Version: 1.0 Effective Date: Jun-29-2015



SAFETY DATA SHEET KLEEN MCT515

1. Identification

Product identifier KLEEN MCT515

Other means of identification None.

Recommended use Membrane cleaner **Recommended restrictions** None known.

Company/undertaking identification

GE Betz, Inc. 4636 Somerton Road Trevose, PA 19053

T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1
Carcinogenicity Category 2

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory

irritation. Suspected of causing cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/. Wash

contaminated clothing before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container to.

Hazard(s) not otherwise classified None known.

(HNOC)

Page: 1 / 8

3. Composition/information on ingredients

Mixtures

Components	CAS#	Percent
N-hydroxyethylenediamine triacetic acid trisodium salt	139-89-9	2.5 - 10
Potassium carbonate	584-08-7	2.5 - 10
Sodium carbonate	497-19-8	2.5 - 10
Benzene, 1,1'-oxybis-, Tetrapropylene Derivs., Sulfonated, Sodium Salts	119345-04-9	1 - 2.5
Nitrilotriacetic acid,trisodium salt (NTA.Na3)	5064-31-3	0.1 - 1

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contactTake off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison

control center immediately. Chemical burns must be treated by a physician. Wash contaminated

clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so

that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and

delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment

needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be

delayed.

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the

label where possible). Ensure that medical personnel are aware of the material(s) involved, and take

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Use standard firefighting procedures and consider the hazards of other involved materials.

precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the

chemical

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Move containers from fire area if you can do so without risk.

Fire fighting equipment/instructions

equipment/instructions

Specific methods

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Material name: KLEEN MCT515 Version number: 1.0 Page: 2 / 8

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handlingObtain special instructions before use. Do not handle until all safety precautions have been read and

understood.

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate

personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see

Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) 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.

Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Splash proof chemical goggles. Face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and

before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

9. Physical and chemical properties

Appearance

Color Colorless to pale yellow

Physical state Liquid
Odor Mild

Odor threshold Not available.

pH (concentrated product) 12.5

pH in aqueous solution 11.4 (5% SOL.)

Melting point/freezing point 15 °F (-9 °C)

Initial boiling point and boiling 220 °F (104 °C)

range

Flash point Not applicable.

Evaporation rate < 1 (Ether = 1)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.
Flammability limit - upper Not available.

(%)

Explosive limit - lower (%)

Explosive limit - upper (%)

Vapor pressure

Vapor pressure temp.

Not available.

18 mm Hg
70 °F (21 °C)

Material name: KLEEN MCT515 Page: 3 / 8

Vapor density < 1 (Air = 1)Relative density 1.25

Relative density temperature 70 °F (21 °C)

Solubility(ies)

Solubility (water) 100 %

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.

Viscosity 22 cps
Viscosity temperature 70 °F (21 °C)

Other information

Percent volatile 0 (Estimated)
Pour point 20 °F (-7 °C)
Specific gravity 1.25

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Not available.

Conditions to avoidContact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Hydrogen cyanide evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system.

Skin contactCauses severe skin burns.Eye contactCauses serious eye damage.IngestionCauses digestive tract burns.

Symptoms related to the physical, chemical and toxicological

characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness

could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Product	Species	Test Results
KLEEN MCT515 (CAS Mixture)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)
Components	Species	Test Results

Benzene, 1,1'-oxybis-, Tetrapropylene Derivs., Sulfonated, Sodium Salts (CAS 119345-04-9)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

Oral

LD50 Rat > 5000 mg/kg

Material name: KLEEN MCT515 Page: 4 / 8

Version number: 1.0

Components Species Test Results

N-hydroxyethylenediamine triacetic acid trisodium salt (CAS 139-89-9)

Acute

Inhalation

LC50 Rat > 10.054 mg/l, 4 Hour

Oral

LD50 Rat 1780 mg/kg

Potassium carbonate (CAS 584-08-7)

Acute

Oral LD50

Rat 1870 mg/kg

Sodium carbonate (CAS 497-19-8)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

LC50 Rat 1.53 mg/l, 4 Hours

Oral

LD50 Rat 2800 mg/kg

Skin corrosion/irritationCauses severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are mutagenic or

genotoxic.

Carcinogenicity Suspected of causing cancer.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

 $\label{eq:maycause} \text{May cause respiratory irritation}.$

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazardNot an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

 Product
 Species
 Test Results

 KLEEN MCT515 (CAS Mixture)

 LC50
 Fathead Minnow
 153 mg/l, Acute Toxicity, 96 hour, (Estimated)

 Aquatic

 Crustacea
 LC50
 Daphnia magna
 53 mg/l, Acute Toxicity, 48 hour, (Estimated)

Bioaccumulative potential

Mobility in soil No data available.

Material name: KLEEN MCT515 Page: 5 / 8

^{*} Estimates for product may be based on additional component data not shown.

^{*} Estimates for product may be based on additional component data not shown.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential,

endocrine disruption, global warming potential) are expected from this component.

Environmental fate The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal instructions**

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste disposal Hazardous waste code

company.

Waste from residues / unused

products

Dispose of in accordance with local regulations.

Empty containers or liners may retain some product residues. This material and its container must be

disposed of in a safe manner (see: Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since Contaminated packaging

emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number UN1719

UN proper shipping name

CAUSTIC ALKALI LIQUIDS, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)

Transport hazard class(es)

8 Class Subsidiary risk Ш Packing group **Environmental hazards** No. **ERG Code** 154

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

Some containers may not be approved under IATA, please check BOL for exact container classification.

IMDG

UN number UN1719

UN proper shipping name Transport hazard class(es) CAUSTIC ALKALI LIQUIDS, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)

Class

8 Subsidiary risk Ш Packing group

Environmental hazards

No. Marine pollutant

Not available. **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA; IMDG



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 US federal regulations CFR 1910.1200.

Material name: KLEEN MCT515 Page: 6 / 8

Version number: 1.0

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

> Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

US state regulations

US - Massachusetts RTK - Substance List

Not regulated.

US - Pennsylvania RTK - Hazardous Substances

Not regulated.

US - Rhode Island RTK

Not regulated.

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Formaldehyde (CAS 50-00-0) Listed: January 1, 1988 LEAD (CAS 7439-92-1) Listed: October 1, 1992

US - California Proposition 65 - CRT: Listed date/Developmental toxin

LEAD (CAS 7439-92-1) Listed: February 27, 1987

Material name: KLEEN MCT515 Page: 7 / 8

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

LEAD (CAS 7439-92-1) Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

LEAD (CAS 7439-92-1) Listed: February 27, 1987

16. Other information, including date of preparation or last revision

Issue dateJun-29-2015Revision dateJun-29-2015

Version # 1.0

References: No data available

Disclaimer The information in the sheet was written based on the best knowledge and experience currently

available.

Revision Information Product and Company Identification: Physical States

Composition / Information on Ingredients: Disclosure Overrides Transport Information: Material Transportation Information

Regulatory Information: United States

HazReg Data: North America

GHS: Classification

Material name: KLEEN MCT515 Page: 8 / 8

Version number: 1.0