SAFETY DATA SHEET



T&G RESTORE

APPLIED PRODUCTS AUSTRALIA PTYLTD

Catalogue number: AP160 Version No: 2.2 Issue date: 16/06/2021 Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	T&G RESTORE
Product code	AP160
Pack sizes	5L & 15L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Advanced tile and grout restoration compound

Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5	
GHS Classification	Skin Corrosion/Irritation Category 2, Acute Toxicity (Dermal) Category 4, Serious Eye Damage Category 1, Acute Toxicity (Inhalation) Category 4, Acute Toxicity (Oral) Category 4, Skin Sensitizer Category 1	
	Classification drawn from HCIS and ECHA C&L Inventory.	

Label elements

Hazard pictograms	
SIGNAL WORD	DANGER

Hazard statement(s)

H318	Causes serious eye damage.
H315	Causes skin irritation.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H332	Harmful if inhaled
H317	May cause an allergic skin reaction.

Precautionary statement(s) Prevention

P261	Avoid breathing mist / vapours / spray.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P264	Wash contaminated skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace

Precautionary statement(s) Response

	-	
P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.	
P303+P310+P361+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P304+P312+P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P363	Wash contaminated clothing before reuse.	
Precautionary statement(s)	Storage	
P405	Store locked up	
Precautionary statement(s)	Disposal	
P501	Dispose of content / container in accordance with local regulations	

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
506-89-8	>60	urea hydrochloride
111-76-2	10-<30	ethylene glycol monobutyl ether
Trade secret	<10	emulsifier 1
Trade secret	<10	emulsifier 2

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Seek medical advice / attention without delay. Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If necessary, transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Seek medical advice / attention without delay. Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. If necessary, transport to hospital, or doctor.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Seek medical advice / attention without delay. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. If necessary, transport to hospital, or doctor, without delay.
Ingestion	For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably d r i n k. Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

INGESTION:

- Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
- Charcoal has no place in acid management.
- ▶ Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN:

Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.

Deep second-degree burns may benefit from topical silver sulfadiazine.

EYE:

- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required.
- Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	There is no restriction on the type of media that may be used. Use media suitable for the surrounding environment

Special hazards arising from the substrate or mixture

Fire incompatibilities	es Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleach, pool chlorine etc. as ignition may result		
Advice for firefighters			
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.		
Fire/Explosion Hazard	Combustion may release toxic fumes of carbon dioxide (CO2), hydrogen chloride, phosgene, nitrogen oxides (NOx), and other pyrolysis products typical of burning organic material may emit corrosive fumes.		
HAZCHEM	Not applicable		

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Clean up all spills immediately. Avoid breathing vapours/ aerosols/ or dusts and avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Place in a suitable, labelled container for waste disposal.
Major Spills	Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively h a n d l e.
	Personal protective equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	DO NOT allow clothing wet with material to stay in contact with skin Avoid all personal contact. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
Other information	

Conditions for safe storage, including any incompatibilities

	Polyliner drum.
	Packing as recommended by manufacturer.
Suitable containers	Check all containers are clearly labelled and free from leaks.
	DO NOT use aluminium or galvanised containers
	Plastic pail.
	Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.
Storage incompatibility	Avoid strong bases.
	Avoid reaction with oxidising agents.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA		STEL		Peak		Notes
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m3	3 / 20 ppm	242 mg/m3 / 50 pp	m	Not Availa	ble	Sk
EMERGENCY LIMITS									
Ingredient	Material name				TEEL-1	TEEL-	2	TEEL	•3
ethylene glycol monobutyl ether	Butoxyethanol, 2-; (Glycol ether EB)			20 ppm	20 ppm	ı	700 pp	m	
Ingredient	Original IDLH Revised IDI			Revised IDLH	LH				
urea hydrochloride	Not Available Not Availa			Not Available	e				
ethylene glycol monobutyl ether	700 ppm 700 [Unch] ppm Not Available Not Available			700 [Unch] ppm					
emulsifier 1				3					
emulsifier 2	Not Available Not Available								

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.			
Personal protection				
Eye and face protection	Eye and face protection Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye removed in a clean environment only after workers have washed hands thoroughly.			
Skin protection	See Hand protection below			
Hands/feet protection	Elbow length chemical gloves. Butyl, PE/EVAL/PE or Saranex 23 are recommended for this application.			
Body protection	Overalls When handling corrosive liquids it is good practice to wear overall legs outside of boots to prevent liquids entering b o ot s.			
Other protection	P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.			
Thermal hazards	Not Available			

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear green liquid		
Physical state	Liquid	Relative density (Water = 1)	1.2
Odour	Not Available	Molecular weight (g/mol)	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Applicable
pH (as supplied)	<1	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Initial boiling point and boiling range °C)	Not Available	Partition coefficient n- octanol /water	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Viscosity (cSt)	Not Available
Lower Explosive Limit(%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7	
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.	
Possibility of hazardous reactions	See section 7	
Conditions to avoid	See section 7	
Incompatible materials	See section 7	
Hazardous decomposition products	See section 5	

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Ingestion	Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident. Severe acute exposure to ethylene glycol monobutyl ether, by ingestion, may cause kidney damage, haemoglobinuria, (blood in urine) and is potentially fatal.
Skin Contact	The material can produce chemical burns following direct contact with the skin. Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Ethylene glycol monobutyl ether penetrates the skin easily and will cause more harm on skin contact than through inhalation. This material can cause inflammation of the skin on contact in some persons.
Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. If applied to the eyes, this material causes severe eye damage.
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Toxicological effects of ingredients

	Urea hydrochloride	No available data
Acute toxicity	Ethylene glycol monobutyl ether	Oral LD50 (guinea pig) 1414 mg/kg - Inhaled LC0 (guinea pig) >3.1 mg/l >641ppm 1hr - Dermal LD50 (guinea pig) >2000 mg/kg
	Emulsifier 1	Oral Estimate (calculated) 555.56 mg/kg Dermal LD50 (rabbit) >2000 mg/kg
	Emulsifier 2	Oral LD50 (rat) 2546 mg/kg Dermal LD50 (rat) 1844 mg/kg
	Urea hydrochloride	Causes skin irritation
Skin corrosion/irritation	Ethylene glycol monobutyl ether	Causes skin irritation
Skin corrosion/irritation	Emulsifier 1	May be irritating
	Emulsifier 2	There is no data available
	Urea hydrochloride	Causes severe eye damage
For damage (indication	Ethylene glycol monobutyl ether	Causes serious eye irritation
Eye damage/irritation	Emulsifier 1	Causes severe eye damage
	Emulsifier 2	Causes serious eye irritation
	Urea hydrochloride	No available data
Respiratory/skin	Ethylene glycol monobutyl ether	Not classified
sensitization	Emulsifier 1	Not expected to be a respiratory sensitizer
	Emulsifier 2	Not a skin sensitizer based on components
	Urea hydrochloride	No available data
	Ethylene glycol monobutyl ether	Not classified
Germ cell mutagenicity	Emulsifier 1	Not considered to be a mutagenic hazard
	Emulsifier 2	No known significant effects or critical hazards
	Urea hydrochloride	No available data
	Ethylene glycol monobutyl ether	Not classified
Carcinogenicity	Emulsifier 1	Not considered to be a carcinogenic hazard
	Emulsifier 2	No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP above the threshold of 0.1%
	Urea hydrochloride	No available data
Dense destine testation	Ethylene glycol monobutyl ether	Not classified
Reproductive toxicity	Emulsifier 1	Not considered to be toxic to reproduction
	Emulsifier 2	No known significant effects or critical hazards
	Urea hydrochloride	No available data
	Ethylene glycol monobutyl ether	High concentrations may cause central nervous system depression.
STOT (single exposure)	Emulsifier 1	Not expected to cause toxicity to a specific target organ
	Emulsifier 2	There is no data available
	Urea hydrochloride	No available data
TOT (Ethylene glycol monobutyl ether	Based on repeated exposure toxicity values, not classified
STOT (repeated exposure)	Emulsifier 1	Not expected to cause toxicity to a specific target organ
	Emulsifier 2	There is no data available
	Urea hydrochloride	No available data
Appiration toyinthe	Ethylene glycol monobutyl ether	Based on physico-chemical values or lack of human evidence, not classified.
Aspiration toxicity	Emulsifier 1	Not expected to be an aspiration hazard
	Emulsifier 2	There is no data available

SECTION 12 ECOLOGICAL INFORMATION

Foxicity					
	Endpoint	Duration (Hr.)	Species	Value	
urea hydrochloride	Not Available	Not Available	Not Available	Not Available	
ethylene glycol monobutyl ether	LC50	96	Fish	2-180mg/L	
	EC50	48	Crustacea	409mg/L	
	EC50	96	Algae or other aquatic plants	3mg/L	
	EC0	24	Crustacea	=39.6mg/L	
	NOEC	504	Crustacea	0.1mg/L	
emulsifier 1	Not Available	Not Available	Not Available	Not Available	
emulsifier 2	Not Available	Not Available	Not Available	Not Available	
	•			· · · · · · · · · · · · · · · · · · ·	

Extracted from Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity

Ecotoxicity:

Harmful to aquatic organisms.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)

Bio accumulative potential

Ingredient	Bioaccumulation
ethylene glycol monobutyl ether	LOW (BCF = 2.51)

Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods Product / packaging disposal Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations

SECTION 14 TRANSPORT INFORMATION

Labels Required		
Marine Pollutant	NO	
HAZCHEM	Not Applicable	

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

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

UREA HYDROCHLORIDE (506-89-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

ETHYLENE GLYCOL MONOBUTYL ETHER (111-76-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6 Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARCMonographs

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	16/06/2021			
Initial Date	18/11/2016			
SDS Version Summary				
Version	Issue Date	Sections Updated		
2.1	05/11/2020	Sections 2,3,5,11,12,15,16 have been updated or corrected		

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

Section 9

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

2.2

16/06/2021

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from Applied Products Australia Pty Ltd.

End of SDS