

3/12/2005

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines:

ACGIH - TLV: Provide suitable personal protective equipment and/or ventilation to maintain exposure below TLV levels.

Engineering Controls/Ventilation: Normally ventilation is not required

Respiratory Protection : Normally not required

Eye Protection: Normally not required. Safety glasses / goggles can be worn if splashing is anticipated.

Hand Protection: Not required.

Other Protective Clothing: Normal work clothing covering arms and legs if splashing anticipated.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odour: Clear Orange Liquid with Lemon Odour.

Solubility in water: Complete.

Boiling Point: 100 ° C

Specific Gravity: 1.015 +/- 0.005 g/cm³

PH: 7.0 +/- 7.5

Vapour Pressure: Not Determine

Vapour Density: Not Determine

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Not applicable.

Incompatibility With Other Materials: None

SECTION 11 - TOXICITY INFORMATION

Components: This product contains trace amount of Formalin that may cause transient irritation in eyes and skin some individuals.

Toxicity: Oral LD 50 (rat) : > 4500 mg/kg

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate and Distribution: It is soluble in water and does not bio-accumulate.

Persistence and Degradation: Product degrades readily by action of microorganism.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal: Dispose off in an approved waste facility according to local regulations.

General Recommendations:

Of the methods of disposal currently available, it is recommended that an alternative be selected according to that of preference, based upon environmental acceptability: (1) Re-cycle or rework, if feasible (2) Incinerate at an authorized facility (3) treat at an acceptable waste treatment facility.

SECTION 14 - TRANSPORT INFORMATION

This material is non-regulated and no special requirement is necessary.

SECTION 15 - REGULATORY INFORMATION

Classification: This product has not been allocated any classification.

Ozone Depleting Chemicals: No regulated ingredients.

SECTION 16 - OTHER INFORMATION

Hazard Rating : HMIS

HEALTH : 1

FLAMMABILITY : 0

REACTIVITY : 0

Note : MSDS is correct at data of publication. It is not necessarily fully adequate for every circumstance, nor to be confused with or followed in violation of applicable laws or insurance requirements. Health hazards and effects of exposure apply only to negligent handling or misuse of product in its concentrated form (as supplied) ; and not to exposure to diluted product under normal use. No warranty, express or implied, of merchantability, fitness or accuracy.

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Safety Data Sheet

Section 1 PRODUCT AND COMPANY IDENTIFICATION					
Product Name: Grand 1016 Description: Rust Remover Date of MSDS: 01-Jan-2025	Distributor: ENC Nationwide Sdn Bhd Address: B-G-03, Block B, Jalan Bangau 11, Bandar Puchong Jaya, Off Jalan Puchong, Puchong, 47170 Selangor. Tel : 603-8075-5222				
Section 2 HAZARDS IDENTIFICATION					
Eye Contact : Skin Contact : Inhalation : Ingestion : Conditions Aggravated By Exposure :	Will cause burns of eyes. Accidental contact may cause burning feels. Can cause upper respiratory tract and lung's tissue. Ingestion will cause burns of mucous membrane and internal damage, possibly death. Exposure to this product will cause burnt of skin and eye.				
					
Section 3 INGREDIENTS INFORMATION					
Chemical Name/Common Name	%	TLV	Chemical Name/Common Name	%	TLV
Hydrochloric Acid		1.0 mg/m ³	Hydrofluoric Acid		3.0 ppm
Section 4 FIRST AID MEASURES					
Eye Contact : Skin : Ingestion: Inhalation: Notes to Physicians:	Flush with cool water for at least 15 minutes. Then consult a physician immediately. Wash with large amounts of soap and water. If irritation persists, consult a physician. Do not induce vomiting. Dilute by drinking water. Call a physician immediately. Move to area of fresh air. If breathing has stopped, artificial respiration should be started; oxygen may be administered if available. Call a physician. Never give anything by mouth to an unconscious person. Treatment should be directed at preventing absorption, administering to symptoms (if they occurred), and providing supportive therapy.				
Section 5 FIRE FIGHTING METHODS					
Flash Point (T.C.C.): Extinguishing Media: Special Fire Fighting Procedure : Unusual Fire/Explosion Hazards:	None to Boiling Water, Dry Chemical, fog and alcohol foam Fire fighters whom may be exposed to the products of combustion should wear a self-contained breathing apparatus with full protective equipment. None				
Flammable Limits - Upper: NA Lower: NA					
Section 6 ACCIDENTAL RELEASE MEASURES					
Evacuation: Containment: Collection And Disposal:	No special procedures are usually necessary. Safely stop discharge. Contain material, as necessary, with dike or barrier. Stop material from contaminating soil or from entering sewers or bodies of water. Stop discharge, if safe to do so. Use proper protective equipment. Cover spills with absorbent clay, sawdust to inert material and place in closed chemical waste containers. Dispose according to applicable local, state and federal regulations.				
Section 7 HANDLING AND STORAGE					
Storage Conditions : Transfer: Personal Hygiene: Empty Container Precautions:	This product is a corrosive liquid. Store in cool, dry, well-ventilated area at room temperature. Close the cap at all time to prevent contamination, Keep away from children. No special precautions are needed. Follow good manufacturing and handling practices. Wash thoroughly with water after handling, especially before eating and drinking. Launder contaminated clothing before re-use. Do not re-use empty container for food, clothing or products of human or animal consumption or where skin contact can occur.				

Safety Data Sheet

EXPOSURE CONTROLS AND PERSONAL PROTECTION

Section 8	Exposure Guidelines:	
	ACGIH - TLV:	Provide suitable personal protective equipment and/or ventilation to maintain exposure below TLV levels.
	Engineering Controls/Ventilation:	Local exhaust ventilation is recommended when vapors mist, or dusts can be released.
	Eye Protection:	Acid proof Safety glasses/ goggles
	Hand Protection:	Rubber/ PVC Gloves
	Other Protective Clothing:	Normal work clothing covering arms and legs.

PHYSICAL AND CHEMICAL PROPERTIES

Section 9	Appearance & Odour:	Red Liquid with suffocating odor	Specific Gravity:	1.135 +/- 0.005 g/cm ³
			PH:	0.4 +/- 0.5
	Solubility in water:	Complete	Vapour Pressure:	Not Determined
	Boiling Point:	100 ° C	Vapour Density:	Not Determined

STABILITY AND REACTIVITY

Section	Chemical Stability:	Stable under normal conditions of use.
	Hazardous Polymerization:	Will not occur.
	Conditions to Avoid:	Not applicable.
	Incompatibility With Other Materials:	Strong alkaline and Oxidizers.

TOXICITY INFORMATION

Section	Components:	This product contains ingredients listed in Section 2 that may cause burn to eyes and/or skin. Indigestion of high amount of product may be fatal.
	Toxicity:	Oral LD 50 (rat) : > 4500 mg/kg

ECOLOGICAL INFORMATION

Section 12	Environmental Fate and Distribution:	It is soluble in water and does not bio-accumulate.
	Persistence and Degradation:	Product degrades readily by action of carbon dioxide in the air as well as decomposition by microorganism.
	Toxicity:	Concentrations with a pH value of 1 or lower especially in fresh water may be fatal to fish and other aquatic organism. Can cause damage to aquatic plants and vegetation.

DISPOSAL CONSIDERATIONS

Section 13	Disposal:	Dispose off in an approved waste facility according to local regulations.
	General Recommendations:	Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) Re-cycle or rework, if feasible (2) Incinerate at an authorized facility (3) treat at an acceptable waste treatment facility.

TRANSPORT INFORMATION

Section	This material is non-regulated and no special requirement is necessary.
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REGULATORY INFORMATION

Section	Classification:	This product contains Hydrochloric acid and Hydrofluoric acid that is classified as Corrosive under EC Classification.
	Ozone Depleting Chemicals:	No regulated ingredients.

OTHER INFORMATION

Section	Hazard Rating : HMIS	FLAMMABILITY : 0
	HEALTH : 2	REACTIVITY : 0

Note : SDS is correct at date of publication. It is not necessarily fully adequate for every circumstance, nor to be confused with or followed in violation of applicable laws or insurance requirements. Health hazards and effects of over - exposure apply only to negligent handling or misuse of product in its concentrated form (as supplied) ; and not routine exposure to diluted product under normal use. No warranty, express or implied, of merchantability, fitness or accuracy of data is made; as such the vendor assumes no responsibility for injury or damages resulting from use of this product.

Material Safety Data Sheet

Section 1		PRODUCT AND COMPANY IDENTIFICATION					
Section 1	Product Name: Grand All	Distributor: ENC Nationwide Sdn Bhd					
	Description: General Purpose Cleaner	Address: A-3-6, Kompleks Industri Puchong No.1, Jalan TPP 1/6, Taman Perindustrial Puchong, 47100 Selangor.					
	Date of MSDS: 12-March-05	Tel : 603-8060-5516					
Section 2		INGREDIENTS INFORMATION					
Section 2	Chemical Name/Common Name	%	TLV	Chemical Name/Common Name	%	TLV	
	Formalin	< 0.15	2 ppm	Non-Hazardous Ingredients	90-100	2.0 mg/m ³	
Section 3		HAZARDS IDENTIFICATION					
Section 3	Emergency Overview :	Ingestion may cause nausea, vomiting, pain, upset stomach, diarrhea. May cause mild eye irritation. Do not swallow. See sections 3,5 and 6.					
	Primary Routes of Exposure :	Skin					
	Eye Contact :	May cause mild irritation.					
	Skin Contact :	Accidental contact may cause irritation.					
	Inhalation :	Exposure is unlikely.					
	Ingestion :	Exposure is unlikely. May cause nausea, vomiting, pain, and stomach upset.					
	Target Organs/Chronic Effects :	None known.					
Conditions Aggravated By Exposure :	Exposure to this product is not expected to contribute, worsen or aggravate any pre-existing medical conditions.						
Section 4		FIRST AID MEASURES					
Section 4	Eye Contact :	Flush with cool water for at least 15 minutes. Then consult a physician immediately.					
	Skin :	Wash with large amounts of soap and water. If irritation persists, consult a physician.					
	Ingestion:	Do not induce vomiting. Dilute by drinking water. Call a physician immediately.					
	Inhalation:	Move to area of fresh air. If breathing has stopped, artificial respiration should be started; oxygen may be administered if available. Call a physician. Never give anything by mouth to an unconscious person.					
	Notes to Physicians:	Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.					
Section 5		FIRE FIGHTING METHODS					
Section 5	Flash Point (T.C.C.):	None to Boiling	Flammable Limits - Upper: NA			Lower: NA	
	Extinguishing Media:	Water, Dry Chemical, Carbon dioxide and universal type Foam.					
	Special Fire Fighting Procedure :	Fire fighters may be exposed to the products of combustion should wear a self-contained breathing apparatus with full protective equipment.					
	Unusual Fire/Explosion Hazards:	None					
Hazardous Decomposition Products:	Burning can produce carbon dioxide and/or carbon monoxide.						
Section 6		ACCIDENTAL RELEASE MEASURES					
Section 6	Evacuation:	No special procedures are usually necessary.					
	Containment:	Stop spill at source. Contain material, as necessary, with dike or barrier. Mop, shovel or absorb with inert material and place in sound containers. Rinse remaining residue with excess water.					
	Collection And Disposal:	Prevent run off, if safe to do so. Use proper protective equipment. Cover spills with absorbent clay, sawdust or inert material and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulation.					
Section 7		HANDLING AND STORAGE					
Section 7	Storage Conditions :	Store in cool place, well ventilated area at room temperature.					
	Transfer:	No special precautions are needed. Follow good manufacturing and handling practices.					
	Personal Hygiene:	Wash thoroughly with water after handling, especially before eating and drinking.					
	Empty Container Precautions:	Do not re-use empty container for food, clothing or products of human or animal					

Material Safety Data Sheet

3/12/2005

Section 8		EXPOSURE CONTROLS AND PERSONAL PROTECTION	
		Exposure Guidelines:	
ACGIH - TLV:	Provide suitable personal protective equipment and/or ventilation to maintain exposure		
Engineering Controls/Ventilation:	Normally ventilation is not required		
Respiratory Protection :	Normally not required		
Eye Protection:	Normally not required. Safety glasses / goggles can be worn if splashing is		
Hand Protection:	Not required.		
Other Protective Clothing:	Normal work clothing covering arms and legs if splashing anticipated.		
Section 9		PHYSICAL AND CHEMICAL PROPERTIES	
Appearance & Odour:	Clear Orange	Specific Gravity:	1.015 +/- 0.005 g/cm3
	with Lemon Odour.	PH:	7.0 +/- 7.5
Solubility in water:	Complete.	Vapour Pressure:	Not Determined
Boiling Point:	100 ° C	Vapour Density:	Not Determined
Section 10		STABILITY AND REACTIVITY	
Chemical Stability:	Stable under normal conditions of use.		
Hazardous Polymerization:	Will not occur.		
Conditions to Avoid:	Not applicable.		
Incompatibility With Other Materials:	None		
Section 11		TOXICITY INFORMATION	
Components:	This product contains trace amount of Formalin that may cause transient irritation in eyes and skin of some individuals.		
Toxicity:	Oral LD 50 (rat) : > 4500 mg/kg		
Section 12		ECOLOGICAL INFORMATION	
Environmental Fate and Distribution:	It is soluble in water and does not bio-accumulate.		
Persistence and Degradation:	Product degrades readily by action of microorganism.		
Section 13		DISPOSAL CONSIDERATIONS	
Disposal:	Dispose off in an approved waste facility according to local regulations.		
General Recommendations:	Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) Re-cycle or rework, if feasible (2) Incinerate at an authorized facility (3) treat at an acceptable waste treatment facility.		
Section 14		TRANSPORT INFORMATION	
		This material is non-regulated and no special requirement is necessary.	
Section 15		REGULATORY INFORMATION	
Classification:	This product has not been allocated any classification.		
Ozone Depleting Chemicals:	No regulated ingredients.		
Section 16		OTHER INFORMATION	
Hazard Rating : HMIS	FLAMMABILITY : 0		
HEALTH : 1	REACTIVITY : 0		

Note : MSDS is correct at data of publication. It is not necessarily fully adequate for every circumstance, nor to be confused with or followed in violation of applicable laws or insurance requirements. Health hazards and effects of over - exposure apply only to negligent handling or misuse of product in its concentrated form (as supplied) ; and not routine

Material Safety Data Sheet

exposure to diluted product under normal use. No warranty, express or implied, of merchantability, fitness or accuracy of data is made; as such the vendor assumes no responsibility for injury or damages resulting from use of this product.

Material Safety Data Sheet

PRODUCT AND COMPANY IDENTIFICATION

Section 1	Product Name: Grand Plus	Distributor: ENC Nationwide Sdn Bhd
	Description: Heavy Duty Germicidal Cleaner	Address: A-3-6, Kompleks Industri Puchong No.1, Jalan TPP 1/6, Taman Perindustri Puchong, 47100 Selangor.
	Date of MSDS: 12-March-05	Tel : 603-8060-5516

INGREDIENTS INFORMATION

Chemical Name/Common Name	%	TLV	Chemical Name/Common Name	%
Sodium Hydroxide	< 3.0	2.0 mg/m ³	Sodium Metasilicate	1 - 5
Non-Hazardous Ingredients	90-100			

HAZARDS IDENTIFICATION

Section 3	Eye Contact :	May cause reddening of eyes and intense irritation.
	Skin Contact :	Accidental contact may cause irritation.
	Inhalation :	Exposure is unlikely.
	Ingestion :	Exposure is unlikely. May cause nausea, vomiting, pain, and stomach upset.
	Conditions Aggravated By Exposure :	Exposure to this product is not expected to contribute, worsen or aggravate any medical conditions.

FIRST AID MEASURES

Section 4	Eye Contact :	Flush with cool water for at least 15 minutes. Then consult a physician immediately.
	Skin :	Wash with large amounts of soap and water. If irritation persists, consult a physician.
	Ingestion:	Induce vomiting. Dilute by drinking water. Call a physician immediately.
	Inhalation:	Move to area of fresh air. If breathing has stopped, artificial respiration should be administered if available. Call a physician. Never give anything to an unconscious person.
	Notes to Physicians:	Treatment should be directed at preventing absorption, administering to symptoms (if occurred), and providing supportive therapy.

FIRE FIGHTING METHODS

Section 5	Flash Point (T.C.C.):	None to Boiling	Flammable Limits - Upper: NA	Lower:	
	Extinguishing Media:	Water, Dry Chemical, Carbon dioxide and universal type Foam.			
	Special Fire Fighting Procedure :	Fire fighters whom may be exposed to the products of combustion should wear contained breathing apparatus with full protective equipment.			
	Unusual Fire/Explosion Hazards:	None			
	Hazardous Decomposition Products:	Burning can produce carbon dioxide and/or carbon monoxide.			

ACCIDENTAL RELEASE MEASURES

Section 6	Evacuation:	No special procedures are usually necessary.
	Containment:	Safely stop discharge. Contain material, as necessary, with dike or barrier. Stop from contaminating soil or from entering sewers or bodies of water.
	Collection And Disposal:	Stop discharge, if safe to do so. Use proper protective equipment. Cover spills with absorbent clay, sawdust to inert material and place in closed chemical waste container. Dispose according to applicable local, state and federal regulations.

HANDLING AND STORAGE

Section 7	Storage Conditions :	This product is a combustible liquid. Store in cool, dry, well-ventilated area at room temperature. Keep away from any possible source of ignition. Store away from oxidizing materials.
	Transfer:	No special precautions are needed. Follow good manufacturing and handling practices.
	Personal Hygiene:	Wash thoroughly with water after handling, especially before eating and drinking. Contaminated clothing should be removed and washed before re-use.
	Empty Container Precautions:	Do not re-use empty container for food, clothing or products of human or animal consumption or where skin contact can occur.

12/3/2005

Section 8	EXPOSURE CONTROLS AND PERSONAL PROTECTION	
	Exposure Guidelines:	
	ACGIH - TLV:	Provide suitable personal protective equipment and/or ventilation to maintain below TLV levels.
	Engineering Controls/Ventilation:	Local exhaust ventilation is recommended when vapors mist, or dusts can be
	Eye Protection:	Safety glasses/ goggles
Section 9	PHYSICAL AND CHEMICAL PROPERTIES	
	Appearance & Odour:	Red Clear Liquid with Pleasant Odour
	Solubility in water:	Complete
	Boiling Point:	100 ° C
	Specific Gravity:	1.070 +/-
	PH:	13.2 +/- 0
	Vapour Pressure:	Not Deter
	Vapour Density:	Not Deter
Section	STABILITY AND REACTIVITY	
	Chemical Stability:	Stable under normal conditions of use.
	Hazardous Polymerization:	Will not occur.
	Conditions to Avoid:	Not applicable.
	Incompatibility With Other Materials: cid, Soaps, Anionic Surfactants, Strong Oxidizing Materials.	
Section 11	TOXICITY INFORMATION	
	Components:	This product contains Sodium Hydroxide solution that may cause irritation to skin. Ingestion of high amount of product may be fatal.
Section 12	ECOLOGICAL INFORMATION	
	Environmental Fate and Distribution:	It is soluble in water and does not bio-accumulate.
	Persistence and Degradation:	Product degrades readily by action of carbon dioxide in the air as well as deco microorganism.
	Toxicity:	Concentrations with a pH value of 10.5 or greater especially in fresh water ma fish and other aquatic organism. Can cause damage to aquatic plants and vege
Section 13	DISPOSAL CONSIDERATIONS	
	Disposal:	Dispose off in an approved waste facility according to local regulations.
	General Recommendations:	Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following preference, based upon environmental acceptability: (1) Re-cycle or rework, if feasible (2) Incinerate at an authorized facil an acceptable waste treatment facility.
Section	TRANSPORT INFORMATION	
	This material is non-regulated and no special requirement is necessary.	
Section	REGULATORY INFORMATION	
	Classification:	This product contains Sodium Hydroxide as an ingredient that is classified as under EC Classification.
	Ozone Depleting Chemicals:	No regulated ingredients.
Section	OTHER INFORMATION	
	Hazard Rating : HMIS HEALTH : 2	FLAMMABILITY : 0 REACTIVITY : 0

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