

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

Trade name: Biokleen 5779

Application of the substance / the preparation: Saponifier

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

Details of the supplier of the safety data sheet

This Safety Data Sheet has been updated in accordance with the Global Harmonized System (GHS).

Manufacturer/Supplier:

Kester
800 West Thronedale Ave.
Itasca, IL 60143
Tel (630) 616-4000
Fax (630) 616-4044

Kester Components Pte Ltd
500 Chai Chee Lane
Singapore 469024
Tel: 65-64491133

Further information obtainable from: SDS Coordinator (630) 616-6844

Emergency telephone number:

CHEMTREC 24-Hour Emergency Response Telephone Number : (800) 424-9300

CHEMTREC 24-Hour Emergency Response (Outside US & Canada) Telephone Number : (703) 527-3887

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H311 Toxic in contact with skin.



GHS05 corrosion

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



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

STOT SE 3 H335+H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS06

Signal word *Danger*

Hazard-determining components of labelling:

2-aminoethanol

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2-butoxyethanol

Hazard statements

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H335+H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P361 Remove/Take off immediately all contaminated clothing.

P405 Store locked up.

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

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures -

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 141-43-5 EINECS: 205-483-3	2-aminoethanol Acute Tox. 3, H311 Skin Corr. 1B, H314 Acute Tox. 4, H332	50-100%
CAS: 111-76-2 EINECS: 203-905-0	2-butoxyethanol Acute Tox. 3, H311 Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 126-86-3 EINECS: 204-809-1	2,4,7,9-tetramethyldec-5-yne-4,7-diol Eye Irrit. 2, H319	2.5-10%

4 First aid measures

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Seek immediate medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

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Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x)

In case of fire, the following can be released:

Advice for firefighters

Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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

Methods and material for containment and cleaning up:

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

141-43-5 2-aminoethanol

WEL Short-term value: 7.6 mg/m³, 3 ppm

Long-term value: 2.5 mg/m³, 1 ppm

Sk

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111-76-2 2-butoxyethanol

WEL	Short-term value: 50 ppm Long-term value: 25 ppm Sk
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Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

When ventilation is not sufficient to remove fumes from the breathing zone, a safety approved respirator or self-contained breathing apparatus should be worn.

Protection of hands:



Protective gloves

Material of gloves

Nitrile rubber, NBR

Natural rubber, NR

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety Glasses with Side Shields Required

Goggles recommended during refilling

Body protection: Apron

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid

Colour: Light yellow

Odour: Ammonia-like

pH-value at 20°C: 12.8

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 171°C

Flash point: > 55°C

Ignition temperature: 240°C

Self-igniting: Product is not selfigniting.

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

Explosion limits:

Lower: 1.1 Vol %

Upper: 10.6 Vol %

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Vapour pressure at 20°C: 1.2 hPa

Density at 20°C: 0.98 g/cm³

Solubility in / Miscibility with water: Fully miscible.

Solvent content:
Organic solvents: 95.5 %

Solids content: 1.0 %

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: Strong acids, strong oxidizers.

Hazardous decomposition products: Nitrogen oxides

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

141-43-5 2-aminoethanol

Oral LD50 2050 mg/kg (rat)

Dermal LD50 1000 mg/kg (rabbit)

111-76-2 2-butoxyethanol

Oral LD50 1480 mg/kg (rat)

Dermal LD50 400 mg/kg (rab)

Primary irritant effect:

on the skin:

Caustic effect on skin and mucous membranes.

Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: Sensitization possible through inhalation.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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13 Disposal considerations

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

UN-Number

ADR, IMDG, IATA

UN2491

UN proper shipping name

ADR

2491 ETHANOLAMINE SOLUTION

IMDG, IATA

ETHANOLAMINE SOLUTION

Transport hazard class(es)

ADR



Class
Label

8 Corrosive substances.
8

IMDG, IATA



Class
Label

8 Corrosive substances.
8

Packing group

ADR, IMDG, IATA

III

Environmental hazards:

Marine pollutant:

No

Special precautions for user

Not applicable.

Danger code (Kemler):

80

EMS Number:

F-A,S-B

Segregation groups

Alkalis

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Transport/Additional information:

ADR

Tunnel restriction code

E

UN "Model Regulation":

UN2491, ETHANOLAMINE SOLUTION, 8, III

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15 Regulatory information

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

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS06

Signal word **Danger**

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P361 Remove/Take off immediately all contaminated clothing.

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

16 Other information

The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Kester extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The data on this Material Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Material Safety Data Sheet as a source for hazard information.

Contact: Branch Manager (Malaysia only) Tel : 04-6414633

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* **Data compared to the previous version altered.**