



## Suma Vegwash D4.6

Revision: 2018-06-06

Version: 01.0

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

#### 1.1 Product identifier

Trade name: Suma Vegwash D4.6

#### 1.2 Recommended use and restrictions on use

For professional use only.

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

Diversey (Malaysia) Sdn. Bhd.

#### Contact details

No. 6, Jalan Pengarah U1/29, Seksyen U1  
Hicom Glenmarie Industrial Park  
40150 Shah Alam  
Selangor, Malaysia  
Tel : +603-5569-6363  
Fax: +603-5569-6262

#### 1.4 Emergency telephone number

Tel : +603-5569-6363

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Aquatic Chronic 2 (H411)

#### 2.2 Label elements



#### Hazard statements:

H411 - Toxic to aquatic life with long lasting effects.

#### 2.3 Other hazards

No other hazards known

Exposure and appropriate engineering controls are specified in subsection 8.2 exposure controls.

#### 2.4 Classification diluted product:

Recommended maximum concentration (%): 0.37

Not classified as hazardous

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances / Mixtures

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

## Suma Vegwash D4.6

This preparation contains less than 12% Sodium hydroxide/Potassium hydroxide which exempts from Poison Act 1952.  
Workplace exposure limit(s), if available, are listed in subsection 8.1.  
For the full text of the H phrases mentioned in this Section, see Section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

<b>Inhalation:</b>	Get medical attention or advice if you feel unwell.
<b>Skin contact:</b>	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.
<b>Ingestion:</b>	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.
<b>Self-protection of first aider:</b>	Consider personal protective equipment as indicated in subsection 8.2.

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

<b>Inhalation:</b>	No known effects or symptoms in normal use.
<b>Skin contact:</b>	No known effects or symptoms in normal use.
<b>Eye contact:</b>	No known effects or symptoms in normal use.
<b>Ingestion:</b>	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. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. 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.

## Suma Vegwash D4.6

**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:

**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**

**Physical State:** Solid

**Colour:** Clear, White

**Odour:** Chlorine

**Odour threshold:** Not applicable

**pH:** Not applicable.

**Dilution pH:** ≈ 7 (1%)

**Melting point/freezing point (°C):** Not determined

**Initial boiling point and boiling range (°C):** Not determined

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not applicable.

( UN Manual of Tests and Criteria, section 32, L.2 )

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not determined

**Upper/lower flammability limit (%):** Not determined

**Vapour pressure:** Not determined

**Vapour density:** Not determined

**Relative density:** ≈ 1.15 (20 °C)

**Solubility in / Miscibility with Water: completely soluble** 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

**Method / remark**

ISO 4316

Not relevant to classification of this product

Not applicable to solids or gases

Not relevant to classification of this product

Not relevant to classification of this product  
OECD 109 (EU A.3)

**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): >2000

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 <sub>50</sub>	1671	Rat	EPA OPP 81-1	

Acute dermal toxicity

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

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	LC <sub>50</sub>	> 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	Corrosive	Rabbit	EPA OPP 81-5	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium dichloroisocyanurate, dihydrate	Corrosive	Rabbit	EPA OPP 81-4	

Respiratory tract irritation and corrosivity

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

#### Sensitisation

## Suma Vegwash D4.6

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

## 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

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	No data available

## 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

## Suma Vegwash D4.6

## Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	LC <sub>50</sub>	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 <sub>50</sub>	0.17	<i>Daphnia magna Straus</i>	ASTM draft method	48

## Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium dichloroisocyanurate, dihydrate	EC <sub>50</sub>	< 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		No data available			

## Aquatic long-term toxicity

## 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)	Species	Method	Exposure time (days)	Effects observed

## Suma Vegwash D4.6

		soil)				
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 <sub>50</sub>	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 K<sub>ow</sub>)

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 K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (des)	Method	Soil/sediment type	Evaluation
sodium dichloroisocyanurate, dihydrate	No data available				

**12.5 Other adverse effects**

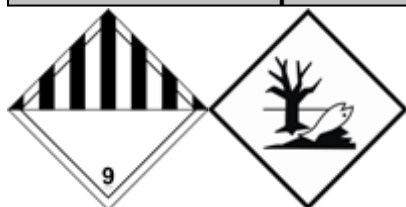
No other adverse effects known.

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

Dispose of observing national or local regulations. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not dispose of waste into sewer. Do not re-use empty containers.

**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.

## Suma Vegwash D4.6

**Other relevant information:****IMO/IMDG**

EmS: F-A, S-F

The product has been classified, labelled and packaged in accordance with the requirements of national road transport regulations and the provisions of the IMDG Code

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**

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

**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: MS4000438

Version: 01.0

Revision: 2018-06-06

**Full text of the H phrases mentioned in section 3:**

- H302 - 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**