

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/10/2017 Revision date: 05/15/2020

SECTION 1: Identification of the substa	nce/mixture and of the comp	oany/undertakin	g
1.1. Product identifier			
Product form : N	Aixture		
	Fropical UltraGreen Roof Wash		
	FRO-652		
	160-052		
1.2. Relevant identified uses of the substance	e or mixture and uses advised aga	inst	
Use of the substance/mixture : \	Nater based cleaner and degreaser.	Use on rinsable, nor	-porous surfaces.
1.3. Details of the supplier of the safety data	sheet		
TROPICAL ROOFING PRODUCTS			
1904 S.W. 31ST Ave.			
HALLANDALE, FL 33009 - UNITED STATES			
T 954-983-3434 technical@tropicalroofingproducts.com - www.tropica	Iroofingproducts com		
1.4. Emergency telephone number			
	200 404 0000		
5,	300-424-9300 Chemtrec		
``	Shemileo		
SECTION 2: Hazards identification			
2.1. Classification of the substance or mixtu	re		
GHS-US classification			
Not classified			
2.2. Label elements			
CHS US labelling			
GHS-US labelling			
0			
2.3. Other hazards			
No additional information available			
2.4. Unknown acute toxicity (GHS US)			
Not applicable			
SECTION 3: Composition/information o	n ingredients		
3.1. Substance			
Not applicable			
3.2. Mixture			
Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	> 90	Not classified
alcohols, C12-14, ethoxylated	(CAS No) 68439-50-9	<= 10	Not classified
edetic acid	(CAS No) 60-00-4	< 1	Not classified
sodium hydroxide, conc=50%, aqueous solution	(CAS No) 1310-73-2	< 1	Skin Corr. 1A, H314
sodium carbonate	(CAS No) 497-19-8	< 1	Skin Corr. 1A, H314
Fragrance	(CAS No) Proprietary	< 1	Not classified
Colorant	(CAS No) Proprietary	< 1	Not classified
Full text of H-statements: see section 16			
SECTION 4: First aid measures			
4.1. Description of first aid measures			
First-aid measures general : 0	Call a poison center or a doctor if you	feel unwell.	
-	Remove person to fresh air and keep		thing.
	Nash skin with plenty of water.		-
	Rinse eyes with water as a precaution		
-	Call a poison center or a doctor if you		

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		both acute and delayed	
Symptoms/injuries		Not expected to present a significant hazard under anticipated conditions of normal use.	
Symptoms/injuries after inhalatio		None under normal use.	
Symptoms/injuries after skin con		Not irritating.	
Symptoms/injuries after eye cont		Not irritating. No effects known.	
Symptoms/injuries after ingestion			
	nediate medical att	tention and special treatment needed	
Treat symptomatically.			
SECTION 5: Firefighting	measures		
5.1. Extinguishing media			
Suitable extinguishing media	:	Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arisi	ng from the substa	ance or mixture	
Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.	
5.3. Advice for firefighter	S		
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing	
		apparatus. Complete protective clothing.	
SECTION 6: Accidental I	elease measur	res	
		ment and emergency procedures	
General measures		Absorb spillage to prevent material damage.	
6.1.1. For non-emergency p			
Emergency procedures	:	Ventilate spillage area.	
6.1.2. For emergency respo	onders		
Protective equipment		Do not attempt to take action without suitable protective equipment. For further information	
		refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental preca	utions		
Avoid release to the environmen	t.		
6.3. Methods and materia	I for containment a	and cleaning up	
Methods for cleaning up	:	Take up liquid spill into absorbent material.	
Other information	:	Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other se	ections		
For further information refer to se	ection 13.		
SECTION 7: Handling an	d storage		
7.1. Precautions for safe			
Precautions for safe handling		Ensure good ventilation of the work station. Wear personal protective equipment.	
Hygiene measures		Do not eat, drink or smoke when using this product. Always wash hands after handling the	
		product.	
7.2. Conditions for safe s	torage, including a	any incompatibilities	
Storage conditions		Store in a well-ventilated place. Keep cool.	
7.3. Specific end use(s)			
No additional information availab			
			_
SECTION 8: Exposure co	ontrols/person	al protection	
8.1. Control parameters			
Tropical UltraGreen Roof Wa			
ACGIH	Not applicable		
OSHA	Not applicable		
alcohols, C12-14, ethoxylated (68439-50-9)			
ACGIH	Not applicable		
OSHA	Not applicable		

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edetic acid (60-00-4)			
ACGIH	Not applicable		
OSHA	Not applicable		
sodium carbonate (497-19-8)			
ACGIH	Not applicable		
OSHA	Not applicable		
sodium hydroxide, conc=50%	sodium hydroxide, conc=50%, aqueous solution (1310-73-2)		
ACGIH	Not applicable		
OSHA	Not applicable		
Fragrance (Proprietary)			
ACGIH	Not applicable		
OSHA	Not applicable		
Colorant (Proprietary)			
ACGIH	Not applicable		
OSHA	Not applicable		
Water (7732-18-5)			
ACGIH	Not applicable		
OSHA	Not applicable		

8.2. Exposure controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Protective gloves.
Eye protection	: Safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and	chemical properties	
Physical state	: Liquid	
Appearance	: Mobile liquid.	
Colour	: Green	
Odour	: Fresh	
Odour threshold	: No data available	
рН	: 9.5 - 10.5	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: ≈212 °F	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: No data available	
Density	: ≈8.3	

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Solubility	 Water: Solubility in water of component(s) of the mixture : alcohols, C12-14, ethoxylated: < 63 mg/l (25 °C) edetic acid: 0.05 g/100ml sodium hydroxide, conc=50%, aqueous solution: Complete sodium carbonate: 21.25 g/100ml (20 °C, OECD 105: Water Solubility)
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and re	activity
10.1. Reactivity	
The product is non-reactive under nor	mal conditions of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous re	eactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Acute toxicity

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Not classified

alcohols, C12-14, ethoxylated (68439-	-50-9)
LD50 oral rat	> 2000 mg/kg bodyweight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Read-across; Equivalent or similar to OECD 402)
edetic acid (60-00-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
sodium carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg (16 CFR 1500. 40, 24 h, Rabbit, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	2.30 mg/l (2 h, Rat, Male, Experimental value, Inhalation (aerosol))
ATE US (oral)	2800.000 mg/kg bodyweight
ATE US (vapours)	2.300 mg/l/4h
ATE US (dust,mist)	2.300 mg/l/4h
Skin corrosion/irritation	: Not classified
	pH: 9.5 - 10.5
Serious eye damage/irritation	: Not classified
	pH: 9.5 - 10.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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Reproductive toxicity Specific target organ toxicity (single exposure)	•	Not classified Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard		Not classified
Symptoms/injuries after inhalation	•	None under normal use.
Symptoms/injuries after skin contact	:	Not irritating.
Symptoms/injuries after eye contact	:	Not irritating.
Symptoms/injuries after ingestion	:	No effects known.

SECTION 12: Ecological information 12.1. Toxicity Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

alcohols, C12-14, ethoxylated (68439-50-9)	
LC50 fish 1	0.876 mg/l (LC50; EU Method C.1; 96 h; Danio rerio; Semi-static system; Fresh water; Experimental value)
EC50 Daphnia 1	0.53 mg/l (EC50; Other; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	0.41 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Weight of evidence)
Threshold limit algae 2	0.31 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Weight of evidence)
edetic acid (60-00-4)	
EC50 Daphnia 1	480 - 790 mg/l (EC50; 24 h)
LC50 fish 2	159 mg/l (LC50; 96 h; Lepomis macrochirus)
sodium carbonate (497-19-8)	
LC50 fish 1	300 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	200 - 227 mg/l (48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability alcohols, C12-14, ethoxylated (68439-50-9) Persistence and degradability Readily biodegradable in water. The surfactant(s) is/are biodegradable. Low potential for mobility in soil. edetic acid (60-00-4) Persistence and degradability Not readily biodegradable in water. Ozonation in the air. Photolysis in the air. Biochemical oxygen demand (BOD) 0.01 g O₂/g substance Chemical oxygen demand (COD) 0.85 g O₂/g substance ThOD 1.09 g O₂/g substance BOD (% of ThOD) 0.0091 sodium carbonate (497-19-8) Persistence and degradability Biodegradability: not applicable. Chemical oxygen demand (COD) Not applicable (inorganic) ThOD Not applicable (inorganic) sodium hydroxide, conc=50%, aqueous solution (1310-73-2) Biodegradability: not applicable. No (test)data on mobility of the components available. Persistence and degradability

12.3. Bioaccumulative potential

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alcohols, C12-14, ethoxylated (68439-50-9)		
BCF fish 1	237 (BCF; 72 h; Pimephales promelas; Flow-through system; Fresh water)	
Log Pow	5.6 - 7 (Weight of evidence approach; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 23 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
edetic acid (60-00-4)		
BCF fish 1	0.8 - 1.9 (BCF)	
BCF other aquatic organisms 1	19 (BCF)	
Log Pow	-5.013.34 (Calculated)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
sodium carbonate (497-19-8)		
Log Pow	-6.19 (Estimated value)	
Bioaccumulative potential	Not bioaccumulative.	
sodium hydroxide, conc=50%, aqueous soluti	ion (1310-73-2)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).	

12.4. Mobility in soil

alcohols, C12-14, ethoxylated (68439-50-9)		
Surface tension	0.28 N/m (25 °C; 19.6 mg/l)	
Log Koc	log Koc,3.95; QSAR	
Ecology - soil	Low risk to terrestrial organisms.	
sodium carbonate (497-19-8)		
Ecology - soil	Low potential for adsorption in soil.	

12.5.	Other adverse effects	
Effect or	n ozone layer	:
Effect or	n the global warming	: No known ecological damage caused by this product.

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	
SECTION 14: Transport information		
In accordance with DOT		
Not regulated for transport		
Additional information		
Other information	: No supplementary information available.	

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information			
15.1. US Federal regulations			
alcohols, C12-14, ethoxylated (68439-50-9)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e., Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).		

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edetic acid (60-00-4)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporing requirements of the United States SARA Section 313				
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb			
Water (7732-18-5)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

edetic acid (60-00-4)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date

: 05/15/2020

Full text of H-phrases:				
	Skin Corr. 1A	Skin corrosion/irritation, Category 1A		
	H314	Causes severe skin burns and eye damage		

ZLF-PMS 364 CUSTOM TEMPLATE

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.