

Version 1.0

Revision Date 03/13/2015

Print Date 04/28/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	B00309 Mst Rust Treet 55gll
Material number	:	00000000001002008
Manufacturer or supplier's d	leta	ils
Company	:	Zep Inc.
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318
Telephone	:	404-352-1680

Emergency telephone numbers		
For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	green
Odour	characteristic

GHS Classification

Acute toxicity (Oral) Acute toxicity (Dermal) Skin corrosion Serious eye damage	:	Category 3 Category 3 Category 1B Category 1
GHS Label element		
Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H301 + H311 Toxic if swallowed or in contact with skin H314 Causes severe skin burns and eye damage.
Precautionary statements	:	Prevention: P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P310 + P330 IF SWALLOWED: Immediately call a



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	POISON CENTER or doctor/ phys P301 + P330 + P331 IF SWALLO induce vomiting. P303 + P361 + P353 IF ON SKIN immediately all contaminated clot shower.	WED: Rinse mouth. Do NOT (or hair): Remove/ Take off
	 P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P363 Wash contaminated clothing before reuse. Storage: P405 Store locked up. Disposal: P501 Dispose of contents/container in accordance with local regulation. 	
Potential Health Effects		
Carcinogenicity:		
IARC	No component of this product present equal to 0.1% is identified as probable human carcinogen by IARC.	
ACGIH	Confirmed animal carcinogen with un humans	known relevance to
OSHA	2-butoxyethanol No component of this product present equal to 0.1% is identified as a carcin carcinogen by OSHA.	
NTP	No component of this product present equal to 0.1% is identified as a known by NTP.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
orthophosphoric acid	7664-38-2	>= 30 - < 50
2-butoxyethanol	111-76-2	>= 5 - < 10
hydrogen fluoride	7664-39-3	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.



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If inhaled	: If unconscious place in recovery po advice. If symptoms persist, call a physicia	
In case of skin contact	: In case of contact, immediately flus for at least 15 minutes while remove and shoes. Get immediate medica and massaging in 2.5% calcium glu before reuse. Clean shoes thoroug immediate medical attention.	ing contaminated clothing I attention while applying uconate gel. Wash clothing
In case of eye contact	 Small amounts splashed into eyes tissue damage and blindness. Continue rinsing eyes during transp Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a s If in eyes, rinse with water for 15 m 	port to hospital.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an If symptoms persist, call a physicia DO NOT induce vomiting unless di physician or poison control center. Take victim immediately to hospita	n. rected to do so by a

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water Carbon dioxide (CO2) Dry chemical Foam
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Smoke Phosphorus compounds Nitrogen oxides (NOx) Fluorine compounds
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.



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Special protective equipment for firefighters	: Wear self-contained breathing apprecessary.	paratus for firefighting if

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment.	
Environmental precautions	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.	
Methods and materials for containment and cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.	

SECTION 7. HANDLING AND STORAGE

Technical measures	:	Due to the unique hazards associated with hydrogen fluoride (HF), it is highly recommended that emergency pre-planning and training of employees occur to mitigate and facilitate rapid response to an exposure. Facilities need to have access to emergency showers, proper personal protective equipment (PPE), a supply of calcium gluconate gel, and complete training of all individuals on proper PPE and procedures.
Advice on safe handling	:	Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	:	Do not freeze. Store and keep away from bases and alkalies.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters



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Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
orthophosphoric acid	7664-38-2	TWA	1 mg/m3	ACGIH	
		STEL	3 mg/m3	ACGIH	
		TWA	1 mg/m3	NIOSH REL	
		ST	3 mg/m3	NIOSH REL	
		TWA	1 mg/m3	OSHA Z-1	
		TWA	1 mg/m3	OSHA P0	
		STEL	3 mg/m3	OSHA P0	
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH	
		TWA	5 ppm 24 mg/m3	NIOSH REL	
		TWA	50 ppm 240 mg/m3	OSHA Z-1	
		TWA	25 ppm 120 mg/m3	OSHA P0	
hydrogen fluoride	7664-39-3	TWA	0.5 ppm	ACGIH	
· -		С	2 ppm	ACGIH	
		TWA	3 ppm 2.5 mg/m3	NIOSH REL	
		С	6 ppm 5 mg/m3	NIOSH REL	
		TWA	3 ppm	OSHA Z-2	
		TWA	3 ppm	OSHA P0	
		STEL	6 ppm	OSHA P0	

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As	200 mg/g	ACGIH BEI
				soon as possible		
				after		
				exposure		
				ceases)		
Remarks: Creatinine	r			1	1	
HYDROFLUORIC ACID	7664-39-3	Fluoride	Urine	Prior to	2 mg/l	ACGIH BEI
				shift (16		
				hours after		
				exposure		
				ceases)		
HYDROFLUORIC ACID		Fluoride	Urine	End of	3 mg/l	ACGIH BEI
				shift (As	0	
				soon as		
				possible		
				after		
				exposure		
				ceases)		

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally



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	required.	
Hand protection Remarks	: The suitability for a specific workp with the producers of the protectiv	
Eye protection	: Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective s problems.	uit for abnormal processing
Skin and body protection	: impervious clothing Choose body protection according concentration of the dangerous su	
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at	the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	green
Odour	:	characteristic
Odour Threshold	:	no data available
рH	:	no data available
Melting point/freezing point	:	not applicable
Boiling point	:	100 °C
Flash point	:	
		does not flash
Evaporation rate	:	1
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Density	:	no data available
Solubility(ies)		
Water solubility	:	completely miscible
Partition coefficient: n- octanol/water	:	no data available
Auto-ignition temperature	:	not determined
Thermal decomposition	:	no data available
Viscosity		



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Viscosity, kinematic

: no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat.
Incompatible materials	: Alkali metals Metals glass
Hazardous decomposition products	: Carbon oxides Phosphorus compounds Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:	
Acute oral toxicity	: Acute toxicity estimate : 229.56 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : 25.48 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : 287.17 mg/kg Method: Calculation method

Skin corrosion/irritation

Product:

Remarks: Causes skin burns. Harmful if absorbed through the skin. Contact results in immediate skin absorption which may cause hypocalcemia (calcium loss). This effect may be delayed for several hours after exposure. Severe over-exposure by absorption can result in death. Get immediate medical attention.

Components:

hydrogen fluoride:

Remarks: Causes skin burns. Harmful if absorbed through the skin. Contact results in immediate skin absorption which may cause hypocalcemia (calcium loss). This effect may be delayed for

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several hours after exposure. Severe over-exposure by absorption can result in death. Get immediate medical attention.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

orthophosphoric acid: 2-butoxyethanol: hydrogen fluoride:

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

Further information

Product:

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

no data available Bioaccumulative potential

Product:

Partition coefficient: noctanol/water : Remarks: no data available



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Mobility in soil		
no data available		
Other adverse effects		
no data available Product:		
Regulation	40 CFR Protection of Environment; Stratospheric Ozone - CAA Section Substances	
Remarks	This product neither contains, nor w with a Class I or Class II ODS as de Clean Air Act Section 602 (40 CFR + B).	fined by the U.S.
Additional ecological information	An environmental hazard cannot be event of unprofessional handling or aquatic life.	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID, AMMONIUM BIFLUORIDE), 8, III

Transportation Regulation: IMDG (Vessel): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID, AMMONIUM BIFLUORIDE), 8, III

Transportation Regulation: IATA (Cargo Air): UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID, AMMONIUM BIFLUORIDE), 8, III

Transportation Regulation: IATA (Passenger Air): UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (PHOSPHORIC ACID, AMMONIUM BIFLUORIDE), 8, III

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Transportation Degulation, TDC	(Canada):	
Transportation Regulation: TDG UN3264, CORROSIVE LIQUID,	ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC	ACID, AMMONIUM
BIFLUORIDE), 8, III		

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
hydrogen fluoride	7664-39-3	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
hydrogen fluoride	7664-39-3	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazard	s : Acute Health Hazard
SARA 302	: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
The components of th	is product are reported in the following inventories:
TSCA	On TSCA Inventory
DSL	This product contains one or several components listed in the Canadian NDSL.
AICS	Not in compliance with the inventory
NZIOC	Not in compliance with the inventory
PICCS	Not in compliance with the inventory
15000	

IECSC Not in compliance with the inventory

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)



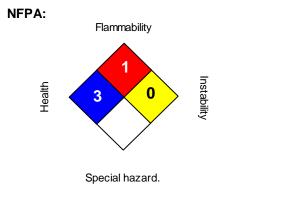
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SECTION 16. OTHER INFORMATION

Further information



HMIS III:



0 = not significant, 1 =Slight, 2 = Moderate, 3 = High

4 = Extreme, * = Chronic

OSHA GHS Label Information:

Hazard pictograms	
Signal w ord Hazard statements	 Danger: Toxic if sw allowed or in contact w ith skin Causes severe skin burns and eye damage.
Precautionary statements	: Prevention: Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
	Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with w ater/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. Storage: Store locked up. Disposal: Dispose of contents/container in accordance with local regulation.

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Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®,Zep Professional®, Enforcer®, National Chemical[™], Selig[™], Misty®, Next Dimension[™], Petro®, i-Chem®, TimeMist®, TimeWick[™], MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National[™], FC Forward Chemicals®,Rexodan®, Mykal[™], and a number of private labeled brands.



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