

# SAFETY DATA SHEET



RENO GRUND NORDIC 3338-00

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

### 1.1 Product identifier

**Product name** : RENO GRUND NORDIC 3338-00

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Paint.

### 1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

**e-mail address of person responsible for this SDS** : Prod-safe@teknos.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : In an emergency, call 112

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 2, H225

Eye Irrit. 2, H319

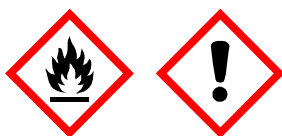
The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H225 - Highly flammable liquid and vapour.  
H319 - Causes serious eye irritation.

#### Precautionary statements

- Prevention** : P280 - Wear eye or face protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Response** : P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 - If eye irritation persists: Get medical advice or attention.
- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** :

## SECTION 2: Hazards identification

**Annex XVII - Restrictions** :  
on the manufacture,  
placing on the market and  
use of certain dangerous  
substances, mixtures and  
articles

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers                                                                          | %         | Classification                                                        | Specific Conc. Limits, M-factors and ATEs | Type    |
|-------------------------|--------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------|-------------------------------------------|---------|
| Ethanol                 | REACH #:<br>01-2119457610-43<br>EC: 200-578-6<br>CAS: 64-17-5<br>Index: 603-002-00-5 | ≥75 - ≤90 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319                              | -                                         | [1]     |
| Butanone                | REACH #:<br>01-2119457290-43<br>EC: 201-159-0<br>CAS: 78-93-3<br>Index: 606-002-00-3 | ≤3        | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336<br>EUH066 | -                                         | [1] [2] |

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

**See Section 16 for the full text of the H statements declared above.**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## SECTION 4: First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** :  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

- Small spill** :  Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** :  Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

-  Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. See Section 10 for incompatible materials before handling or use.

SECTION 7: Handling and storage

Seveso Directive - Reporting thresholds

Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| P5c      | 5000 tonnes                     | 50000 tonnes            |

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values                                                                                                                                                                                                                                            |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethanol                 | <b>Regulation on Limit Values - MAC (Austria, 12/2025)</b><br>TWA 8 hours: 1000 ppm.<br>TWA 8 hours: 1900 mg/m³.<br>CEIL 60 minutes: 2000 ppm 3 times per shift.<br>CEIL 60 minutes: 3800 mg/m³ 3 times per shift.                                               |
| Butanone                | <b>Regulation on Limit Values - MAC (Austria, 12/2025)</b> Absorbed through skin.<br>TWA 8 hours: 100 ppm.<br>TWA 8 hours: 295 mg/m³.<br>PEAK 30 minutes: 200 ppm 4 times per shift.<br>PEAK 30 minutes: 590 mg/m³ 4 times per shift.                            |
| Ethanol                 | <b>Limit values (Belgium, 12/2023)</b><br>TWA 8 hours: 1000 ppm.<br>TWA 8 hours: 1907 mg/m³.                                                                                                                                                                     |
| Butanone                | <b>Limit values (Belgium, 12/2023)</b><br>TWA 8 hours: 200 ppm.<br>TWA 8 hours: 600 mg/m³.<br>STEL 15 minutes: 300 ppm.<br>STEL 15 minutes: 900 mg/m³.                                                                                                           |
| Ethanol                 | <b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)</b><br>Limit value 8 hours: 1000 mg/m³.                                                                                                            |
| Butanone                | <b>Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)</b><br>Limit value 8 hours: 590 mg/m³.<br>Limit value 15 minutes: 885 mg/m³.                                                                       |
| Ethanol                 | <b>Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 10/2025)</b><br>ELV 8 hours: 1900 mg/m³.<br>ELV 8 hours: 1000 ppm.                                                             |
| Butanone                | <b>Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 10/2025)</b><br>STELV 15 minutes: 900 mg/m³.<br>STELV 15 minutes: 300 ppm.<br>ELV 8 hours: 600 mg/m³.<br>ELV 8 hours: 200 ppm. |

## SECTION 8: Exposure controls/personal protection

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| Butanone | <p><b>Department of Labor Inspection, Chemical Agents (Cyprus, 11/2025)</b><br/>           STEL 15 minutes: 300 ppm.<br/>           STEL 15 minutes: 900 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 200 ppm.<br/>           TWA 8 hours: 600 mg/m<sup>3</sup>.</p>                                   |
| Ethanol  | <p><b>Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 11/2025)</b><br/>           TWA 8 hours: 1000 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 522 ppm.<br/>           STEL 15 minutes: 3000 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 1566 ppm.</p>                      |
| Butanone | <p><b>Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 11/2025)</b><br/>           TWA 8 hours: 600 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 200 ppm.<br/>           STEL 15 minutes: 900 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 300 ppm.</p>                         |
| Ethanol  | <p><b>Working Environment Authority (Denmark, 11/2025)</b><br/>           TWA 8 hours: 1000 ppm.<br/>           TWA 8 hours: 1900 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 3800 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 2000 ppm.</p>                                                |
| Butanone | <p><b>Working Environment Authority (Denmark, 11/2025)</b> Absorbed through skin.<br/>           TWA 8 hours: 50 ppm.<br/>           TWA 8 hours: 145 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 900 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 300 ppm.</p>                              |
| Ethanol  | <p><b>Occupational exposure limits, Regulation No. 293 (Estonia, 1/2026)</b><br/>           TWA 8 hours: 1000 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 500 ppm.<br/>           STEL 15 minutes: 1900 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 1000 ppm.</p>                               |
| Butanone | <p><b>Occupational exposure limits, Regulation No. 293 (Estonia, 1/2026)</b><br/>           TWA 8 hours: 600 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 200 ppm.<br/>           STEL 15 minutes: 900 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 300 ppm.</p>                                  |
| Butanone | <p><b>EU OEL (Europe, 1/2022)</b><br/>           TWA 8 hours: 200 ppm.<br/>           TWA 8 hours: 600 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 300 ppm.<br/>           STEL 15 minutes: 900 mg/m<sup>3</sup>.</p>                                                                             |
| Ethanol  | <p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 3/2026)</b><br/>           TWA 8 hours: 200 ppm.<br/>           TWA 8 hours: 380 mg/m<sup>3</sup>.<br/>           STEL 15 minutes: 800 ppm.<br/>           STEL 15 minutes: 1520 mg/m<sup>3</sup>.</p>                     |
| Butanone | <p><b>Institute of Occupational Health, Ministry of Social Affairs (Finland, 3/2026)</b> Absorbed through skin.<br/>           STEL 15 minutes: 100 ppm.<br/>           STEL 15 minutes: 300 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 60 mg/m<sup>3</sup>.<br/>           TWA 8 hours: 20 ppm.</p> |

## SECTION 8: Exposure controls/personal protection

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| Ethanol  | <p><b>Ministry of Labor (France, 1/2026)</b><br/> TWA 8 hours: 1000 ppm. Notes: Permissible limit values (circulars)<br/> TWA 8 hours: 1900 mg/m<sup>3</sup>. Notes: Permissible limit values (circulars)<br/> STEL 15 minutes: 5000 ppm. Notes: Permissible limit values (circulars)<br/> STEL 15 minutes: 9500 mg/m<sup>3</sup>. Notes: Permissible limit values (circulars)</p>                                                                                                                                                                |
| Butanone | <p><b>Ministry of Labor (France, 1/2026)</b> Absorbed through skin.<br/> TWA 8 hours: 200 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)<br/> TWA 8 hours: 600 mg/m<sup>3</sup>. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)<br/> STEL 15 minutes: 900 mg/m<sup>3</sup>. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)<br/> STEL 15 minutes: 300 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)</p> |
| Ethanol  | <p><b>TRGS 900 OEL (Germany, 12/2025)</b><br/> TWA 8 hours: 380 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 1520 mg/m<sup>3</sup>.<br/> TWA 8 hours: 200 ppm.<br/> PEAK 15 minutes: 800 ppm.<br/> <b>DFG MAC-values list (Germany, 7/2025)</b> Carc 5, Muta 5, Develop C.<br/> TWA 8 hours: 200 ppm.<br/> PEAK 15 minutes: 800 ppm 4 times per shift [Interval: 1 hour].<br/> TWA 8 hours: 380 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 1520 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].</p>                                                |
| Butanone | <p><b>TRGS 900 OEL (Germany, 12/2025)</b> Absorbed through skin.<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 600 mg/m<sup>3</sup>.<br/> TWA 8 hours: 200 ppm.<br/> PEAK 15 minutes: 200 ppm.<br/> <b>DFG MAC-values list (Germany, 7/2025)</b> Develop C. Absorbed through skin.<br/> TWA 8 hours: 200 ppm.<br/> PEAK 15 minutes: 200 ppm 4 times per shift [Interval: 1 hour].<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 600 mg/m<sup>3</sup> 4 times per shift [Interval: 1 hour].</p>                    |
| Ethanol  | <p><b>Presidential Decree 307/1986: Occupational exposure limit values (Greece, 8/2024)</b><br/> TWA 8 hours: 1000 ppm.<br/> TWA 8 hours: 1900 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                                                                                              |
| Butanone | <p><b>Presidential Decree 307/1986: Occupational exposure limit values (Greece, 8/2024)</b><br/> TWA 8 hours: 200 ppm.<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 300 ppm.<br/> STEL 15 minutes: 900 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                     |
| Ethanol  | <p><b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2025)</b><br/> TWA 8 hours: 1900 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 3800 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 2000 ppm.<br/> TWA 8 hours: 1000 ppm.</p>                                                                                                                                                                                                                                                                                                                                    |
| Butanone | <p><b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2025)</b> Absorbed through skin.<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 900 mg/m<sup>3</sup>.<br/> PEAK 15 minutes: 300 ppm.<br/> TWA 8 hours: 200 ppm.</p>                                                                                                                                                                                                                                                                                                                 |

## SECTION 8: Exposure controls/personal protection

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| Ethanol  | Ministry of Welfare, List of Exposure Limits (Iceland, 11/2024)<br>TWA 8 hours: 1900 mg/m <sup>3</sup> .<br>TWA 8 hours: 1000 ppm.                                                                                                                                                        |
| Butanone | Ministry of Welfare, List of Exposure Limits (Iceland, 11/2024)<br>Absorbed through skin.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .<br>STEL 15 minutes: 300 ppm.<br>TWA 8 hours: 145 mg/m <sup>3</sup> .<br>TWA 8 hours: 50 ppm.                                                        |
| Ethanol  | NAOSH (Ireland, 4/2024) Notes: Advisory Occupational Exposure Limit Values (OELVs)<br>OELV 15 minutes: 1000 ppm.                                                                                                                                                                          |
| Butanone | NAOSH (Ireland, 4/2024) Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values<br>OELV 8 hours: 200 ppm.<br>OELV 8 hours: 600 mg/m <sup>3</sup> .<br>OELV 15 minutes: 300 ppm.<br>OELV 15 minutes: 900 mg/m <sup>3</sup> .                                           |
| Butanone | Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 9/2024)<br>Limit value 8 hours: 200 ppm.<br>Limit value 8 hours: 600 mg/m <sup>3</sup> .<br>Short Term 15 minutes: 300 ppm.<br>Short Term 15 minutes: 900 mg/m <sup>3</sup> . |
| Ethanol  | Ministers Cabinet Regulations Nr.325 (2007) - AER (Latvia, 3/2026)<br>TWA 8 hours: 1000 mg/m <sup>3</sup> .                                                                                                                                                                               |
| Butanone | Ministers Cabinet Regulations Nr.325 (2007) - AER (Latvia, 3/2026)<br>STEL 15 minutes: 300 ppm.<br>TWA 8 hours: 67 ppm.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .<br>TWA 8 hours: 200 mg/m <sup>3</sup> .                                                                               |
| Ethanol  | Lithuanian Hygiene Standard HN 23 (Lithuania, 10/2025)<br>TWA 8 hours: 1000 mg/m <sup>3</sup> .<br>TWA 8 hours: 500 ppm.<br>STEL 15 minutes: 1900 mg/m <sup>3</sup> .<br>STEL 15 minutes: 1000 ppm.                                                                                       |
| Butanone | Lithuanian Hygiene Standard HN 23 (Lithuania, 10/2025)<br>TWA 8 hours: 600 mg/m <sup>3</sup> .<br>TWA 8 hours: 200 ppm.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .<br>STEL 15 minutes: 300 ppm.                                                                                          |
| Butanone | Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)<br>TWA 8 hours: 200 ppm.<br>TWA 8 hours: 600 mg/m <sup>3</sup> .<br>STEL 15 minutes: 300 ppm.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .                                                                      |
| Butanone | EU OEL (Europe, 1/2022)<br>TWA 8 hours: 200 ppm.<br>TWA 8 hours: 600 mg/m <sup>3</sup> .<br>STEL 15 minutes: 300 ppm.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .                                                                                                                         |
| Ethanol  | Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 3/2026) Carc B2. Absorbed through skin.<br>TWA 8 hours: 260 mg/m <sup>3</sup> .<br>STEL 15 minutes: 1900 mg/m <sup>3</sup> .<br>STEL 15 minutes: 1000 ppm.<br>TWA 8 hours: 137 ppm.                           |
| Butanone | Ministry of Social Affairs and Employment, Legal limit values                                                                                                                                                                                                                             |

## SECTION 8: Exposure controls/personal protection

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|          | (Netherlands, 3/2026) Absorbed through skin.<br>TWA 8 hours: 590 mg/m <sup>3</sup> .<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .<br>TWA 8 hours: 197 ppm.<br>STEL 15 minutes: 300 ppm.                                                                                                                                                                         |
| Ethanol  | FOR-2011-12-06-1358 (Norway, 12/2025)<br>TWA 8 hours: 500 ppm.<br>TWA 8 hours: 950 mg/m <sup>3</sup> .                                                                                                                                                                                                                                                         |
| Butanone | FOR-2011-12-06-1358 (Norway, 12/2025)<br>TWA 8 hours: 75 ppm.<br>TWA 8 hours: 220 mg/m <sup>3</sup> .                                                                                                                                                                                                                                                          |
| Ethanol  | Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 4/2026)<br>TWA 8 hours: 1900 mg/m <sup>3</sup> .                                                                   |
| Butanone | Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 4/2026) Absorbed through skin.<br>TWA 8 hours: 450 mg/m <sup>3</sup> .<br>STEL 15 minutes: 900 mg/m <sup>3</sup> . |
| Ethanol  | Portuguese Institute of Quality (Portugal, 11/2014) A3.<br>STEL 15 minutes: 1000 ppm.                                                                                                                                                                                                                                                                          |
| Butanone | Portuguese Institute of Quality (Portugal, 11/2014)<br>TWA 8 hours: 200 ppm.<br>STEL 15 minutes: 300 ppm.<br>Decree-Law 24/2012 - Occupational exposure limits for chemical agents (Portugal, 6/2021)<br>STEL 15 minutes: 300 ppm.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .<br>TWA 8 hours: 200 ppm.<br>TWA 8 hours: 600 mg/m <sup>3</sup> .                |
| Ethanol  | HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 2/2026)<br>VLA 8 hours: 1900 mg/m <sup>3</sup> .<br>VLA 8 hours: 1000 ppm.<br>Short term 15 minutes: 9500 mg/m <sup>3</sup> .<br>Short term 15 minutes: 5000 ppm.                                                                                                                 |
| Butanone | HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 2/2026)<br>VLA 8 hours: 600 mg/m <sup>3</sup> .<br>VLA 8 hours: 200 ppm.<br>Short term 15 minutes: 900 mg/m <sup>3</sup> .<br>Short term 15 minutes: 300 ppm.                                                                                                                     |
| Ethanol  | Government regulation SR c. 355/2006 (Slovakia, 6/2024)<br>Inhalation sensitiser.<br>TWA 8 hours: 960 mg/m <sup>3</sup> .<br>TWA 8 hours: 500 ppm.<br>STEL 15 minutes: 1920 mg/m <sup>3</sup> .<br>STEL 15 minutes: 1000 ppm.                                                                                                                                  |
| Butanone | Government regulation SR c. 355/2006 (Slovakia, 6/2024)<br>Inhalation sensitiser.<br>TWA 8 hours: 600 mg/m <sup>3</sup> .<br>TWA 8 hours: 200 ppm.<br>STEL 15 minutes: 900 mg/m <sup>3</sup> .<br>STEL 15 minutes: 300 ppm.                                                                                                                                    |

## SECTION 8: Exposure controls/personal protection

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethanol  | <p><b>Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2025)</b><br/> TWA 8 hours: 960 mg/m<sup>3</sup>.<br/> TWA 8 hours: 500 ppm.<br/> KTV 15 minutes: 1920 mg/m<sup>3</sup> 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].<br/> KTV 15 minutes: 1000 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].</p>                           |
| Butanone | <p><b>Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2025)</b><br/> Absorbed through skin.<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> TWA 8 hours: 200 ppm.<br/> KTV 15 minutes: 900 mg/m<sup>3</sup> 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].<br/> KTV 15 minutes: 300 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].</p> |
| Ethanol  | <p><b>National institute of occupational safety and health (Spain, 2/2026)</b><br/> STEL 15 minutes: 1000 ppm.<br/> STEL 15 minutes: 1910 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                                                                              |
| Butanone | <p><b>National institute of occupational safety and health (Spain, 2/2026)</b><br/> TWA 8 hours: 200 ppm.<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 300 ppm.<br/> STEL 15 minutes: 900 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                             |
| Ethanol  | <p><b>Work environment authority Regulation 2023:14 (Sweden, 6/2025)</b><br/> TWA 8 hours: 500 ppm.<br/> TWA 8 hours: 1000 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 1000 ppm.<br/> STEL 15 minutes: 1900 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                |
| Butanone | <p><b>Work environment authority Regulation 2023:14 (Sweden, 6/2025)</b><br/> TWA 8 hours: 50 ppm.<br/> TWA 8 hours: 150 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 300 ppm.<br/> STEL 15 minutes: 900 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                    |
| Ethanol  | <p><b>SUVA (Switzerland, 1/2026) Carc 1A, Repr 1A.</b><br/> TWA 8 hours: 500 ppm.<br/> TWA 8 hours: 960 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 1000 ppm.<br/> STEL 15 minutes: 1920 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                                   |
| Butanone | <p><b>SUVA (Switzerland, 1/2026) Absorbed through skin.</b><br/> TWA 8 hours: 200 ppm.<br/> TWA 8 hours: 590 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 200 ppm.<br/> STEL 15 minutes: 590 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                                |
| Ethanol  | <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020)</b><br/> TWA 8 hours: 1000 ppm.<br/> TWA 8 hours: 1920 mg/m<sup>3</sup>.</p>                                                                                                                                                                                                                                                                                                                                                                                              |
| Butanone | <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020) Absorbed through skin.</b><br/> STEL 15 minutes: 899 mg/m<sup>3</sup>.<br/> STEL 15 minutes: 300 ppm.<br/> TWA 8 hours: 600 mg/m<sup>3</sup>.<br/> TWA 8 hours: 200 ppm.</p>                                                                                                                                                                                                                                                                                              |

### Biological exposure indices

## SECTION 8: Exposure controls/personal protection

| Product/ingredient name    | Exposure indices                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| Butanone                   | <b>Ordinance on the protection of workers from exposure to hazardous chemicals at work, biological limit values (Annex IV) (Croatia, 10/2025)</b><br>BEI: 2.6 mg/g creatinine, ethyl-methyl ketone [in urine]. Sampling time: at the end of the work shift.<br>BEI: 4.08 mmol/mol creatinine, ethyl-methyl ketone [in urine]. Sampling time: at the end of the work shift. |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| Butanone                   | <b>DFG BEI-values list (Germany, 7/2025)</b> Notes: danger from percutaneous absorption (see p. 211 and p. 228).<br>BEI: 2 mg/l, 2-butanone [in urine]. Sampling time: end of exposure or end of shift.<br><b>TRGS 903 - BEI Values (Germany, 12/2025)</b><br>BEI: 2 mg/l, 2-butanone [in urine]. Sampling time: end of exposure or end of shift.                          |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| Butanone                   | <b>5/2020. (II. 6.) ITM Decree (Hungary, 12/2025)</b><br>BEI: 28 µmol/l, methyl-ethyl-ketone [in urine]. Sampling time: at the end of the shift.<br>BEI: 2 mg/l, methyl-ethyl-ketone [in urine]. Sampling time: at the end of the shift.                                                                                                                                   |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| Butanone                   | <b>NAOSH BGVs (Ireland, 1/2011)</b><br>BMGV: 70 µmol/l, butan-2- one [in urine]. Sampling time: post shift.                                                                                                                                                                                                                                                                |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| Butanone                   | <b>Minister Cabinet Regulations No.325 - BEI (Latvia, 3/2026)</b><br>BEI: 2 mg/l, 2-butanone [in urine]. Sampling time: at the end of the exposure or at the end of the shift.                                                                                                                                                                                             |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| No exposure indices known. |                                                                                                                                                                                                                                                                                                                                                                            |
| Butanone                   | <b>Portuguese Institute of Quality (Portugal, 11/2014)</b><br>BEI: 2 mg/l, methyl ethyl ketone (MEK) [in urine]. Sampling time: end of shift.                                                                                                                                                                                                                              |
| Butanone                   | <b>HG 1218/2006, Annex 2, with subsequent modifications and additions (Romania, 2/2026)</b><br>OBLV: 2 mg/l, methyl ethyl ketone [in urine]. Sampling time: end of shift.                                                                                                                                                                                                  |

## SECTION 8: Exposure controls/personal protection

|                            |                                                                                                                                                                                                                            |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No exposure indices known. |                                                                                                                                                                                                                            |
| Butanone                   | <b>Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2025)</b><br>BLV: 2 mg/l, 2-butanone [in urine]. Sampling time: at the end of the work shift.        |
| Butanone                   | <b>National institute of occupational safety and health (Spain, 2/2026)</b><br>BLV: 2 mg/l, methyl ethyl ketone [in urine]. Sampling time: end of shift.                                                                   |
| No exposure indices known. |                                                                                                                                                                                                                            |
| Butanone                   | <b>SUVA (Switzerland, 1/2026)</b><br>BEI: 2 mg/l, 2-butanone (MEK) [in urine]. Sampling time: before the next shift or 4pm.<br>BEI: 27.7 µmol/l, 2-butanone (MEK) [in urine]. Sampling time: before the next shift or 4pm. |
| Butanone                   | <b>EH40/2005 BMGVs (United Kingdom (UK), 1/2020)</b><br>BGV: 70 µmol/l, butan-2-one [in urine]. Sampling time: post shift.                                                                                                 |

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

#### Product/ingredient name

Ethanol

#### Result

##### DNEL - Workers - Long term - Inhalation

380 mg/m<sup>3</sup>

Effects: Systemic

##### DNEL - General population - Long term - Oral

87 mg/kg bw/day

Effects: Systemic

##### DNEL - General population - Long term - Inhalation

114 mg/m<sup>3</sup>

Effects: Systemic

##### DNEL - General population - Long term - Dermal

206 mg/kg bw/day

Effects: Systemic

##### DNEL - Workers - Long term - Dermal

343 mg/kg bw/day

Effects: Systemic

##### DNEL - General population - Short term - Inhalation

950 mg/m<sup>3</sup>

Effects: Local

##### DNEL - Workers - Short term - Inhalation

1900 mg/m<sup>3</sup>

Effects: Local

Butanone

##### DNEL - General population - Long term - Oral

31 mg/kg bw/day

Effects: Systemic

##### DNEL - General population - Long term - Inhalation

## SECTION 8: Exposure controls/personal protection

106 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - General population - Long term - Dermal**

412 mg/kg bw/day

Effects: Systemic

### **DNEL - General population - Short term - Inhalation**

450 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - Workers - Long term - Inhalation**

600 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - Workers - Short term - Inhalation**

900 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - Workers - Long term - Dermal**

1161 mg/kg bw/day

Effects: Systemic

### PNECs

Not available.

## 8.2 Exposure controls

### **Appropriate engineering controls**

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Individual protection measures

#### **Hygiene measures**

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

#### **Hand protection**

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations : Wear suitable gloves tested to EN374.

< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm

1 - 4 hours (breakthrough time): 4H / Silver Shield® gloves.

## SECTION 8: Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.  
Filter type: A  
Filter type (spray application): A P
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Slight
- Odour threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** :

| Ingredient name | °C    | °F    | Method |
|-----------------|-------|-------|--------|
| Ethanol         | 78.29 | 172.9 |        |
| Butanone        | 79.59 | 175.3 |        |

- Flammability** : Not available.
- Lower and upper explosion limit** : Lower: 1.8% (butanone)  
Upper: 19% (ethanol)
- Flash point** : Closed cup: 13°C (55.4°F)
- Auto-ignition temperature** :

| Ingredient name | °C  | °F    | Method    |
|-----------------|-----|-------|-----------|
| Butanone        | 404 | 759.2 |           |
| Ethanol         | 455 | 851   | DIN 51794 |

- Decomposition temperature** : Not available.
- pH** : Not applicable.
- Viscosity** : Not available.
- Solubility(ies)** :  
Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Vapour pressure** :

## SECTION 9: Physical and chemical properties

| Ingredient name | Vapour Pressure at 20°C |      |        | Vapour pressure at 50°C |     |        |
|-----------------|-------------------------|------|--------|-------------------------|-----|--------|
|                 | mm Hg                   | kPa  | Method | mm Hg                   | kPa | Method |
| Butanone        | 78.7564                 | 10.5 |        |                         |     |        |
| Ethanol         | 42.94865                | 5.7  |        |                         |     |        |

**Relative density** : Not available.

**Density** : 0.8 g/cm<sup>3</sup>

**Vapour density** : Not available.

### Particle characteristics

**Median particle size** : Not applicable.

## 9.2 Other information

### 9.2.1 Information with regard to physical hazard classes

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

### 9.2.2 Other safety characteristics

Not applicable.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:  
oxidising materials

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

##### Product/ingredient name

Ethanol

##### Result

**Rat - Oral - LD50**

7 g/kg

**Rat - Inhalation - LC50 Vapour**

124700 mg/m<sup>3</sup> [4 hours]

Butanone

**Rabbit - Dermal - LD50**

6480 mg/kg

**Rat - Oral - LD50**

2737 mg/kg

**Conclusion/Summary [Product]** : Not available.

#### Acute toxicity estimates

**Date of issue/Date of revision** : 18/09/2026 **Date of previous issue** : 10/01/2024

**Version** : 1.01 15/25

RENO GRUND NORDIC 3338-00

**Label No** : 31766

## SECTION 11: Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Ethanol                 | 7000         | N/A            | N/A                      | 124.7                       | N/A                                 |
| Butanone                | 2737         | 6480           | N/A                      | N/A                         | N/A                                 |

### Skin corrosion/irritation

#### Product/ingredient name

Ethanol

#### Result

##### Rabbit - Skin - Mild irritant

Amount/concentration applied: 400 mg

##### Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 20 mg

Butanone

##### Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 14 mg

##### Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 402 mg

##### Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

**Conclusion/Summary [Product]** : Not available.

### Serious eye damage/eye irritation

#### Product/ingredient name

Ethanol

#### Result

##### Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

##### Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 0.066666667 minutes

Amount/concentration applied: 100 mg

##### Rabbit - Eyes - Moderate irritant

Amount/concentration applied: 100 uL

##### Rabbit - Eyes - Severe irritant

Amount/concentration applied: 500 mg

##### Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 50 pph

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Respiratory or skin sensitization

Not available.

## SECTION 11: Toxicological information

### Skin

**Conclusion/Summary [Product]** : Not available.

### Respiratory

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** :  Not available.

### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** :  Not available.

### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** :  Not available.

### Specific target organ toxicity (single exposure)

#### **Product/ingredient name**

 Butanone

#### **Result**

STOT SE 3, H336 (Narcotic effects)

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product/ingredient name

Ethanol

#### Result

##### Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia magna*

2000 µg/l [48 hours]

Effect: Physiology

##### Acute - LC50 - Fresh water

Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss*

42000 µg/l [4 days]

Effect: Mortality

##### Acute - EC50 - Marine water

Algae - Green algae - *Ulva pertusa*

17.921 mg/l [96 hours]

Effect: Reproduction

##### Chronic - NOEC - Marine water

Algae - Green algae - *Ulva pertusa*

4.995 mg/l [96 hours]

Effect: Reproduction

##### Chronic - NOEC - Fresh water

Fish - Eastern mosquitofish - *Gambusia holbrooki* - Larvae

Age: 3 days

0.375 µl/l [12 weeks]

Effect: Morphology

##### Chronic - NOEC - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate

Age: <24 hours

100 µl/l [21 days]

Effect: Mortality

Butanone

##### Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia magna* - Larvae

Age: <24 hours

5091000 µg/l [48 hours]

Effect: Intoxication

## SECTION 12: Ecological information

### Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*

Age: 31 days; Size: 22 mm; Weight: 0.167 g

3220000 µg/l [96 hours]

Effect: Mortality

### Acute - EC50 - Marine water

Algae - Diatom - *Skeletonema costatum*

>500000 µg/l [96 hours]

Effect: Population

**Conclusion/Summary [Product]** :  Not available.

### 12.2 Persistence and degradability

Not available.

**Conclusion/Summary [Product]** :  Not available.

### 12.3 Bioaccumulative potential

| Product/ingredient name                                                                   | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------------------------------------------------------------------------|--------------------|-----|-----------|
|  Ethanol | -0.35              | -   | Low       |
| Butanone                                                                                  | 0.3                | -   | Low       |

### 12.4 Mobility in soil

#### Soil/water partition coefficient

| Product/ingredient name                                                                     | Value                       |
|---------------------------------------------------------------------------------------------|-----------------------------|
|  Ethanol | logKoc: 0.2<br>Koc: 1.59008 |
| Butanone                                                                                    | logKoc: 1.2<br>Koc: 15.8984 |

#### Results of PMT and vPvM assessment

| Product/ingredient name                                                                     | PMT | P  | M  | T  | vPvM | vP | vM |
|---------------------------------------------------------------------------------------------|-----|----|----|----|------|----|----|
|  Ethanol | No  | No | No | No | No   | No | No |
| Butanone                                                                                    | No  | No | No | No | No   | No | No |

**Mobility** : Not available.

**Conclusion/Summary** :  The product does not meet the criteria to be considered as a PMT or vPvM.

### 12.5 Results of PBT and vPvB assessment

#### Regulation (EC) No. 1907/2006 [REACH]

| Product/ingredient name                                                                     | PBT | P   | B   | T  | vPvB | vP  | vB  |
|---------------------------------------------------------------------------------------------|-----|-----|-----|----|------|-----|-----|
|  Ethanol | No  | N/A | N/A | No | N/A  | N/A | N/A |
| Butanone                                                                                    | No  | N/A | N/A | No | N/A  | N/A | N/A |

#### Regulation (EC) No. 1272/2008 [CLP]

| Product/ingredient name                                                                     | PBT | P  | B  | T  | vPvB | vP | vB |
|---------------------------------------------------------------------------------------------|-----|----|----|----|------|----|----|
|  Ethanol | No  | No | No | No | No   | No | No |
| Butanone                                                                                    | No  | No | No | No | No   | No | No |

**Conclusion/Summary** :  The product does not meet the criteria to be considered as a PBT or vPvB.

**Regulation (EC) No. 1272/2008 [CLP]**

### 12.6 Endocrine disrupting properties

Not available.

## SECTION 12: Ecological information

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations. Avoid release to the environment. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**European waste catalogue (EWC)** : 08 01 11\*

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

|                                 | ADR/RID                                                                                  | ADN                                                                                      | IMDG                                                                                      | IATA                                                                                       |
|---------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 14.1 UN number or ID number     | UN1263                                                                                   | UN1263                                                                                   | UN1263                                                                                    | UN1263                                                                                     |
| 14.2 UN proper shipping name    | PAINT                                                                                    | PAINT                                                                                    | PAINT                                                                                     | PAINT                                                                                      |
| 14.3 Transport hazard class(es) | 3<br> | 3<br> | 3<br> | 3<br> |
| 14.4 Packing group              | II                                                                                       | II                                                                                       | II                                                                                        | II                                                                                         |
| 14.5 Environmental hazards      | No.                                                                                      | Yes.                                                                                     | No.                                                                                       | No.                                                                                        |

### Additional information

**ADR/RID** : **Special provisions** 640 (C)  
**Tunnel code** (D/E)

**ADN** : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.  
**Special provisions** 640 (C)

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

## SECTION 14: Transport information

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

| Product/ingredient name   | %   | Designation [Usage] |
|---------------------------|-----|---------------------|
| RENO GRUND NORDIC 3338-00 | ≥90 | 3                   |

 Mixture is subject to Entry 78 of REACH Annex XVII Restrictions.

**Labelling** :

Other EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Explosive precursors** : Not applicable.

(EC) No 273/2004 on drug precursors

Not listed.

(EC) No 111/2005 Trade between the Union and third countries in drug precursors

| Ingredient name                                                                                                                  | %             | Status                   |
|----------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------|
|  Methyl ethyl ketone<br>Toluene and its salts | ≤3<br>≤0.0015 | Category 3<br>Category 3 |

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

**Category**

 5c

## SECTION 15: Regulatory information

### National regulations

#### Austria

VbF class :  Category 2

Limitation of the use of organic solvents :  Permitted.

#### Belgium

#### Czech Republic

Storage code : 

#### Denmark

Fire class :  1

MAL-code : 2-1

Protection based on MAL : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

**General:** Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, respiratory protection with air supply and arm protectors/apron/coveralls/protective clothing must be worn as appropriate or as instructed.

MAL-code: 2-1

**Application:** When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing\* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Air-supplied half mask must be worn.

When spraying in existing\* spray booths, if the operator is outside the spray zone.

- Air-supplied half mask, arm protectors and eye protection must be worn.

During non-atomising spraying in existing\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied half mask and eye protection must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied half mask, eye protection, coveralls and hood must be worn.

**Drying:** Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

**Polishing:** When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

**Caution** The regulations contain other stipulations in addition to the above.

## SECTION 15: Regulatory information

\*See Regulations.

- Low-boiling liquids** : This product contains low-boiling point liquids. Any respiratory protective equipment should be air-fed.
- Restrictions on use** : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.
- List of undesirable substances** : Not listed

### Finland

### France

- Social Security Code, Articles L 461-1 to L 461-7** :  Ethanol RG 84  
Butanone RG 84

- Reinforced medical surveillance** : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

### Germany

**Storage class (TRGS 510)** : 3

### Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

### Danger criteria

| Category | Reference number |
|----------|------------------|
| P5c      | 1.2.5.3          |

**Hazard class for water** : 1

### Technical instruction on air quality control (TA Luft)

| Number [Class]                                                                            | Description        | %    |
|-------------------------------------------------------------------------------------------|--------------------|------|
|  5.2.1 | Total dust         | 11.2 |
| 5.2.5                                                                                     | Organic substances | 83.5 |
| 5.2.5 [I]                                                                                 | Organic substances | 83.1 |

### Italy

**D.Lgs. 152/06** : Not determined.

### Netherlands

**Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances**

| Ingredient name | Carcinogen | Mutagen | Reproductive toxicity - Fertility | Reproductive toxicity - Development | Harmful via breastfeeding |
|-----------------|------------|---------|-----------------------------------|-------------------------------------|---------------------------|
| ethanol         | Listed     | -       | Fertility 1A                      | Development 1A                      | Listed                    |

**Water Discharge Policy (ABM)** : A(2) Toxic for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

### Norway

### Sweden

**Flammable liquid class (SRVFS 2005:10)** : 

### Switzerland

**VOC content** :  VOC (w/w): 83.1%

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

## SECTION 15: Regulatory information

Not listed.

### [Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

### [UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

#### 15.2 Chemical safety assessment

: This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

#### Abbreviations and acronyms

: ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
N/A = Not available  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
SGG = Segregation Group  
vPvB = Very Persistent and Very Bioaccumulative

#### [Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

| Classification                           | Justification                               |
|------------------------------------------|---------------------------------------------|
| Flam. Liq. 2, H225<br>Eye Irrit. 2, H319 | On basis of test data<br>Calculation method |

#### [Full text of abbreviated H statements](#)

|        |                                                       |
|--------|-------------------------------------------------------|
| H225   | Highly flammable liquid and vapour.                   |
| H319   | Causes serious eye irritation.                        |
| H336   | May cause drowsiness or dizziness.                    |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

#### [Full text of classifications \[CLP/GHS\]](#)

|              |                                                               |
|--------------|---------------------------------------------------------------|
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2                |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2                                |
| STOT SE 3    | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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**Date of previous issue** : 10/01/2024

**Version** : 1.01

RENO GRUND NORDIC 3338-00

All variants

#### [Notice to reader](#)

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

