Safety Data Sheet

Tannin Stain Remover

Revision: 2023-01-31 **Version:** 01.0

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

1.1 Product identifier
Trade Name: Tannin Stain Remover

1.2 Recommended use and restrictions on use
See product label.
For professional use only.

1.3 Details of the supplier of the safety data sheet
Diversey Philippines Inc

Contact details
6756 Ayala Avenue
8 Floor Bankmer Building
Makati City 1226 Philippines
Tel. +63 2 8271 2400

1.4 Emergency telephone number
In case of medical emergency, please seek professional medical advice.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2 (H319)

2.2 Label elements

Signal word: Warning.

Hazard statements:
H319 - Causes serious eye irritation.

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

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS #	Classification	Weight %
2-(2-butoxyethoxy)ethanol	112-34-5	Eye Irrit. 2 (H319)	3-10
Citric acid	77-92-9	Eye Irrit. 2 (H319)	3-10
Sodium xylene sulfonate	1300-72-7	Eye Irrit. 2 (H319)	1-3
Linear alcohol alkoxylate	68987-81-5	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	1-3

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

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.
Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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:	Causes severe irritation.
Ingestion:	No known effects or symptoms in normal use.

4.3 Indication of immediate medical attention and notes for physician.
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. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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 adviced 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 section 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 container.
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:

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:

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

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: Liquid	
Color: Clear , Pale , Yellow	
Odor: Product specific Slightly perfumed	
Odor threshold: Not applicable	
pH: ≈ 3 (neat)	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	
Flammability (liquid): Not flammable.	
Flash point (°C): > 93 °C	closed cup
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 applicable to liquids	
Lower and upper explosion limit/flammability limit (%): Not determined	
Vapor pressure: Not determined	
Relative vapor density Not determined	Not relevant to classification of this product
Relative density: ≈ 1.03 (20 °C)	OECD 109 (EU A.3)
Solubility in / Miscibility with water: Fully miscible	
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
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive to metals

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
Reacts with alkali. Keep away from products containing chlorine-based bleaching agents or sulphites.

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): 4900

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)
2-(2-butoxyethoxy)ethanol	LD_{50}	2410	Rat	Method not given	
Citric acid	LD_{50}	5400-11700	Rat	Method not given	
Sodium xylene sulfonate	LD_{50}	> 7200	Rat	OECD 401 (EU B.1)	
Linear alcohol alkoxylate		No data available	Rat	Weight of evidence	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
2-(2-butoxyethoxy)ethanol	LD_{50}	2764	Rabbit	Method not given	
Citric acid	LD_{50}	> 2000	Rat	Method not given	
Sodium xylene sulfonate	LD_{50}	> 2000	Rabbit	OECD 402 (EU B.3)	
Linear alcohol alkoxylate		No data available	Rat	Weight of evidence	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-(2-butoxyethoxy)ethanol		No data available			
Citric acid		No data available			
Sodium xylene sulfonate	LC_{0}	> 6.41 (mist) No mortality observed	Rat	OECD 403 (EU B.2)	4
Linear alcohol alkoxylate		No data available			

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-(2-butoxyethoxy)ethanol	Not irritant	Rabbit	Method not given	
Citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	
Sodium xylene sulfonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	

Linear alcohol alkoxylate	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-(2-butoxyethoxy)ethanol	Irritant	Rabbit	Method not given	
Citric acid	Severe damage Irritant	Rabbit	OECD 405 (EU B.5)	
Sodium xylene sulfonate	Irritant	Rabbit	OECD 405 (EU B.5)	
Linear alcohol alkoxylate	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-(2-butoxyethoxy)ethanol	No data available			
Citric acid	No data available			
Sodium xylene sulfonate	No data available			
Linear alcohol alkoxylate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
2-(2-butoxyethoxy)ethanol	Not sensitising	Guinea pig	Method not given	
Citric acid	Not sensitising	Guinea pig	Method not given	
Sodium xylene sulfonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Linear alcohol alkoxylate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
2-(2-butoxyethoxy)ethanol	No data available			
Citric acid	No data available			
Sodium xylene sulfonate	No data available			
Linear alcohol alkoxylate	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)
2-(2-butoxyethoxy)ethanol	No evidence of genotoxicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
Citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given
Sodium xylene sulfonate	No evidence for mutagenicity, negative test results	OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
Linear alcohol alkoxylate	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
2-(2-butoxyethoxy)ethanol	No data available
Citric acid	No evidence for carcinogenicity, negative test results
Sodium xylene sulfonate	No evidence for carcinogenicity, negative test results
Linear alcohol alkoxylate	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
2-(2-butoxyethoxy)ethanol			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
Citric acid			No data available				No evidence for reproductive toxicity
Sodium xylene sulfonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		
Linear alcohol alkoxylate			No data available				

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
2-(2-butoxyethoxy)ethanol		No data				

		available				
Citric acid		No data available				
Sodium xylene sulfonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)	90	
Linear alcohol alkoxylate		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
2-(2-butoxyethoxy)ethanol		No data available				
Citric acid		No data available				
Sodium xylene sulfonate	NOAEL	> 440		OECD 411 (EU B.28)	90	
Linear alcohol alkoxylate		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
2-(2-butoxyethoxy)ethanol		No data available				
Citric acid		No data available				
Sodium xylene sulfonate		No data available				
Linear alcohol alkoxylate		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
2-(2-butoxyethoxy)ethanol			No data available					
Citric acid			No data available					
Sodium xylene sulfonate	Oral		No data available	Rat	OECD 453 (EU B.33)	24 month(s)	No adverse effects observed	
Linear alcohol alkoxylate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
2-(2-butoxyethoxy)ethanol	No data available
Citric acid	No data available
Sodium xylene sulfonate	No data available
Linear alcohol alkoxylate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
2-(2-butoxyethoxy)ethanol	No data available
Citric acid	No data available
Sodium xylene sulfonate	No data available
Linear alcohol alkoxylate	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)
2-(2-butoxyethoxy)ethanol	LC_{50}	> 100	*Fish*	Method not given	
Citric acid	LC_{50}	440	*Leuciscus idus*	Method not given	48
Sodium xylene sulfonate	LC_{50}	> 1000	*Oncorhynchus mykiss*	Method not given	96
Linear alcohol alkoxylate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-(2-butoxyethoxy)ethanol	EC_{50}	> 100	*Daphnia magna Straus*	DIN 38412, Part 11	48
Citric acid	EC_{50}	1535	*Daphnia magna Straus*	Method not given	24
Sodium xylene sulfonate	EC_{50}	> 1000	*Daphnia*	Method not given	48
Linear alcohol alkoxylate		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-(2-butoxyethoxy)ethanol	EC_{50}	> 100	*Desmodesmus subspicatus*	Method not given	
Citric acid	LC_{50}	425	*Scenedesmus quadricauda*	Method not given	168
Sodium xylene sulfonate	EC_{50}	> 230	*Not specified*	EPA OPPTS 850.5400	96
Linear alcohol alkoxylate		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
2-(2-butoxyethoxy)ethanol		No data available			
Citric acid		No data available			
Sodium xylene sulfonate		No data available			
Linear alcohol alkoxylate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
2-(2-butoxyethoxy)ethanol	EC_{10}	1170	*Pseudomonas*	Method not given	16 hour(s)
Citric acid	EC_{50}	> 10000	*Pseudomonas*	Method not given	16 hour(s)
Sodium xylene sulfonate	$E_r C_{50}$	> 1000	*Activated sludge*	OECD 209	3 hour(s)
Linear alcohol alkoxylate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
2-(2-butoxyethoxy)ethanol		No data available				
Citric acid		No data available				
Sodium xylene sulfonate		No data available				
Linear alcohol alkoxylate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
2-(2-butoxyethoxy)ethanol		No data available				
Citric acid		No data available				
Sodium xylene sulfonate		No data				

		available				
Linear alcohol alkoxylate		No data available				

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

Terrestrial toxicity

Terrestrial toxicity - earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
Citric acid	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
Citric acid	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
Citric acid		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
2-(2-butoxyethoxy)ethanol	Activated sludge, aerobe	COD removal	95% in 28 day(s)	OECD 301C	Readily biodegradable
Citric acid			97 % in 28 day(s)	Method not given OECD 301B	Readily biodegradable
Sodium xylene sulfonate	Activated sludge, aerobe	CO_2 production	99.8 % in 28 day(s)	OECD 301B	Readily biodegradable
Linear alcohol alkoxylate	Adapted activated sludge		> 50-60%	OECD 301B	Inherently biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Citric acid					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Citric acid					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
2-(2-butoxyethoxy)ethanol	0.56	Method not given	No bioaccumulation expected	
Citric acid	-1.72		No bioaccumulation expected	
Sodium xylene sulfonate	-3.12	Method not given	No bioaccumulation expected	
Linear alcohol alkoxylate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
2-(2-butoxyethoxy)ethanol	1.4		QSAR	Low potential for bioaccumulation	
Citric acid	No data available				
Sodium xylene sulfonate	No data available				
Linear alcohol alkoxylate	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
2-(2-butoxyethoxy)ethanol	No data available				Potential for mobility in soil, soluble in water
Citric acid	No data available				Potential for mobility in soil, soluble in water
Sodium xylene sulfonate	No data available				
Linear alcohol alkoxylate	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 (undiluted product): 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.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information

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

National regulations
• DOLE Department Order No. 136-14 Guidelines for the Implementation of Globally Harmonized System (GHS) in Chemical Safety Program in the Workplace

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

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Full text of the H phrases mentioned in section 3:
• H315 - Causes skin irritation.
• H319 - Causes serious eye irritation.
• H335 - May cause respiratory irritation.
• H402 - Harmful to aquatic life.

Abbreviations and acronyms:
• DNEL - Derived No Effect Level
• 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