



Suma Equip San EasyPack

Revision: 2020-03-10

Version: 01.0

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

1.1 Product identifier

Trade name: Suma Equip San EasyPack

1.2 Recommended use and restrictions on use

For professional use only.

1.3 Details of the supplier of the safety data sheet

Diversey Hygiene Representative Office - Vietnam

Contact details

6th Floor Hai Au Building
39B Truong Son, W.04, Tan Binh Dist
Ho Chi Minh City, Vietnam
Tel : (+84) 838 486 634

1.4 Emergency telephone number

In case of medical emergency, please seek professional medical advice.

SECTION 2: Composition/information on ingredients

2.1 Substances / Mixtures

| Ingredient(s) | CAS number | EC number | Classification | Weight percent |
|--|------------|-----------|---|----------------|
| sodium dichloroisocyanurate, dihydrate | 51580-86-0 | 220-767-7 | Acute Tox. 4 (H302) STOT SE 3 (H335) Eye Irrit. 2A (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | 3-10 |

Workplace exposure limit(s), if available, are listed in subsection 8.1.

SECTION 3: Hazards identification

3.1 Classification of the substance or mixture

Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2

3.2 Label elements



Hazard statements:

H411 - Toxic to aquatic life with long lasting effects.

3.3 Other hazards

No other hazards known. Exposure and appropriate engineering controls are specified in subsection 8.2 exposure controls.

3.4 Classification diluted product

Recommended maximum concentration (%): 0.37

Not classified as hazardous

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

Suma Equip San EasyPack

| | |
|--|---|
| Eye contact: | Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention. |
| Ingestion: | Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell. |
| Self-protection of first aider: | Consider personal protective equipment as indicated in subsection 8.2. |

4.2 Most important symptoms and effects, both acute and delayed

| | |
|----------------------|---|
| Inhalation: | No known effects or symptoms in normal use. |
| Skin contact: | No known effects or symptoms in normal use. |
| Eye contact: | No known effects or symptoms in normal use. |
| Ingestion: | No known effects or symptoms in normal use. |

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

No special measures required.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Collect mechanically.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Measures to prevent fire and explosions:**

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

Biological limit values, if available:

Suma Equip San EasyPack

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: No special requirements under normal use conditions.

Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.

Hand protection: No special requirements under normal use conditions.

Body protection: No special requirements under normal use conditions.

Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 0.37

Appropriate engineering controls: No special requirements under normal use conditions.

Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.

Hand protection: No special requirements under normal use conditions.

Body protection: No special requirements under normal use conditions.

Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | Method / remark |
|--|--|
| Physical State: Solid | |
| Colour: Clear, White | |
| Odour: Product specific | |
| Odour threshold: Not applicable | |
| pH: Not applicable | |
| Dilution pH: ≈ 7 (1%) | ISO 4316 |
| Melting point/freezing point (°C): Not determined | Not relevant to classification of this product |
| Initial boiling point and boiling range (°C): Not determined | Not applicable to solids or gases |
| Flammability (liquid): Not applicable. | |
| Flash point (°C): Not applicable. | |
| Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2) | |
| Evaporation rate: Not determined | Not relevant to classification of this product |
| Flammability (solid, gas): Not determined | |
| Upper/lower flammability limit (%): Not determined | |
| Vapour pressure: Not determined | |
| Vapour density: Not determined | Not relevant to classification of this product |
| Relative density: ≈ 1.15 (20 °C) | OECD 109 (EU A.3) |
| Solubility in / Miscibility with Water: Soluble | |
| Partition coefficient: n-octanol/water: No information available. | |
| Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3 | |
| Autoignition temperature: Not determined | |
| Decomposition temperature: Not applicable. | |
| Viscosity: Not determined | Not applicable to solids or gases |
| Explosive properties: Not explosive. | |
| Oxidising properties: Not oxidising | |
| 9.2 Other information | |
| Surface tension (N/m): Not determined | |
| Corrosion to metals: Not determined | Not applicable to solids or gases |

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Mixture data:

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >5000

Substance data, where relevant and available, are listed below:

Acute toxicity

Acute oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|--|------------------|---------------|---------|--------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | LD ₅₀ | 1671 | Rat | EPA OPP 81-1 | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|--|------------------|---------------|---------|--------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | LD ₅₀ | > 5000 | Rat | EPA OPP 81-2 | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|------------------|--------------|---------|-------------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | LC ₅₀ | > 0.27 | Rat | OECD 403 (EU B.2) | 4 |

Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|--------------|---------|------------------|---------------|
| sodium dichloroisocyanurate, dihydrate | Not irritant | | Method not given | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|----------|---------|------------------|---------------|
| sodium dichloroisocyanurate, dihydrate | Irritant | | Method not given | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|---------------------------------|---------|--------|---------------|
| sodium dichloroisocyanurate, dihydrate | Irritating to respiratory tract | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|--|-----------------|------------|--------------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | Not sensitising | Guinea pig | OECD 429 (EU B.42) | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| sodium dichloroisocyanurate, dihydrate | No data available | | | |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|--|---|-----------------------|--|--------------------|
| sodium dichloroisocyanurate, dihydrate | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) | No evidence of genotoxicity, negative test results | OECD 475 (EU B.11) |

Carcinogenicity

| Ingredient(s) | Effect |
|--|--|
| sodium dichloroisocyanurate, dihydrate | No evidence for carcinogenicity, negative test results |

Toxicity for reproduction

Suma Equip San EasyPack

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|--|----------|------------------------|--------------------|---------|---------------------------|---------------|------------------------------------|
| sodium dichloroisocyanurate, dihydrate | NOAEL | Developmental toxicity | 190 | Rat | OECD 416, (EU B.35), oral | | |

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|--|----------|--------------------|---------|------------------|----------------------|--------------------------------------|
| sodium dichloroisocyanurate, dihydrate | NOAEL | 115 | Rat | Method not given | 28 | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|--|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | | |

Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|--|----------|--------------------|---------|------------------|----------------------|--------------------------------------|
| sodium dichloroisocyanurate, dihydrate | NOAEL | > 31 | Rat | Method not given | 28 | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|--|----------------|----------|--------------------|---------|--------------------|---------------|--------------------------------------|--------|
| sodium dichloroisocyanurate, dihydrate | Oral | NOAEL | 1523 | Mouse | OECD 453 (EU B.33) | 24 month(s) | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| sodium dichloroisocyanurate, dihydrate | Respiratory tract |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| sodium dichloroisocyanurate, dihydrate | No data available |

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information**12.1 Toxicity**

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|------------------|--------------|----------------------------|------------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | LC ₅₀ | 0.23 | <i>Lepomis macrochirus</i> | Method not given | 96 |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|------------------|--------------|-----------------------------|-------------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | EC ₅₀ | 0.21 | <i>Daphnia magna</i> Straus | ASTM draft method | 48 |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|------------------|--------------|-----------------------------|--------------------|-------------------|
| sodium dichloroisocyanurate, dihydrate | EC ₅₀ | < 0.5 | <i>Scenedesmus obliquus</i> | Non guideline test | 3 |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|--|----------|-------------------|---------|--------|----------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | - |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|--|------------------|--------------|----------|----------|---------------|
| sodium dichloroisocyanurate, dihydrate | EC ₅₀ | 51 | | OECD 209 | 3 hour(s) |

Aquatic long-term toxicity

Suma Equip San EasyPack

Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|--------------|----------------------------|----------|---------------|------------------|
| sodium dichloroisocyanurate, dihydrate | NOEC | 1000 | <i>Oncorhynchus mykiss</i> | OECD 215 | 28 day(s) | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|--------------|----------------------|----------|---------------|------------------|
| sodium dichloroisocyanurate, dihydrate | NOEC | 160 | <i>Daphnia magna</i> | OECD 211 | 21 day(s) | |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw sediment) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|---------------------------|---------|--------|----------------------|------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | - | |

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|-----------------------|----------|----------------------|------------------|
| sodium dichloroisocyanurate, dihydrate | NOEC | 1000 | <i>Eisenia fetida</i> | OECD 207 | 14 | |

Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | - | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-------------------|---------|--------|----------------------|------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | - | |

Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | - | |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| sodium dichloroisocyanurate, dihydrate | | No data available | | | - | |

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT ₅₀ | Method | Evaluation |
|--|----------|-------------------|-------------------|-----------|----------------------------|
| sodium dichloroisocyanurate, dihydrate | | Oxygen depletion | 2 % in 28d day(s) | OECD 301D | Not readily biodegradable. |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|--|---------|------------------|-----------------------------|--------|
| sodium dichloroisocyanurate, dihydrate | -0.0056 | Method not given | No bioaccumulation expected | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|--|-------------------|---------|--------|------------|--------|
| sodium dichloroisocyanurate, dihydrate | No data available | | | | |

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|--|--------------------------------|-------------------------------------|--------|--------------------|------------|
| sodium dichloroisocyanurate, dihydrate | No data available | | | | |

Suma Equip San EasyPack

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste from residues / unused products:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging**Recommendation:**

Dispose of observing national or local regulations.

SECTION 14: Transport information**Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

14.1 UN number: 3077

14.2 UN proper shipping name:

Environmentally hazardous substance, solid, n.o.s. (sodium dichloroisocyanurate dihydrate)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 9

14.4 Packing group: III**14.5 Environmental hazards:**

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:**IMO/IMDG**

EmS: F-A, S-F

Transport regulations include special provisions for dangerous goods packed in small quantities classified under UN3077 or UN3082.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

• Decree 108/2008/NP-CP Circular No.: 04/2012/TT-BCT Regulations on the Classification and Labeling of Chemicals

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS4800305

Version: 01.0

Revision: 2020-03-10

Full text of the H phrases mentioned in section 3:

- H302 - Harmful if swallowed.
- H303 - May be harmful if swallowed.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

- DNEL - Derived No Effect Limit
- PNEC - Predicted No Effect Concentration
- ATE - Acute Toxicity Estimate
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet