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

1.1 Product identifier
   Trade name : TERRAWET Gloss Coating G 9/703-040

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Use of the Substance/Mixture : Printing and reproduction of recorded media
                                 : Rolling
                                 : The product is intended for professional use.
   Recommended restrictions on use : For industrial use only.

1.3 Details of the supplier of the safety data sheet
   Company : ACTEGA Terra GmbH
             Industriestraße 12
             31275 Lehrte
   Telephone : +49513250090
   Telefax : +4951325009110
   E-mail address : qum.actega.terra@altana.com

1.4 Emergency telephone number
   +44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Serious eye damage, Category 1
   H318: Causes serious eye damage.
   Skin sensitisation, Category 1
   H317: May cause an allergic skin reaction.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Hazard pictograms :
   Signal word : Danger
   Hazard statements : H317 May cause an allergic skin reaction.
                      H318 Causes serious eye damage.
Precautionary statements:

Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:
- 577-11-7 docusate sodium
- 65997-10-6 Resin acids and Rosin acids, fumarated, esters with glycerol
- 2682-20-4 2-methyl-2H-isothiazol-3-one

2.3 Other hazards

Water-based products typically contain isothiazolinone biocides, including methyl isothiazolinone, as in-can preservatives. Such biocides may cause allergic skin reactions in already sensitised individuals.
May produce an allergic reaction.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature: Waterbased polymerdispersion

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Registration number</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>docusate sodium</td>
<td>577-11-7</td>
<td>209-406-4</td>
<td>01-2119491296-29</td>
<td>Skin Irrit. 2; H315</td>
<td>&gt;= 3 - &lt; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1; H318</td>
<td></td>
</tr>
<tr>
<td>Resin acids and Rosin acids, fumarated, esters with glycerol</td>
<td>65997-10-6</td>
<td>307-051-0</td>
<td></td>
<td>Eye Irrit. 2; H319</td>
<td>&gt;= 3 - &lt; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1; H317</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 4; H413</td>
<td></td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>215-222-5</td>
<td></td>
<td>Aquatic Acute 1; H400</td>
<td>&gt;= 0.1 - &lt; 0.25</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Move to fresh air. If symptoms persist, call a physician.
In case of skin contact : Wash off with warm water. Do not remove solidified product. Call a physician if irritation develops or persists.
In case of eye contact : Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.
If swallowed : Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Skin contact may provoke the following symptoms:
Allergies

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- Water spray jet
- Alcohol-resistant foam
- Carbon dioxide (CO2)
- ABC powder

Unsuitable extinguishing media:
- High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting:
- Hazardous decomposition products formed under fire conditions.
  Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Further information:
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
- Ensure adequate ventilation.
  Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions:
- Prevent further leakage or spillage if safe to do so.
- Prevent spreading over a wide area (e.g. by containment or oil barriers).
- Avoid subsoil penetration.
- Do not flush into surface water or sanitary sewer system.
- Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up:
- Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- Flush with water.
- Pick up and transfer to properly labelled containers.

6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:
- The slight ammonia smell can become stronger if the product will heated up higher than roomtemperature.
Provide sufficient air exchange and/or exhaust in work rooms. For personal protection see section 8.

Hygiene measures: General industrial hygiene practice. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities
Advice on common storage: Keep in a dry, cool and well-ventilated place. No special restrictions on storage with other products.

Recommended storage temperature: 5 - 35 °C

7.3 Specific end use(s)
Specific use(s): Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>56-81-5</td>
<td>TWA (Mist)</td>
<td>10 mg/m3</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>docusate sodium</td>
<td>Industrial use</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>31,3 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Industrial use</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>44,1 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Professional use</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>18,8 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Professional use</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>13 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Professional use</td>
<td>Ingestion</td>
<td>Long-term systemic effects</td>
<td>18,8 mg/kg</td>
</tr>
</tbody>
</table>

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>docusate sodium</td>
<td>Fresh water</td>
<td>0,0066 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0,0007 mg/l</td>
</tr>
<tr>
<td></td>
<td>Intermittent releases</td>
<td>0,066 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>0,138 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Sewage treatment plant</td>
<td>122 mg/l</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Personal protective equipment
Eye protection: Safety glasses with side-shields

Hand protection
Material: Nitrile rubber
Break through time: 240 min
Glove thickness: 0.4 mm
Glove length: Gauntlets
Directive: Equipment should conform to EN 374
Remarks: Preventive skin protection

Skin and body protection: Work uniform or laboratory coat.

Respiratory protection: No personal respiratory protective equipment normally required.

General advice: Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.
Retain and dispose of contaminated wash water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance: dispersion
Colour: milky, white - off-white
Odour: slight, ammoniacal, acrylic-like
Odour Threshold: No data available
pH: 7.6 - 8.6 (20 °C)
Melting point/freezing point: No data available
Boiling point/boiling range: ca. 100 °C
Flash point: Greater than 100 °C
   Method: ASTM D 93, Pensky-Martens closed cup
   Other information: Will not burn
Evaporation rate: Not applicable
Upper explosion limit: Not applicable
Lower explosion limit: Not applicable
Vapour pressure: < 0.1 hPa
   similar to water
Relative vapour density: No data available
Density: ca. 1.04 g/cm³ (20 °C)
   Method: DIN 53217
Solubility(ies)
Water solubility : completely miscible
Ignition temperature : not auto-flammable
Flow time : ca. 40 s at 20 °C
Cross section: 4 mm
Method: DIN 53211

9.2 Other information
Metal corrosion rate : Not applicable
Self-ignition : Method: No information available.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid
Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials
Materials to avoid : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products
No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Components: docusate sodium:
Acute oral toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 401

Skin corrosion/irritation
Product: Remarks: May irritate skin.
Serious eye damage/eye irritation

**Product:**
Remarks: May irritate eyes.

Respiratory or skin sensitisation

**Product:**
Remarks: May cause sensitisation of susceptible persons by skin contact.

Germ cell mutagenicity

**Product:**
Germ cell mutagenicity - Assessment: Contains no ingredient listed as a mutagen

Carcinogenicity

**Product:**
Carcinogenicity - Assessment: Contains no ingredient listed as a carcinogen

Reproductive toxicity

**Product:**
Reproductive toxicity - Assessment: Contains no ingredient listed as toxic to reproduction

STOT - single exposure

**Product:**
Remarks: No data available

Repeated dose toxicity

**Product:**
Remarks: No data available

Aspiration toxicity

**Product:**
No aspiration toxicity classification

SECTION 12: Ecological information

12.1 Toxicity

**Product:**
Toxicity to fish: Remarks: No data available

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

docusate sodium:
  Toxicity to fish : LC50 (Fish): 49 mg/l
  Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 6,6 mg/l
  Toxicity to algae : ErC50 (algae): 82,5 mg/l

zinc oxide:
  M-Factor (Short-term (acute) aquatic hazard) : 1
  M-Factor (Long-term (chronic) aquatic hazard) : 1

ammonia:
  M-Factor (Short-term (acute) aquatic hazard) : 1

Alcohols, C16-18, ethoxylated:
  M-Factor (Short-term (acute) aquatic hazard) : 1

2-methyl-2H-isothiazol-3-one:
  Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 6,0 mg/l
                 : Exposure time: 96 h
                 : LC50 (Lepomis macrochirus (Bluegill sunfish)): 12,4 mg/l
                 : Exposure time: 96 h
  Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 1,6 mg/l
                 : Exposure time: 48 h
  Toxicity to algae : EC50 (Pseudokirchneriella subcapitata): 0,157 mg/l
                 : Exposure time: 72 h
  M-Factor (Short-term (acute) aquatic hazard) : 10
  Toxicity to microorganisms : (Pseudomonas putida): 2,3 mg/l
                             : Exposure time: 16 h
  M-Factor (Long-term (chronic) aquatic hazard) : 1

12.2 Persistence and degradability

Product:
  Biodegradability : Test Type: aerobic
                    : Inoculum: activated sludge
                    : Biodegradation: < 50 %
                    : Exposure time: 29 d
                    : Method: OECD Test Guideline 301B
                    : Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.

  Chemical Oxygen Demand : > 150.000 mg/l
12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment

**Product:**
**Assessment:** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

**Product:**
Do not dispose of waste into sewer.
The product should not be allowed to enter drains, water courses or the soil.
Do not mix waste streams during collection.
If recycling is not practicable, dispose of in compliance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
The following Waste Codes are only suggestions:
- waste paint and varnish containing organic solvents or other dangerous substances
- waste ink containing hazardous substances

**Contaminated packaging:**
Empty remaining contents.
Do not re-use empty containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Packaging that is not properly emptied must be disposed of as the unused product.

SECTION 14: Transport information

14.1 UN number
Not regulated as a dangerous good

14.2 UN proper shipping name
Not regulated as a dangerous good

14.3 Transport hazard class(es)
Not regulated as a dangerous good

14.4 Packing group

**ADR:** Not regulated as a dangerous good
SAFETY DATA SHEET
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IMDG
Remarks: Not regulated as a dangerous good

IATA (Cargo)
Remarks: Not regulated as a dangerous good

IATA (Passenger)
Remarks: Not regulated as a dangerous good

14.5 Environmental hazards
Not regulated as a dangerous good

14.6 Special precautions for user
Remarks: Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV): Not applicable

Not applicable

Volatile organic compounds: Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 0.48 %, 11.51 g/l
Remarks: VOC content excluding water

15.2 Chemical safety assessment
Not applicable

SECTION 16: Other information

Full text of H-Statements
H301: Toxic if swallowed.
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

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Version 2.0 SDS_GB Revision Date 07.02.2020 Print Date 08.02.2020

H319 : Causes serious eye irritation.
H330 : Fatal if inhaled.
H335 : May cause respiratory irritation.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.
H413 : May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation
STOT SE : Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

The evaluation of this mixture for the purpose of classification and labeling is based on calculations and bridging principles (essentially similar mixtures, batch analogy).
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier’s control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.