

MIGHTY CLEAN SDS

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

Product Name on Label: PROFESSIONALS CHOICE MIGHTY CLEAN

Other Identification: NONE

Use of the substance/mixture: cleaner

Company name : MOORE OIL COMPANY
4033 WEST CUSTER AVE

MILWAUKEE, WI 53209 (414) 462-3200

Emergency number: (800) 424-9300 - CHEMTREC

SECTION 2: Hazards identification

Classification of the substance or mixture:

Flammable liquids: Category 3

Corrosive to metals: Category 1

Acute toxicity (Inhalation): Category 4

Acute toxicity (Oral): Category 4

Skin corrosion: Category 1A

Serious eye damage: Category 1

Skin sensitization: Category 1

Aspiration hazard: Category 1

Label elements:



Hazard pictograms:

Signal word: Danger

Hazard statements:

Combustible liquid. May be corrosive to metals. May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. May form combustible dust concentrations in air. May cause an allergic skin reaction. Causes serious eye irritation.

SECTION 3: Composition/information on ingredients

Mixture

NAME	PRODUCT IDENTIFIER	% BY WT
Nonylphenol polyethylene glycol ether	127087-87-0	4-5
2-Butoxy ethanol	111-76-2	2-3
Tetrapotassium pyrophosphate	7320-34-5	1-2
d-Limonene	5989-27-5	1-2
Citrus terpenes	94266-47-4	1-2
Polyethylene glycol	25322-68-3	<1
Polyoxyethylene dinonylphenol	9014-93-1	<1
Potassium hydroxide (K(OH))	1310-58-3	<1
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)	64-02-8	<1
Sodium hydroxide	1310-73-2	<1
Glycine, N,N-bis(carboxymethyl)-, sodium salt (1:3)	5064-31-3	<1
WATER	N/A	88-92

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SECTION 4: First aid measures

Description of first aid measures

First-aid measures general	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.
First-aid measures after inhalation	Remove victim to fresh air. If feeling unwell, immediately seek medical attention. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician. Consult a physician after significant exposure.
First-aid measures after skin contact	Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Rinse immediately with plenty of water. Remove contaminated clothing and shoes. If on skin, take off contaminated clothing.
First-aid measures after eye contact	If feeling unwell, immediately seek medical attention. Take victim immediately to hospital. Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Keep eye wide open while rinsing. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
First-aid measures after ingestion	Do not induce vomiting. Do not give milk or alcoholic beverages. If feeling unwell, immediately seek medical attention. Immediately rinse mouth with water. Keep respiratory tract clear. Take victim immediately to hospital. Never give anything by mouth to an unconscious person.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture: Do not allow run-off from fire-fighting to enter drains or water courses. During a fire, irritating or toxic decomposition products may be generated.

Advice for firefighters

Firefighting instructions: For safety reasons in case of fire, cans should be stored separately in closed containments. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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Protection during firefighting: Wear self-contained breathing apparatus for fire-fighting if necessary. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit. Avoid dust production. Wear respiratory protection. Wearing of safety glasses absolutely necessary. Wear protective gloves. Wear impervious safety shoes or rubber boots.

Environmental precautions: On land, sweep or shovel into suitable containers. Avoid dust production. Rinse with plenty of water. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and cleaning up: Keep in suitable, closed containers for disposal. Neutralize with acid. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling: Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Remove contaminated clothing and shoes. Wash clothing before re-using. Packaging, even those that have been emptied, will retain product residue. Always obey safety warnings and handle empty packaging as if they were full.

Conditions for safe storage, including any incompatibilities: No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Control parameters:

7320-34-5 TKPP TG		
ACGIH	TWA (mg/m ³) 10 mg/m ³ (inhalable)	3 mg/m ³ (respirable dust)
OSHA	PEL (TWA) (mg/m ³) 15 mg/m ³ (inhalable)	5 mg/m ³ (respirable dust)
1310-73-2 Sodium hydroxide		
ACGIH	C	2 mg/m ³
NIOSH REL	C	2 mg/m ³
OSHA Z-1	TWA	2 mg/m ³
OSHA P0	C	2 mg/m ³
1310-58-3 Potassium		

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hydroxide (K(OH))		
ACGIH	C	2 mg/m3
NIOSH REL	C	2 mg/m3
OSHA P0	C	2 mg/m3
111-76-2 2-Butoxy ethanol		
ACGIH	TWA	20 ppm
NIOSH REL	TWA	5 ppm 24 mg/m3
OSHA Z-1	TWA	50 ppm 240 mg/m3
OSHA P0	TWA	25 ppm 120 mg/m3
ACGIH BEI	Butoxyacetic acid (BAA) – Urine – End of shift(as soon as possible after exposure ceases)	200 mg/g Creatinine
25322-68-3 Polyethylene glycol		
US WEEL	TWA	10 mg/m3
5989-27-5 d-Limonene		
ACGIH	TWA	20 ppm

Exposure controls

Hand protection: Wear chemical protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

Respiratory protection: Respiratory protection programs must comply with 29 CFR 1910.134. Approved dust respirator (NIOSH/MSHA) should be used if airborne particles are generated when handling this material.

Skin and Body protection: Wear impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Dust impervious protective suit.

Hygiene Measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

SECTION 10: Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Vapors may form explosive mixture with air. Stable under normal conditions.

Conditions to avoid (e.g., static discharge, shock, or vibration): Freezing temperatures. Keep away from heat, flame, sparks and other ignition sources. Exposure to air. Possible emission of gaseous decomposition products may lead to a dangerous pressure build-up.

Incompatible materials: Avoid contact with: halogens, peroxides, Strong acids, Strong bases, Strong oxidizing agents, acidic clays, vinyl chloride, iodine pentafluoride, aluminum, Halogenated compounds, Brass, bronze, Copper alloys, Copper, Nickel, Lead, Tin, Zinc, Alkali metals, Metals, Halogens, Organic materials.

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Hazardous decomposition products: acrid smoke, Carbon monoxide, carbon dioxide, unburned hydrocarbons (smoke), Aldehydes, Ketones, Hydrogen (by reaction with metals), Organic acids and fumes.

SECTION 11: Toxicological information

Acute toxicity

Components:

5989-27-5:

Acute oral toxicity: LD50 (rat): 4,400 mg/kg

Assessment: The component/mixture is low toxic after single ingestion.

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: LD50 (rabbit): > 5,000 mg/kg

Assessment: The substance or mixture has no acute dermal toxicity

94266-47-4:

Acute oral toxicity: LD50 (rabbit): > 5,000 mg/kg

Acute inhalation toxicity: RD50 (mouse): 1 mg/l

Acute dermal toxicity: LD50 (rabbit): > 5,000 mg/kg

127087-87-0:

Acute oral toxicity: LD50 (Rat): 3,980 mg/kg

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: LD50 (Rabbit): 2,573 mg/kg

Assessment: The substance or mixture has no acute dermal toxicity

25322-68-3:

Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity: LC50 (Rat): > 2.5 mg/l

Exposure time: 6 h Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg

9014-93-1:

Acute oral toxicity: Remarks: No data available

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: Remarks: No data available

111-76-2:

Acute oral toxicity: LD50 (Rat): 745 mg/kg

Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity: LC50 (Rat): 550 ppm

Exposure time: 4 h

Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity: LD50 (Rat): 1,250 mg/kg

Assessment: The component/mixture is moderately toxic after single contact with skin.

7320-34-5

LD50 oral rat > 2000 mg/kg

LD50 dermal rabbit > 2000 mg/kg Similar to:OECD 402

LC50 inhalation rat (mg/l) > 1,1 mg/l rat,OECD 403, EU method B.2

Skin corrosion/irritation : Not classified

pH: 10.1 - 10.7

Serious eye damage/irritation : Causes serious eye irritation.

pH: 10.1 - 10.7

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Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure)

: Not classified

PRAYPHOS™ TKPP TG (7320-34-5)

NOAEL (oral, rat, 90 days) 500 mg/kg bodyweight/day OECD 408

Aspiration hazard : Not classified

1310-58-3:

Acute oral toxicity: LD50 (rat, male): 333 mg/kg

Method: OECD Test Guideline 425

Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: Remarks: No data available

64-02-8:

Acute oral toxicity: LD50 (Rat): 630 mg/kg

Method: Standard Acute

Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity: LC50 (Rat): 10 mg/l

Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity: Remarks: No data available

1310-73-2:

Acute oral toxicity: Remarks: No data available

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: Remarks: No data available

5064-31-3:

Acute oral toxicity: LD50 (Rat, male and female): 1,740 mg/kg

Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity: LC50 (Rat, male): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: Standard Acute

Assessment: The component/mixture is low toxic after short term inhalation.

Acute dermal toxicity: LD50 (Rabbit, male and female): > 2,000 mg/kg

Method: Standard Acute GLP: no

Skin corrosion/irritation

Components:

5989-27-5:

Species: rabbit Result: Irritating to skin.

94266-47-4:

Species: guinea pig Result: Mild skin irritation

127087-87-0:

Species: Rabbit Result: Irritating to skin.

25322-68-3:

Remarks: No data available

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9014-93-1:

Remarks: No data available

111-76-2:

Species: Rabbit Result: Irritating to skin.

1310-58-3:

Species: rabbit Result: Causes severe burns.

64-02-8:

Species: Rabbit Result: No skin irritation

1310-73-2:

Species: Rabbit Result: Causes severe burns.

5064-31-3:

Species: Rabbit Exposure time: 24 h Method: OECD Test Guideline 404

Result: No skin irritation GLP: no

Serious eye damage/eye irritation

Components:

5989-27-5:

Species: rabbit Result: No eye irritation

94266-47-4:

Species: rabbit Result: Eye irritation

127087-87-0:

Species: Rabbit Result: Irritating to eyes.

25322-68-3:

Species: Rabbit Result: No eye irritation

9014-93-1:

Species: Rabbit Result: Irritating to eyes.

111-76-2:

Species: Rabbit Result: Irritating to eyes.

1310-58-3:

Result: Risk of serious damage to eyes. Remarks: No data available

64-02-8:

Species: Rabbit Result: Risk of serious damage to eyes.

1310-73-2:

Species: Rabbit Result: Risk of serious damage to eyes.

5064-31-3:

Species: Rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405

Respiratory or skin sensitization

Components:

5989-27-5:

Test Type: lymph node assay Species: mouse Result: May cause sensitization by skin contact.

94266-47-4:

Assessment: The product is a skin sensitizer, sub-category 1B.

Result: The product is a skin sensitizer, sub-category 1B.

127087-87-0:

Species: Guinea pig Result: Did not cause sensitization on laboratory animals.

25322-68-3:

Species: Guinea pig Method: OECD Test Guideline 406

Result: Does not cause skin sensitization.

9014-93-1:

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Remarks: No data available

111-76-2:

Test Type: Maximization test Species: Guinea pig

Result: Did not cause sensitization on laboratory animals.

1310-58-3:

Species: guinea pig Method: In vivo

Result: Did not cause sensitization on laboratory animals.

64-02-8:

Species: Guinea pig Result: Did not cause sensitization on laboratory animals.

5064-31-3:

Test Type: Buehler Test Species: Guinea pig Method: OECD Test Guideline 406

Result: Did not cause sensitization on laboratory animals. GLP: yes

Germ cell mutagenicity

Components:

5989-27-5:

Genotoxicity in vitro: Test Type: Mammalian cell gene mutation assay

Test species: mouse lymphoma cells Metabolic activation: with and without metabolic activation

Result: negative Genotoxicity in vivo: Test Type: DNA damage and/or repair

Test species: rat Cell type: Kidney cells Application Route: Oral Result: negative

Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

127087-87-0:

Genotoxicity in vitro: Remarks: No data available Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

25322-68-3:

Genotoxicity in vitro: Test Type: Ames test Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation Result: negative

Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

9014-93-1:

Genotoxicity in vitro: Remarks: No data available

Germ cell mutagenicity- Assessment: Mutagenicity classification not possible from current data

111-76-2:

Genotoxicity in vitro: Test Type: Mammalian cell gene mutation assay

Test species: Chinese hamster ovary (CHO)

Metabolic activation: with and without metabolic activation

Result: negative Genotoxicity in vivo: Test Type: In vivo micronucleus test

Test species: Mouse (male) Application Route: Intraperitoneal

Result: negative Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

1310-58-3:

Genotoxicity in vitro: Test Type: Ames test Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation Result: negative

GLP: No data available Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

64-02-8:

Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

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1310-73-2:

Genotoxicity in vitro: Test Type: Ames test Test species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation Result: negative
Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

5064-31-3:

Genotoxicity in vitro: Test Type: Ames test
Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo: Test Type: Chromosome aberration assay in vivo Test species: Mouse (male)
Application Route: Oral Exposure time: 6 h, single dose Dose: 0, 100, 330, 1000 mg/kg
Result: negative GLP: yes Germ cell mutagenicity- Assessment: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Components:

5989-27-5: Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

127087-87-0: Remarks: This information is not available.

Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

25322-68-3: Remarks: This information is not available.

Carcinogenicity – Assessment: Animal testing did not show any carcinogenic effects.

9014-93-1: Remarks: This information is not available.

Carcinogenicity - Assessment: Carcinogenicity classification not possible from current data.

111-76-2: Species: Mouse Application Route: Inhalation Exposure time: 2 yr

Activity duration: 6 h Frequency of Treatment: 5 days/week NOAEL: 125 ppm

Result: Limited evidence of carcinogenic effects with no relevance to humans

Carcinogenicity - Assessment: Not classifiable as a human carcinogen.

1310-58-3: Remarks: This information is not available.

Carcinogenicity - Assessment: Carcinogenicity classification not possible from current data.

64-02-8: Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

1310-73-2: Remarks: This information is not available.

Carcinogenicity - Assessment: Carcinogenicity classification not possible from current data.

5064-31-3: Species: Rat, (male and female)

Application Route: Oral

Exposure time: 104 wks

Dose: 0, 9.2, 92, 921 mg/kg/d

LOAEL: 92 mg/kg body weight

Result: evidence of carcinogenic activity

Remarks: Category 2

Carcinogenicity - Assessment: Suspected human carcinogens

Reproductive toxicity

Components:

5989-27-5:

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.

127087-87-0:

Effects on fertility: Remarks: No data available

Effects on fetal development: Remarks: No data available

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

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25322-68-3:

Effects on fertility: Test Type: Three-generation study Species: Rat, male and female

Application Route: oral Dose: 0, 15, 59, 270, 1690 mg/kg bw

General Toxicity - Parent: NOAEL: 60 mg/kg bw

Result: No reproductive effects.

Effects on fetal development: Species: Rat

Application Route: oral Dose: 1500-5000 mg/kg bw d Duration of Single Treatment: 9 d

Teratogenicity: NOAEL: 1,500 mg/kg bw

Reproductive toxicity - Assessment: No toxicity to reproduction

Did not show teratogenic effects in animal experiments.

9014-93-1:

Effects on fertility: Remarks: No data available

Effects on fetal development: Remarks: No data available

Reproductive toxicity - Assessment: Fertility classification not possible from current data.

Embryotoxicity classification not possible from current data.

111-76-2:

Effects on fertility: Test Type: Two-generation study Species: Mouse Application Route: oral

Fertility: NOAEL: 720 mg/kg body weight Symptoms: Reduced fertility

Result: Reduced fertility at maternally toxic doses

Effects on fetal development: Test Type: Embryo-fetal development

Species: Rat Application Route: Inhalation Duration of Single Treatment: 10 d

Frequency of Treatment: 6 hr/day

Developmental Toxicity: Lowest observed adverse effect level: 100 ppm

Result: Developmental toxicity occurred at maternal toxicity dose levels

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

1310-58-3:

Effects on fertility: Remarks: No data available

Effects on fetal development: Remarks: No data available

Reproductive toxicity - Assessment: Fertility classification not possible from current data.

Embryotoxicity classification not possible from current data.

STOT - single exposure

Components:

64-02-8: No data available

1310-73-2: No data available

5064-31-3: No data available

25322-68-3: Exposure routes: Target Organs: Assessment: Remarks: Inhalation, Respiratory system

May cause respiratory irritation. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

STOT - repeated exposure

Components:

127087-87-0:

Species: Rat Application Route: Oral Exposure time: 2 y Dose: 200

Remarks: No adverse effect has been observed in chronic toxicity tests.

25322-68-3:

Species: Dog, male and female NOAEL: 500 mg/kg Application Route: Oral

Exposure time: 1 yr Number of exposures: daily Dose: 0, 500 mg/kg

9014-93-1:

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Remarks: This information is not available.

111-76-2:

Species: Rat NOAEL: 30 Application Route: Inhalation Exposure time: 14 wk
Number of exposures: 6 h/d, 5 d/wk

1310-58-3:

Remarks: This information is not available.

64-02-8:

Reproductive toxicity – Assessment: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

1310-73-2:

Effects on fertility: Remarks: No data available

Effects on fetal development: Remarks: No data available

Reproductive toxicity - Assessment: Fertility classification not possible from current data.

Embryotoxicity classification not possible from current data.

5064-31-3:

Effects on fertility: Test Type: Two-generation study Species: Rat, male and female

Application Route: Oral Dose: 0, 90, 450 mg/kg bw

General Toxicity - Parent: NOAEL: 450 mg/kg body weight

General Toxicity F1: NOAEL: 450 mg/kg body weight

Fertility: NOAEL: 450 mg/kg body weight

Result: No reproductive effects.

Effects on fetal development: Species: Rabbit

Application Route: Oral Dose: 0, 2.5, 25, 100, 250 mg/kg bw

Duration of Single Treatment: 10 d General Toxicity Maternal: NOAEL: 250 mg/kg body weight

Teratogenicity: NOAEL: 250 mg/kg body weight

Developmental Toxicity: NOAEL: 250 mg/kg body weight

Result: No teratogenic effects

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

64-02-8:

Exposure routes: Target Organs: Assessment: Remarks: Inhalation, Respiratory system

May cause damage to organs through prolonged or repeated exposure. The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

1310-73-2: No data available

5064-31-3: No data available

Repeated dose toxicity

Components:

5989-27-5:

Species: mouse LOAEL: 3,300 mg/kg Application Route: Oral Exposure time: 16 d

64-02-8:

Repeated dose toxicity - Assessment: Harmful if swallowed. Causes serious eye damage.

1310-73-2:

Remarks: This information is not available.

Repeated dose toxicity – Assessment: Causes severe skin burns and eye damage. Causes severe digestive tract burns. Corrosive to respiratory system. The product causes burns of eyes, skin and mucous membranes.

5064-31-3:

Species: Rat, male NOAEL: 9 mg/kg Application Route: Oral Exposure time: 4 wks

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Number of exposures: daily

Dose: 0, 9 mg/kg bw/d

GLP: yes

Aspiration toxicity

Components:

5989-27-5:

May be fatal if swallowed and enters airways.

94266-47-4:

May be fatal if swallowed and enters airways.

1310-58-3:

No aspiration toxicity classification

64-02-8:

No aspiration toxicity classification

1310-73-2:

No aspiration toxicity classification

SECTION 12: Ecological information

Ecotoxicity

Components:

5989-27-5:

Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 0.702 mg/l

Exposure time: 96 h Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0.36 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): 150 mg/l

Exposure time: 72 h Test Type: static test

M-Factor (Acute aquatic toxicity): 1

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.

127087-87-0:

Toxicity to fish: Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates: Remarks: No data available

Toxicity to algae: Remarks: No data available

Ecotoxicology Assessment

Acute aquatic toxicity: Toxic to aquatic life.

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

25322-68-3:

Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other aquatic invertebrates: LC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae: EC50 (Skeletonema costatum): > 100 mg/l

End point: Biomass Exposure time: 72 h Test Type: Growth inhibition

9014-93-1:

Toxicity to fish: Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates: Remarks: No data available

Toxicity to algae: Remarks: No data available

Ecotoxicology Assessment

Acute aquatic toxicity: Harmful to aquatic life.

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Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

111-76-2:

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 1,474 mg/l

Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: no

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 1,800 mg/l

Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: no

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (green algae)): 911 mg/l

End point: Biomass Exposure time: 72 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 201 GLP: no

7320-34-5:

LC50 fishes 1 > 100 mg/l (96h - Oncorhynchus Mykiss, OECD 203)

EC50 Daphnia 1 > 100 mg/l (48h - Daphnia magna, OECD 202)

EC50 other aquatic organisms 1 > 1000 mg/l (3h - ACTIVATED SLUDGE, OECD 209)

ErC50 (algae) > 100 mg/l (72h - OECD 201)

NOEC chronic fish 100 mg/l (96h - Oncorhynchus Mykiss, OECD 203)

NOEC chronic algae > 100 mg/l (72h - OECD 201)

Additional ecotoxicological information Phosphates are plant nutrient and as such may contribute to the growth of phytoplanktons in water.

1310-58-3:

Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 179 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 60 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae: EC50 (Selenastrum capricornutum (green algae)): 61 mg/l

End point: Growth rate Exposure time: 96 h Test Type: static test

64-02-8:

Toxicity to fish: LC50 (Lepomis macrochirus (Bluegill sunfish)): 486 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other aquatic invertebrates: LC50 (Daphnia magna (Water flea)): 625 mg/l

Exposure time: 24 h Test Type: static test

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): 2.77 mg/l

End point: Growth rate Exposure time: 72 h Test Type: static test

Ecotoxicology Assessment

Acute aquatic toxicity: Toxic to aquatic life.

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

1310-73-2:

Toxicity to fish: LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 40.38 mg/l

Exposure time: 48 h Test Type: Immobilization

Toxicity to algae: Remarks: No data available

Ecotoxicology Assessment Acute aquatic toxicity: Harmful to aquatic organisms.

5064-31-3:

Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 114 mg/l

Exposure time: 96 h Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae: EC50 (Desmodesmus subspicatus (green algae)): > 91.5 mg/l

End point: Biomass Exposure time: 72 h Test Type: static test

MIGHTY CLEAN SDS

Method: OECD Test Guideline 201

GLP: yes

Persistence and degradability

Components:

5989-27-5:

Biodegradability: aerobic Concentration: 0.6 mg/l Result: Readily biodegradable.

94266-47-4:

Biodegradability: Result: Readily biodegradable.

127087-87-0:

Biodegradability: Result: Not readily biodegradable. Biodegradation: < 60 %

Exposure time: 28 d Method: OECD Test Guideline 301B

25322-68-3:

Biodegradability: Result: Readily biodegradable Biodegradation: 90 %

Exposure time: 28 d Method: OECD Test Guideline 301F

Chemical Oxygen Demand (COD): 0.00182 mg/g

Theoretical Oxygen Demand (ThOD): 0.00177 mg/g

9014-93-1:

Biodegradability: Remarks: No data available

111-76-2:

Biodegradability: aerobic Inoculum: Activated sludge, domestic, adaption not specified

Result: Readily biodegradable Biodegradation: 90.4 % Exposure time: 28 d

Method: OECD Test Guideline 301B GLP: no

7320-34-5: Not relevant. (inorganic substance).

1310-58-3:

Biodegradability: Remarks: No data available

64-02-8:

Biodegradability: Remarks: No data available

1310-73-2:

Biodegradability: Remarks: No data available

5064-31-3:

Biodegradability: aerobic Concentration: 70 mg/l

Result: Readily biodegradable Biodegradation: 100 % Testing period: 9 d

Exposure time: 14 d Method: OECD Test Guideline 301E GLP: no

Bioaccumulative potential

Components:

5989-27-5:

Partition coefficient: n-octanol/water: log Pow: 4.57 log Pow: 4.38 (37 °C) pH: 7.2

94266-47-4:

Bioaccumulation: Remarks: Bioaccumulation is unlikely.

25322-68-3:

Partition coefficient: n-octanol/water: Pow: 0.2 (30 °C) pH: 6.44

Mobility in soil: No data available Other adverse effects: No data available

111-76-2:

Partition coefficient: n-octanol/water: log Pow: 0.83

Mobility in soil: No data available Other adverse effects: No data available

1310-58-3:

Partition coefficient: n-octanol/water: Remarks: not applicable

5064-31-3:

Partition coefficient: n-octanol/water: log Pow: -10.08 (25 °C)

MIGHTY CLEAN SDS

Mobility in soil: No data available

Other adverse effects: No data available

SECTION 13: Disposal considerations

Waste from residues: Dispose of in accordance with all applicable local, state and federal regulations. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

UN number: 1719

UN proper shipping name: CAUSTIC ALKALI LIQUIDS, N.O.S. (2 BUTOXY ETHANOL, POTASSIUM HYDROXIDE)

Transport hazard class(es): 8

Packing group, if applicable: II

Environmental hazards (e.g., Marine pollutant (Yes/No)): No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): N/A

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises:

SECTION 15: Regulatory information

US Federal Regulations: OSHA Hazards: Moderate skin irritant, Harmful by inhalation. Corrosive to eyes, Carcinogen, Specific target organ toxicity - repeated exposure,

Combustible dust, Toxic by ingestion, Corrosive to skin, Severe eye irritant

WHMIS Classification: D1B: Toxic Material Causing Immediate and Serious Toxic Effects

D2A: Very Toxic Material Causing Other Toxic Effects

E: Corrosive Material

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity Components CAS-No. Component RQ (lbs) Calculated product RQ (lbs)

Potassium hydroxide (K(OH))	1310-58-3	1000	1000
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SARA 304 Extremely Hazardous Substances Reportable Quantity: This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Acute Health Hazard

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM1 Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. Clean Water Act, Section 311, Table 116.4A:

1310-58-3	Potassium hydroxide (K(OH))
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MIGHTY CLEAN SDS

1310-73-2 Sodium hydroxide

The following Hazardous Chemicals are listed under the U.S. Clean Water Act, Section 311, Table 117.3:

1310-58-3 Potassium hydroxide (K(OH))

1310-73-2 Sodium hydroxide

Massachusetts Right To Know

111-76-2 2-Butoxy ethanol

1310-73-2 Sodium hydroxide

5064-31-3 Glycine, N,N-bis(carboxymethyl)-, sodium salt (1:3)

50-00-0 Formaldehyde

1310-58-3 Potassium hydroxide (K(OH))

Pennsylvania Right To Know

5989-27-5 d-Limonene

94266-47-4 Citrus terpenes

127087-87-0 Nonylphenol polyethylene glycol ether

25322-68-3 Polyethylene glycol

111-76-2 2-Butoxy ethanol

64-02-8 Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)

2836-32-0 Acetic acid, 2-hydroxy-, sodium salt (1:1)

1310-73-2 Sodium hydroxide

50-00-0 Formaldehyde

1310-58-3 Potassium hydroxide (K(OH))

1310-73-2 Sodium hydroxide

New Jersey Right To Know

5989-27-5 d-Limonene

94266-47-4 Citrus terpenes

127087-87-0 Nonylphenol polyethylene glycol ether

25322-68-3 Polyethylene glycol

9014-93-1 Polyoxyethylene dinonylphenol

111-76-2 2-Butoxy ethanol

64-02-8 Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt (1:4)

2836-32-0 Acetic acid, 2-hydroxy-, sodium salt (1:1)

5064-31-3 Glycine, N,N-bis(carboxymethyl)-, sodium salt (1:3)

1310-73-2 Sodium hydroxide

1310-58-3 Potassium hydroxide (K(OH))

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

50-00-0 Formaldehyde

The components of this product are reported in the following inventories:

1907/2006 (EU): y (positive listing) (On the inventory, or in compliance with the inventory)

Switzerland. New notified substances and declared preparations: y (positive listing) (The formulation contains substances listed on the Swiss Inventory)

United States TSCA Inventory: y (positive listing) (On TSCA Inventory)

Canadian Domestic Substances List (DSL): y (positive listing) (All components of this product are on the Canadian DSL.)

Australia Inventory of Chemical Substances (AICS): y (positive listing) (On the inventory, or in compliance with the inventory)

New Zealand. Inventory of Chemical Substances: y (positive listing) (On the inventory, or in compliance with the inventory)

MIGHTY CLEAN SDS

Japan. ENCS - Existing and New Chemical Substances Inventory: y (positive listing) (On the inventory, or in compliance with the inventory)

Japan. ISHL - Inventory of Chemical Substances (METI): y (positive listing) (On the inventory, or in compliance with the inventory)

Korea. Korean Existing Chemicals Inventory (KECI): y (positive listing) (On the inventory, or in compliance with the inventory)

Philippines Inventory of Chemicals and Chemical Substances (PICCS): y (positive listing) (On the inventory, or in compliance with the inventory)

China. Inventory of Existing Chemical Substances in China (IECSC): y (positive listing) (On the inventory, or in compliance with the inventory)

SECTION 16: Other information

The information in this Safety Sheet was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This safety sheet was prepared and is to be used only for this product. If the product is used as a component in another product, this safety sheet information may not be applicable.