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

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

1.1 Product identifier

Trade name: Cooling medium for recouling (Chiller) systems (ready mix 1:2 outdoor)
Article number: 3301950/3301955/3301957

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

Relevant identified uses of the substance or mixture

Industry sector: Functional Fluids
Type of use: Brine for refrigeration
Exposure scenarios: see annex

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Clariant Produkte (Deutschland) GmbH
Brueningstr. 50
65929 Frankfurt am Main
Telephone no.: +49 6196 757 60

Information about the substance/mixture

BU Industrial & Consumer Specialties
Product Stewardship
E-mail: SDS.Europe@clariant.com

1.4 Emergency telephone number

00800-5121 5121   (24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4
H302: Harmful if swallowed.

Specific target organ toxicity - repeated exposure, Category 2
H373: May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:

Signal word: Warning
Hazard statements:
- H302 Harmful if swallowed.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:
**Prevention:**
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash skin thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**
- P314 Get medical advice/attention if you feel unwell.
- P337 + P313 If eye irritation persists: Get medical advice/attention.

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

2.3 Other hazards
No additional hazards are known except those derived from the labelling.

**SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

**Hazardous components**

<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>Ethanediol</td>
<td>107-21-1</td>
<td>203-473-3</td>
<td>01-2119456816-28</td>
<td>Acute Tox. 4; H302 STOT RE 2; H373</td>
<td>33 - 37</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01-2119456816-28-0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01-2119456816-28-0003</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01-2119456816-28-0038</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01-2119456816-28-XXXX</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For explanation of abbreviations see section 16.

**SECTION 4: First aid measures**

### 4.1 Description of first aid measures

**General advice:** Remove/Take off immediately all contaminated clothing.

**If inhaled:** If inhaled, remove to fresh air. Get medical advice/attention.

**In case of skin contact:** In case of contact, immediately flush skin with plenty of water.
In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed: Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms: No symptoms known currently.
Risks: No hazards known at this time.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: Not combustible.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting: In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
Nitrogen oxides (NOx)

5.3 Advice for firefighters
Special protective equipment for firefighters: Self-contained breathing apparatus
Further information: Wear suitable protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions: Ensure adequate ventilation.
Wear suitable protective equipment.

6.2 Environmental precautions
Environmental precautions: Do not allow to enter drains or waterways

6.3 Methods and material for containment and cleaning up
Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel,
6.4 Reference to other sections
Information regarding Safe handling, see chapter 7., For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: Handle and open container with care. Ensure adequate ventilation.

Advice on protection against fire and explosion: Not combustible.

Hygiene measures: Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities
Further information on storage conditions: Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care.

Other data: Storage time: 24 months

7.3 Specific end use(s)
Specific use(s): No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<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>Ethanediol</td>
<td>107-21-1</td>
<td>TWA</td>
<td>20 ppm</td>
<td>52 mg/m³</td>
</tr>
<tr>
<td>Further information</td>
<td>Identifies the possibility of significant uptake through the skin, Indicative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>40 ppm</td>
<td>104 mg/m³</td>
</tr>
</tbody>
</table>

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>Ethanediol CAS-No.: 107-21-1</td>
<td>Workers</td>
<td>Dermal</td>
<td>Long-term systemic effects</td>
<td>106 mg/kg bw/day</td>
</tr>
</tbody>
</table>
## Remarks:

### DNEL

**Workers**

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Long-term local effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>35 mg/m³</td>
</tr>
</tbody>
</table>

**Remarks:**

**General population**

<table>
<thead>
<tr>
<th>Dermal</th>
<th>Long-term systemic effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>53 mg/kg bw/day</td>
</tr>
</tbody>
</table>

**Remarks:**

**General population**

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Long-term local effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>7 mg/m³</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>Ethanediol</td>
<td>Fresh water</td>
<td>10 mg/l</td>
</tr>
<tr>
<td>CAS-No.: 107-21-1</td>
<td>salt water</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Water (intermittent release)</td>
<td>10 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>37 mg/kg dry weight (d.w.)</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>1,53 mg/kg dry weight (d.w.)</td>
</tr>
<tr>
<td></td>
<td>Sewage treatment plant</td>
<td>199,5 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>3,7 mg/kg dry weight (d.w.)</td>
</tr>
</tbody>
</table>

## 8.2 Exposure controls

### Personal protective equipment

**Eye protection**

Depending on the risk, wear sufficient eye protection (safety glasses with side protection or goggles, and if necessary, face shield.)

**Hand protection**

<table>
<thead>
<tr>
<th>Break through time</th>
<th>Glove thickness</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>480 min</td>
<td>0.7 mm</td>
<td>Long-term exposure Impervious butyl rubber gloves</td>
</tr>
</tbody>
</table>

**Break through time**

30 min

**Glove thickness**

0.4 mm

**Remarks**

For short-term exposure (splash protection): Nitrile rubber gloves.

**Remarks**

These types of protective gloves are offered by various manufacturers. Please note the manufacturers’ detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.

**Respiratory protection**

Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure

Full mask to standard DIN EN 136

Filter A (organic gases and vapours) to standard DIN EN 141

The use of filter apparatus presupposes that the environment atmosphere contains at least 17% oxygen by volume, and does not exceed the maximum gas concentration, usually
0.5% by volume. Relevant guidelines to be considered include EN 136/141/143/371/372 as well as other national regulations.

**Protective measures**
- Do not inhale vapours

---

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

- **Appearance**: Liquid
- **Colour**: light yellow
- **Odour**: slightly perceptible
- **Odour Threshold**: not tested.
- **pH**: approx. 8
  - Concentration: 100 g/l (20 °C)
  - Method: DIN 19268
- **Melting point**: -22 °C
  - Method: DIN 51583
- **Boiling point**: 106 °C
  - (1.013 hPa)
  - Method: ASTM D 1120
- **Flash point**: Method: ASTM D6450 (closed cup)
  - does not flash
- **Evaporation rate**: not tested.
- **Upper explosion limit**: not tested.
- **Lower explosion limit**: not tested.
- **Combustion number**: Not applicable
- **Vapour pressure**: < 0.01 kPa (20 °C)
  - Method: Calculated by Syracuse.
- **Relative vapour density**: not tested.
- **Density**: 1.0466 g/cm³ (20 °C)
  - Method: DIN 51757
- **Bulk density**: Not applicable
- **Solubility(ies)**
  - **Water solubility**: completely miscible (20 °C)
### Solubility in other solvents

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Not tested.</th>
</tr>
</thead>
</table>

### Partition coefficient: n-octanol/water

<table>
<thead>
<tr>
<th>Method</th>
<th>Not tested.</th>
</tr>
</thead>
</table>

### Auto-ignition temperature

<table>
<thead>
<tr>
<th>Method</th>
<th>Not applicable for Liquids with Flash Point &gt; 70 °C.</th>
</tr>
</thead>
</table>

### Decomposition temperature

<table>
<thead>
<tr>
<th>Method</th>
<th>Measurement under nitrogen No decomposition up to 250 °C.</th>
</tr>
</thead>
</table>

### Viscosity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, dynamic</td>
<td>2,62 mPa.s (20 °C)</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>2,5 mm²/s (20 °C)</td>
</tr>
</tbody>
</table>

### Explosive properties

<table>
<thead>
<tr>
<th>Method</th>
<th>Not explosive</th>
</tr>
</thead>
</table>

### Oxidizing properties

<table>
<thead>
<tr>
<th>Method</th>
<th>The substance or mixture is not classified as oxidizing.</th>
</tr>
</thead>
</table>

### Surface tension

<table>
<thead>
<tr>
<th>Method</th>
<th>Not applicable</th>
</tr>
</thead>
</table>

### Metal corrosion rate

<table>
<thead>
<tr>
<th>Method</th>
<th>&lt; 6,25 mm/a</th>
</tr>
</thead>
</table>

### Minimum ignition energy

<table>
<thead>
<tr>
<th>Method</th>
<th>Not tested.</th>
</tr>
</thead>
</table>

### Particle size

<table>
<thead>
<tr>
<th>Method</th>
<th>Not applicable</th>
</tr>
</thead>
</table>

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See section 10.3. "Possibility of hazardous reactions"

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

<table>
<thead>
<tr>
<th>Hazardous reactions</th>
<th>Incompatible with oxidizing agents.</th>
</tr>
</thead>
</table>

### 10.4 Conditions to avoid

<table>
<thead>
<tr>
<th>Conditions to avoid</th>
<th>None known.</th>
</tr>
</thead>
</table>

### 10.5 Incompatible materials
10.6 Hazardous decomposition products
When handled and stored appropriately, no dangerous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity: Remarks: not tested.

   Acute toxicity estimate: 1.423 mg/kg
   Method: Calculation method

Acute inhalation toxicity: Remarks: not tested.

Acute dermal toxicity: Remarks: not tested.

Components:
Ethanediol:

Acute oral toxicity: LD50 (Rat, male and female): 22.000 mg/kg
   Method: Other
   GLP: no

Acute inhalation toxicity: LC50 (Rat, male and female): > 2.5 mg/l
   Exposure time: 6 h
   Method: Other
   GLP: yes

Acute dermal toxicity: LD50 (Mouse, male and female): > 3.500 mg/kg
   Method: Other
   GLP: yes

Skin corrosion/irritation

Product:
   Remarks: not tested.

Components:
Ethanediol:

Species: Rabbit
   Exposure time: 20 h
   Method: BASF test
   Result: No skin irritation
   GLP: no
Serious eye damage/eye irritation

Product:
Remarks: not tested.

Components:
Ethanediol:
Species: rabbit eye
Exposure time: 24 h
Method: BASF test
Result: non-irritant
GLP: no

Respiratory or skin sensitisation

Product:
Remarks: not tested.

Components:
Ethanediol:
Test Type: Maximisation Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: yes

Germ cell mutagenicity

Product:
Germ cell mutagenicity-Assessment: No information available.

Components:
Ethanediol:
Genotoxicity in vitro: Test Type: Ames test
Species: Salmonella typhimurium
Concentration: 33 - 5000 μg/plate
Metabolic activation: with and without
Method: OECD Test Guideline 471
Result: negative
GLP: yes

: Test Type: Ames test
Species: Escherichia coli
Concentration: 33 - 5000 μg/plate
Metabolic activation: with and without
Method: OECD Test Guideline 471
Result: negative
Genotoxicity in vivo:

Test Type: Dominant lethal assay
Species: Rat (male and female)
Strain: Fischer F344
Application Route: oral (feed)
Exposure time: 3 generation
Dose: 40 - 200 - 1000 mg/kg
Method: Other
Result: negative
GLP: no

It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

Carcinogenicity

Product:
Carcinogenicity - Assessment: No information available.

Components:

Ethanediol:
Carcinogenicity - Assessment: Not classifiable as a human carcinogen.

Reproductive toxicity

Product:
Reproductive toxicity - Assessment: No information available.

Components:

Ethanediol:
Effects on fertility:
Species: Rat
Sex: male and female
Dose: 40 - 200 - 1000
Frequency of Treatment: daily
Fischer F344
Application Route: oral (feed)
Test period: 3 generations
NOAEL: > 1.000 mg/kg,
F1: > 1.000 mg/kg,
F2: > 1.000 mg/kg,
Method: Other
GLP: no

Effects on foetal development:
Species: Rat
Application Route: oral (gavage)
Exposure time: gestation day 6-15
Dose: 150 - 500 - 1000 - 2500 mg/kg
Group: yes
500 mg/kg
1.000 mg/kg
Number of exposures: daily
Method: Other
GLP: yes

Reproductive toxicity - Assessment: No reproductive toxicity to be expected.
No teratogenic effects to be expected.

STOT - single exposure
Product:
Remarks: not tested.

Components:
Ethanediol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure
Product:
Remarks: not tested.

Components:
Ethanediol:
Target Organs: Kidney
Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity
Product:
Remarks: not tested.

Components:
Ethanediol:
Species: Rat, male
NOAEL: 150 mg/kg
Application Route: oral (feed)
Exposure time: 16 w
Number of exposures: daily
Dose: 50 - 150 - 500 - 1000 mg/kg
Group: yes
Method: OECD Test Guideline 408
GLP: yes
Species: Dog, male
NOAEL: ca. 2,200 mg/kg
Application Route: Skin contact
Exposure time: 4 w
Number of exposures: daily
Dose: 0.5 - 2 - 8 ml/kg
Group: yes
Method: OECD Test Guideline 410
GLP: yes

Aspiration toxicity

Product:
no data available

Components:
Ethanediol:
No aspiration toxicity classification

Further information

Product:
Remarks: Kidney injury may occur.
Remarks: Poisoning affects the central nervous system
Remarks: The data on toxicology refer to the active ingredient.
Remarks: The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.

SECTION 12: Ecological information

12.1 Toxicity

Product:
Toxicity to fish: LC0 (Leuciscus idus (Golden orfe)): 1,000 mg/l
Remarks: By analogy with a product of similar composition
LL50 (Danio rerio (zebra fish)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes
Remarks: By analogy with a product of similar composition

Toxicity to daphnia and other aquatic invertebrates: Remarks: not tested.

Toxicity to algae: Remarks: not tested.
Toxicity to bacteria:
Remarks: not tested.

**Components:**

**Ethanediol:**

Toxicity to fish:
LC50 (Pimephales promelas (fathead minnow)): 72.860 mg/l
Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes
Method: EPA
GLP: no
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae:
EC50 (Pseudokirchneriella subcapitata (green algae)): 6.500 - 13.000 mg/l
End point: Growth rate
Exposure time: 7 d
Test Type: static test
Analytical monitoring: no data available
Method: EPA
GLP: No information available.

Toxicity to bacteria:
EC20 (activated sludge, domestic): > 1.995 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 0.5 h
Analytical monitoring: no
Method: ISO 8192
GLP: no
Remarks: By analogy with a product of similar composition

Toxicity to fish (Chronic toxicity):
Chronic Toxicity Value: 2.629 mg/l
Exposure time: 30 d
End point: Other
Species: Fish
Method: Other
GLP: no
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
NOEC: 8.590 mg/l
Exposure time: 7 d
End point: Reproduction rate
Species: Ceriodaphnia spec.
Test Type: semi-static test
Analytical monitoring: yes
Method: Other
GLP: No information available.
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to soil dwelling organisms: Remarks: The study is not necessary from a scientific perspective.

Plant toxicity: Remarks: The study is not necessary from a scientific perspective.

Sediment toxicity: Remarks: The study is not necessary from a scientific perspective.

Toxicity to terrestrial organisms: Remarks: The study is not necessary from a scientific perspective.

12.2 Persistence and degradability
Product:
Biodegradability: Result: Readily biodegradable.
Biodegradation: 90 %
Method: OECD Test Guideline 302B
Remarks: By analogy with a product of similar composition

Components:
Ethanediol:
Biodegradability: Test Type: aerobic
Inoculum: activated sludge
Concentration: 53 mg/l
Result: Readily biodegradable.
Biodegradation: 90 - 100 %
Related to: DOC decrease
Exposure time: 10 d
Method: OECD Test Guideline 301A
GLP: yes

12.3 Bioaccumulative potential
Product:
Bioaccumulation: Remarks: not tested.

Components:
Ethanediol:
Bioaccumulation: Remarks: Due to the low logPow bioaccumulation is not expected
12.4 Mobility in soil

**Product:**
Distribution among environmental compartments :
Remarks: not tested.

**Components:**
**Ethanediol:**
Distribution among environmental compartments :
Adsorption/Soil Medium: water - soil
log Koc: 0
Method: other (calculated)

12.5 Results of PBT and vPvB assessment

**Product:**
Assessment :
Remarks: no data available

**Components:**
**Ethanediol:**
Assessment :
This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

12.6 Other adverse effects

**Product:**
Additional ecological information :
If handled correctly it causes no disturbance in treatment plants.
Determined in the undiluted form
The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.

**Components:**
**Ethanediol:**
Environmental fate and pathways :
not available
Additional ecological information :
Do not allow to enter ground water, waterways or waste water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

**Product** :
Dispose of in accordance with local regulations.

**Contaminated packaging** :
Uncontaminated packaging may be reused
Packaging that cannot be cleaned should be disposed of as product waste

SECTION 14: Transport information

Section 14.1. to 14.5.

<table>
<thead>
<tr>
<th>ADR</th>
<th>not restricted</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>not restricted</td>
</tr>
<tr>
<td>RID</td>
<td>not restricted</td>
</tr>
<tr>
<td>IATA</td>
<td>not restricted</td>
</tr>
<tr>
<td>IMDG</td>
<td>not restricted</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code (International Bulk Chemicals Code)

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

Other regulations : Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2 Chemical safety assessment

Chemical Safety Assessments (CSAs) are available for one or more of the component substances contained in this product.

SECTION 16: Other information

Full text of H-Statements

<table>
<thead>
<tr>
<th>H302</th>
<th>Harmful if swallowed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure if swallowed.</td>
</tr>
</tbody>
</table>

Full text of other abbreviations

<table>
<thead>
<tr>
<th>Acute Tox.</th>
<th>Acute toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT RE</td>
<td>Specific target organ toxicity - repeated exposure</td>
</tr>
</tbody>
</table>

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
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