

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/20/2015

Reviewed on 05/20/2015

1 Identification

• Product identifier

- Trade name: KYZEN E5611
- Application of the substance / the mixture: Cleaning agent/ Cleaner

• Details of the supplier of the safety data sheet

- Manufacturer/Supplier:
KYZEN
430 Harding Industrial Drive
NASHVILLE, TN 37211 USA
P: 1-800-845-5524
www.KYZEN.com
- Information department: Product safety department
- Emergency telephone number:
CHEMTREC
Within the USA and Canada: 1-800 424-9300
Outside the USA and International: +1-703-527-3887

2 Hazard(s) identification

• Classification of the substance or mixture



GHS07

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Skin Sens. 1 H317 May cause an allergic skin reaction.

• Label elements

- GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS07

- Signal word Danger
- Hazard-determining components of labeling:
tetrahydro-2-furylmethanol
(R)-p-mentha-1,8-diene
- Hazard statements
May cause an allergic skin reaction.

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- Precautionary statements
 - Avoid breathing dust/fume/gas/mist/vapors/spray
 - Wear protective gloves.
 - Contaminated work clothing must not be allowed out of the workplace.
 - Obtain special instructions before use.
 - Do not handle until all safety precautions have been read and understood.
 - Specific treatment (see on this label).
 - Wash contaminated clothing before reuse.
 - IF exposed or concerned: Get medical advice/attention.
 - If skin irritation or rash occurs: Get medical advice/attention.
 - If on skin: Wash with plenty of water.
 - Store locked up.
 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

- NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



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 the substances listed below with nonhazardous additions.

- Dangerous components:

29911-27-1	Dipropylene glycol n-propyl ether	25-50%
97-99-4	tetrahydro-2-furylmethanol	1-≤2.5%
	(R)-p-mentha-1,8-diene	1-≤2.5%

4 First-aid measures

Description of first aid measures

- After inhalation:
 - Supply fresh air and to be sure call for a doctor.
 - In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- 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.

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5 Fire-fighting measures

- **Extinguishing media**
 - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - Protective equipment: No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
 - Information about protection against explosions and fires: Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
 - Storage:
 - Requirements to be met by storerooms and receptacles: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- Components with limit values that require monitoring at the workplace:

97-99-4 tetrahydro-2-furymethanol

WEEL Long-term value: 2.0 ppm

- Additional information: The lists that were valid during the creation were used as basis.

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Exposure controls

- Personal protective equipment:
 - General protective and hygienic measures:
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
 - Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
 - Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- 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: Goggles recommended during refilling.

9 Physical and chemical properties

Information on basic physical and chemical properties

- | | |
|----------------------------------|-----------------------------------------------|
| • General Information | |
| • Appearance: | |
| • Form: | Liquid |
| • Color: | Colorless |
| • Odor: | Mild |
| • Odour threshold: | Not determined. |
| • pH-value at 20 °C (68 °F): | 6.7 |
| • Change in condition | |
| • Melting point/Melting range: | Undetermined. |
| • Boiling point/Boiling range: | 103 °C (217 °F) |
| • Flash point: | > 103 °C (> 217 °F) (Tag Closed Cup) |
| • Flammability (solid, gaseous): | Not applicable. |
| • Decomposition temperature: | Not determined. |
| • Auto igniting: | Product is not selfigniting. |
| • Danger of explosion: | Product does not present an explosion hazard. |
| • Explosion limits: | |
| • Lower: | Not determined. |

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· Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
· Density at 20 °C (68 °F):	0.932 g/cm ³ (7.778 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· VOC content:	1.0 % 28.0 g/L (EPA Method 24)
· Other information	No further relevant information available.

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:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

(R)-p-mentha-1,8-diene

Oral	LD50	4400 mg/kg (rat)
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· Primary irritant effect:

- on the skin: No irritant effect.
- on the eye: No irritating effect.

· Sensitization: Sensitization possible through skin contact.

· Other information (about experimental toxicology):

Tetrahydrofurfuryl alcohol, CAS 97-99-4: Animal dermal, inhalation and feeding studies on this material at relatively high dosage levels have demonstrated systemic toxicity and reproductive toxicity. To date, there is no indication of any adverse chronic health effects in humans from this material in over 40 years of industrial use.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

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- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

(R)-p-mentha-1,8-diene

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- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- Aquatic toxicity: No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- Bioaccumulative potential No further relevant information available.

- Mobility in soil No further relevant information available.

- **Ecotoxicological effects:**

- Remark: Harmful to fish

- **Additional ecological information:**

- General notes:

- Water hazard class 1 (Self-assessment): slightly hazardous for water

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

- Harmful to aquatic organisms

- **Results of PBT and vPvB assessment**

- PBT: Not applicable.

- vPvB: Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- Recommendation:

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- DOT, ADR, ADN, IMDG, IATA

Not Regulated

- **UN proper shipping name**

- DOT, ADR, ADN, IMDG, IATA

Not Regulated

- **Transport hazard class(es)**

- DOT, ADR, ADN, IMDG, IATA

- Class

Not Regulated

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- | | |
|----------------------------------------------------------------------------------|-----------------|
| · Packing group
· DOT, ADR, IMDG, IATA | Not Regulated |
| · Environmental hazards:
· Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

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

- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act): All ingredients are listed.
- Proposition 65

- Chemicals known to cause cancer:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Carcinogenic categories

- EPA (Environmental Protection Agency)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS07

- Signal word Danger

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- Hazard-determining components of labeling:

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(R)-p-mentha-1,8-diene

- Hazard statements

May cause an allergic skin reaction.

- Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Contaminated work clothing must not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If on skin: Wash with plenty of water.

Store locked up.

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

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

16 Other information

The information contained herein is based on available data from reliable sources and is accurate to the best of KYZEN Corporation's knowledge at the time of this publication. KYZEN makes no warranty, expressed or implied, of merchantability or fitness for a particular purpose, course of performance or usage of trade. The user is solely responsible for determining the suitability and completeness of such information for their particular application and for adopting appropriate safety precautions. Physical properties listed within are typical values based on samples tested and should not be construed as guaranteed analysis of any specific lot or as specifications for the product. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve additional safety or performance considerations. This data is not to be taken as a warranty or representation for which KYZEN assumes legal or financial responsibility.

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- **Department issuing SDS:** Product safety department

- **Contact:** SDS Coordinator

- Date of preparation / last revision 05/20/2015 / -

- 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

- * Data compared to the previous version altered.