration, smarting, cracking and scaling.
- Ingestion:** If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration.

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Swallowing Methanol is potentially life threatening. Onset of symptoms may be delayed for 18 to 24 hours after digestion.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Ingesting even small amounts of methanol could potentially cause blindness or death. Effects of sub lethal doses may be nausea, headache, abdominal pain, vomiting, blurred vision, blindness, coma and death. A person may get better but then worse again up to 30 hours later.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is not sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO₂, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon. Oxides of nitrogen. Aldehydes. Ammonia.

Protection of Firefighters: Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Personal Precautions: Do not touch or walk through spilled material. Use personal protection recommended in Section 8.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.

Methods for Containment: Stop leak if without risk. Do not flush to sewer or allow to enter waterways.

Methods for Clean-Up: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Other Information: See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:

Do not swallow. Avoid breathing mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. See Section 8 for information on Personal Protective Equipment.

Storage:

Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component

1,3-Dimethylol-5,5-dimethylhydantoin [CAS No. 6440-58-0]

ACGIH: No TLV established.

OSHA: No PEL established.

Capric dimethyl amine oxide [CAS No. 2605-79-0]

ACGIH: No TLV established.

OSHA: No PEL established.

Edetate Sodium [CAS No. 64-02-8]

ACGIH: No TLV established.

OSHA: No PEL established.

Methanol [CAS No. 67-56-1]

ACGIH: 200 ppm (TWA); 250 ppm (STEL); Skin; BEI (2008)

OSHA: 200 ppm (TWA), 260 mg/m³ (TWA);
250 ppm (STEL); Skin. [Vacated];

Formaldehyde [CAS No. 50-00-0]

ACGIH: 0.3 ppm (C); DSEN; RSEN; A2 (1987)

OSHA: 0.75 ppm (TWA); 2 ppm (STEL);

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

C: Ceiling

Engineering Controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Eye/Face Protection:

Wear chemical safety goggles. Ensure that eyewash stations and safety showers are close to the workstation

location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications for further information.

Skin and Body Protection: Wear protective clothing.

Respiratory Protection: If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colourless liquid.

Colour: Colourless.

Odour: Odourless.

Odour Threshold: Not available.

Physical State: Liquid.

pH: 8.8 to 9.3

Melting Point / Freezing Point: Not available.

Initial Boiling Point: Not available.

Boiling Range: Not available.

Flash Point: Not available.

Evaporation Rate: Not available.

Flammability (solid, gas): Not applicable.

Lower Flammability Limit: Not available.

Upper Flammability Limit: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Relative Density: Not available.

Solubilities: Soluble in water.

Partition Coefficient: n-Octanol/Water: Not available.

Auto-ignition Temperature: Not available.

Decomposition Temperature: Not available.

Viscosity: Not available.

Percent Volatile, wt. %: Not available.

VOC content, wt. %: Not available.

Density: Not available.

Coefficient of Water/Oil Distribution: Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity: Contact with incompatible materials. Exposure to heat.

Chemical Stability: Stable under normal storage conditions.

Possibility of Hazardous Reactions: Not available.

Conditions to Avoid: Contact with incompatible materials. Exposure to heat.

Incompatible Materials: Strong bases. Strong oxidizers. Aluminum. Copper. Copper alloys. Nitrous acid. Nickel.

Hazardous Decomposition Products: Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

Component	CAS No.	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀
1,3-Dimethylol-5,5-dimethylhydantoin	6440-58-0	2000 mg/kg (rat)	Not available.	Not available.
Capric dimethyl amine oxide	2605-79-0	Not available.	Not available.	Not available.
Edetate Sodium	64-02-8	Not available.	Not available.	Not available.
Methanol	67-56-1	5628 mg/kg (rat)	15800 mg/kg (rabbit)	64000 ppm (rat); 4H
Formaldehyde	50-00-0	100 mg/kg (rat)	0.27 mL/kg (rabbit)	205 ppm (rat); 4H

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Spleen. Liver. Kidneys. Central nervous system.

Symptoms (including delayed and immediate effects)

- Inhalation:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
- Eye:** Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.
- Skin:** May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Formaldehyde is a severe skin irritant and sensitizer. Contact causes white discoloration, smarting, cracking and scaling.
- Ingestion:** May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Ingesting even small amounts of methanol could potentially cause blindness or death. Effects of sub lethal doses may be nausea, headache, abdominal pain, vomiting, blurred vision, blindness, coma and death. A person may get better but then worse again up to 30 hours later.

- Skin Sensitization:** Not available.
- Respiratory Sensitization:** Not available.
- Medical Conditions Aggravated By Exposure:** Emphysema. Bronchitis.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

- Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Spleen. Liver. Kidneys. Central nervous system.
- Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to Methanol by inhalation or absorption may cause systemic poisoning, brain disorders, impaired vision and blindness. Frequent or prolonged exposure to formaldehyde may cause hypersensitivity leading to contact dermatitis.
- Carcinogenicity:** May cause cancer. Animal studies have shown Formaldehyde to cause carcinogenic effects. In particular, chronic inhalation studies in rats have shown the development of nasal cavity carcinomas at 6 and 15 ppm.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Formaldehyde	A2	Group 1	List 1	OSHA Carcinogen.	Listed.

- Mutagenicity:** Not available.
- Reproductive Effects:** May damage fertility or the unborn child.
- Developmental Effects**
- Teratogenicity:** Possible risk of harm to the unborn child.
- Embryotoxicity:** Possible risk of harm to the unborn child.

- Toxicologically Synergistic Materials:** In animals, high concentrations of methanol can increase the toxicity of other chemicals, particularly liver toxins like carbon tetrachloride. Ethanol significantly reduces

the toxicity of methanol because it competes for the same metabolic enzymes, and has been used to treat methanol poisoning.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Not available.
Persistence / Degradability:	Not available.
Bioaccumulation / Accumulation:	Not available.
Mobility in Environment:	Not available.
Other Adverse Effects:	Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION**U.S. Department of Transportation (DOT)**

Proper Shipping Name:	Not regulated.
Class:	Not applicable.
UN Number:	Not applicable.
Packing Group:	Not applicable.
Label Code:	Not applicable.

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name:	Not regulated.
Class:	Not applicable.
UN Number:	Not applicable.
Packing Group:	Not applicable.
Label Code:	Not applicable.

Section 15: REGULATORY INFORMATION**Chemical Inventories****US (TSCA)**

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations**United States**

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112(r) TQ (lbs.)
Methanol	Not listed.	Not listed.	5000	313	U154	Not listed.
Formaldehyde	500	100	100	313	U122	15000

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Methanol	67-56-1	Listed.
Formaldehyde	50-00-0	E

Note: E = Extraordinarily Hazardous Substance

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Methanol	67-56-1	SHHS
Formaldehyde	50-00-0	SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Methanol	67-56-1	E
Formaldehyde	50-00-0	ES

Note: E = Environmental Hazard; S = Special Hazardous Substance

California

California Prop 65: WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Component	Type of Toxicity
Methanol	developmental
Formaldehyde	cancer

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

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Version: 1.0

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