# Safety Data Sheet

GYEON TECHNOLOGIES

according to Regulation (EC) No 1907/2006

## GYEON Wet Coat

| Print date: 02.12.2015 | Product code: | Page 1 of 9 |

---

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

#### 1.1. Product identifier

GYEON Wet Coat

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

**Use of the substance/mixture**  
Wet coating for all surface, for professional and for consumer use.

**Uses advised against**  
any non-intended use.

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

| Company name: | GYEON TECHNOLOGIES |
| Street: | Yangjimaeul-Ro 22, Gwacheon-Si |
| Place: | Gyeonggi-do, SEOUL, South Korea |
| Telephone: | +82-10-4339-3599 |
| Contact person: | Robert Gyeon |
| e-mail: | sales@gyeonquartz.com |
| Responsible Department: | Dr. Gans-Eichler |
| | e-mail: info@tge-consult.de |
| | Chemieberatung GmbH |
| | Tel.: +49 (0)251/924520-60 |
| | Raesfeldstr. 22 |
| | www.tge-consult.de |
| | D-48149 Münster |

#### 1.4. Emergency telephone number:

+82-10-4339-3599

---

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Regulation (EC) No. 1272/2008**  
This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

#### 2.2. Label elements

**Special labelling of certain mixtures**  
EUH210  
Safety data sheet available on request.

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

---

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>propan-2-ol; isopropyl alcohol; isopropanol</td>
<td>5 - &lt; 10 %</td>
</tr>
<tr>
<td>200-661-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336</td>
<td></td>
</tr>
<tr>
<td>68603-42-9</td>
<td>Amides, coco, N,N-bis(hydroxyethyl)</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>271-657-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1; H315 H319 H400</td>
<td></td>
</tr>
</tbody>
</table>

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1. General information
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation
In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin
Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes
Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion
Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting.
In all cases of doubt, or when symptoms persist, seek medical advice.

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

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1. Suitable extinguishing media
Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

5.1.2. Unsuitable extinguishing media
High power water jet.

5.2. Special hazards arising from the substance or mixture
Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.
Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
See protective measures under point 7 and 8.

6.2. Environmental precautions
Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections
See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Wear suitable protective clothing. See section 8.

Advice on protection against fire and explosion
Usual measures for fire prevention.

Further information on handling
General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep container tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Further information on storage conditions
Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Recommended storage temperature: 20°C
Protect against: Light. UV-radiation/sunlight. heat. moisture.

7.3. Specific end use(s)
refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propan-2-ol</td>
<td>400</td>
<td>999</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>1250</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls
No special measures are necessary.

Protective and hygiene measures
Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection
Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection
In case of prolonged or frequently repeated skin contact:
Wear suitable gloves.
Suitable material:
FKM (fluororubber). - Thickness of glove material: 0,4 mm
Breakthrough time >= 8 h
Butyl rubber. - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm
Breakthrough time >= 8 h
PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm
Breakthrough time >= 8 h
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection
Suitable protective clothing: Lab apron.
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection
With correct and proper use, and under normal conditions, breathing protection is not required.

Environmental exposure controls
No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: liquid
Colour: orange
Odour: none

Test method
pH-Value: 7,5-8

Changes in the physical state
Melting point: not determined
Initial boiling point and boiling range: 85 (@ 1,013 mbar) °C
Sublimation point: not determined
Softening point: not determined
Pour point: not determined
Flash point: 90 °C
Sustaining combustion: Not sustaining combustion
SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions
No information available.

10.4. Conditions to avoid
Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials
Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products
Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicokinetics, metabolism and distribution
No data available.
Acute toxicity
Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>propan-2-ol; isopropyl alcohol; isopropanol</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rabbit</td>
<td>RTECS</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitising effects
Based on available data, the classification criteria are not met.

STOT-single exposure
Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure
Based on available data, the classification criteria are not met.
propan-2-ol; isopropyl alcohol; isopropanol:
Chronic inhalative toxicity (Rat): NOAEC = 5000 ppm (OECD 451), literature information: ECHA Dossier

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.
propan-2-ol; isopropyl alcohol; isopropanol:
OECD Guideline 471 (Bacterial Reverse Mutation Assay) = negative., literature information: ECHA Dossier
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) = negative., literature information: ECHA Dossier
No indications of human carcinogenicity exist., literature information: ECHA Dossier
Reproductive toxicity:
Method: OECD Guideline 415 (One-Generation Reproduction Toxicity Study)
Species: Rat
Results: NOAEL = 853 mg/kg
literature information: ECHA Dossier
Developmental toxicity/teratogenicity:
Method: (oral.) OECD Guideline 414 (Prenatal Developmental Toxicity Study)
Species: Rabbit
Results: NOAEL = 480 mg/kg
literature information: ECHA Dossier

Aspiration hazard
Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal
No data available.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Method</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>propan-2-ol; isopropyl alcohol; isopropanol</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>9640 mg/l</td>
<td>96 h</td>
<td>Pimephales promelas</td>
<td>ECHA Dossier</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>propan-2-ol; isopropyl alcohol; isopropanol</td>
<td>0.05</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

Waste disposal number of used product

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

Waste disposal number of contaminated packaging

150203 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; absorbents, filter materials, wiping cloths and protective clothing; absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user
refer to chapter 6-8

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
not relevant

SECTION 15: Regulatory information

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

EU regulatory information
2010/75/EU (VOC): No information available.
2004/42/EC (VOC): No information available.

Additional information
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].
Not subject to 96/82/EC (SEVESO II), 2012/18/CE (SEVESO III)
REACH 1907/2006 Appendix XVII: not relevant

National regulatory information
Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes
Rev. 1.0; 31.07.2015, Initial release
Rev. 1.1; 01.12.2015, Changes in chapter: 1-15

Abbreviations and acronyms
ADR: Accord européen sur le transport des marchandises dangereuses par Route
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
International Carriage of Dangerous Goods by Road)
Safety Data Sheet

according to Regulation (EC) No 1907/2006

GYEON Wet Coat

IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Concerning the International Transport of Dangerous Goods by Rail)
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
EUH210 Safety data sheet available on request.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)