

Section 1 - Identification of Chemical Product and Company

TQ Products Pty Ltd 15 Weedon Road Forrestdale WA 6112 ACN 149-668-342	24hr Emergency Phone: 13 1126 Australia Emergency Services: 000 Phone: business hours 1 300 075 678
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Substance:

Trade Name: Poly Grip Vertical Adhesive
Product Use: Industrial use only
Creation Date: July 2021
Revision Date: July 2021 and valid for five years

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: HAZARDOUS CHEMICAL; DANGEROUS GOOD according to the WHS Regulations and ADG Code.

Poison Schedule Not applicable

Signal Word: DANGER

Hazard Classification:

Flammable Liquid	Category 3
Acute Oral Toxicity	Category 4
Skin Effects	Category 2
Eye Effects	Category 2
Reproductive Toxicity	Category 2
STOT – RE	Category 1
STOT – SE	Category 1
STOT – SE RTI	Category 3
Chronic Aquatic Hazard	Category 3


Hazard Statements:

H226	Flammable liquid & vapour
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes severe eye irritation
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

Precautionary Statement: Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment
P241	Use explosion proof electrical/ ventilating/ lighting/ intrinsically safe equipment
P242	Use non sparking tools
P243	Take action to prevent static discharge
P233	Keep container tightly closed

P260	Do not breathe mist/ vapour/ spray
P271	Use only in a well ventilated are
P280	Wear protective gloves/ protective clothing/ eye protection and face protection
P264	Wash all exposed external body parts thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment

Precautionary Statement: Response

P301+P3330+P331	IF SWALLOWED: Rinse mouth, Do NOT induce vomiting
P302+P361+P3523	IF ON SKIN: Take off immediately all contaminated clothing. Wash with plenty of soap and water
P333+P313	IF skin irritation or rash occurs: Get medical advice
P362+P364	Take off contaminated clothing and wash before reuse
P035+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313	If eye irritation persists: Get medical advice/ attention
P304+P340	IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P310	Immediately call a POISON CENTRE/ Doctor/ physician/ first aider
P370+P378	In case of fire use alcohol resistant foam or normal protein foam to extinguish

Precautionary Statement: Storage

P405	Store locked up
P402+P235	Store in a well-ventilated place. Keep cool

Precautionary Statement: Disposal

P501	Dispose of contents/ container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal
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Section 3 - Composition/Information on Ingredients

Substances	CAS No	Conc.%
Styrene	100-42-5	12.5 – 25 %
Calcium carbonate	1317-65-3	12.5 – 25 %
Titanium dioxide	13463-67-7	< 10 %
Ethanol	64-17-5	< 1 %
1,1'-(p-tolylimino)dipropan-2-ol	38668-48-3	< 1 %

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other nonhazardous ingredients are also possible.

Mixtures

See above for composition of substance

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 131126 from anywhere in Australia and is available at all times. Have this SDS or product label with you when you call.



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Eye Contact:

Wash out immediately with fresh 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel

Skin Contact:

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhalation:

Remove from contaminated area. Other measures are usually unnecessary.

Ingestion:

Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Note to Physician:

Treat symptomatically.

As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination).

Section 5 - Fire Fighting Measures

Extinguishing Media:

Consider: foam. dry chemical powder. carbon dioxide.

Fire Incompatibility:

Avoid contamination with oxidising agents i.e., nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Fire Fighting:

Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. 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.

Fire and Explosion Hazards:

Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

Fire Decomposition:

Carbon dioxide (CO₂) Carbon dioxide (CO₂), Nitrogen oxides (NO_x) and other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.

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Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Refer Section 8

Environmental precautions

Refer Section 12

Minor Spills:

Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.

Major Spills:

Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse /absorb vapour. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Section 7 - Handling and Storage

Handling:

Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Contains low boiling substance: Storage in sealed containers may result in pressure build-up causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapours Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid generation of static electricity. DO NOT use plastic buckets. Earth all lines and equipment. Use spark-free tools when handling. 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. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. DO NOT allow clothing wet with material to stay in contact with skin

Storage:

Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access. Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances. Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems. Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors. Keep adsorbents for leaks and spills readily available. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Suitable container

Metal can or drum; Packaging as recommended by the manufacturer; Check all containers are clearly labelled and free from leaks

Section 8 - Exposure Controls and Personal Protection

Exposure limits	Australia	
	TWA (mg/m ³)	STEL (mg/m ³)
Styrene	213	420
Limestone	10	
Titanium dioxide	10	
Ethanol	1880	

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Engineering Controls:

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Eye Protection:



Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Skin Protection:



Wear chemical protective gloves, e.g. PE/EVAL/PE or PVA. Wear safety footwear or safety gumboots, e.g. Rubber

When handling hazardous substances, wear trousers or overalls outside of boots, to avoid spills entering boots. Overalls. P.V.C. apron.

Respirator:



Not normally required. If WES is likely to be exceeded, then a Type A filter of sufficient capacity is recommended

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Coloured paste
Odour:	Characteristic
Odour threshold:	no data
pH:	no data
Melting Point:	no data
Boiling Point:	145.2 °C
Flash point:	31 °C

Flammability:	no data
Evaporation Rate:	> 1 butyl acetate = 1
Lower Explosion Limit:	1.2 %
Upper Explosion Limit:	8.9 %
Vapour Pressure:	0.6 kPa
Relative Vapour Density:	> 1
Specific Gravity:	1.77-1.81 g/cm ³
Water Solubility:	immiscible
Coeff Octanol/water distribution	no data
Auto ignition temp:	480 °C
Decomposition temp:	material is stable under normal conditions
SADT:	no data available
Dynamic viscosity:	no data
Kinematic viscosity:	no data
Volatiles:	no data

Section 10 - Stability and Reactivity

Reactivity:

Product is considered stable under normal conditions

Chemical stability:

Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.

Conditions to Avoid:

Refer Section 7

Incompatibilities:

Refer Section 7

Polymerisation:

This product will not undergo polymerisation reactions.

Hazardous Decomposition Products

Refer Section 5

Section 11 - Toxicological Information

Inhaled:

The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Central nervous system (CNS) depression is seen at styrene exposures exceeding 50 ppm, whilst headache, fatigue, nausea and dizziness are seen consistently at exposures of 100 ppm. Evidence exists that at 100 ppm, 5-10% reductions in sensory nerve conductions occur, and after exposure to 50 ppm, there is slowing of reaction times. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest. Heart stoppage may result from cardiovascular collapse. A slow heart rate and low blood pressure may also occur. Alkylbenzenes are not generally toxic except at high levels of exposure. Their breakdown products have low toxicity and are easily eliminated from the body.

If exposure to highly concentrated vapour atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and unless resuscitated - death.

Ingestion:

Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. Styrene is absorbed into the body following oral or inhalation exposure. Its metabolites include styrene oxide, styrene glycol, mandelic acid, benzoic acid, hippuric acid, phenyl glyoxylic acid and possibly vinyl phenol. It is detectable in liver, kidney, pancreas, expired air, urine and faeces in the body. Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Skin Contact:

The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. 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. Styrene has been showed to be absorbed less through the skin than via the airways. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

Eye Contact:

The vapour when concentrated has pronounced eye irritation effects and this gives some warning of high vapour concentrations. If eye irritation occurs seek to reduce exposure with available control measures or evacuate area. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.

Chronic Health Effects:

Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Exposure to styrene may aggravate central nervous system disorders, chronic respiratory disease, skin disease, kidney disease and liver disease. Exposure to styrene at work causes effects on the nervous system. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.

Toxicity refer ingredients

	Oral	Dermal	Inhalation
Product			LC ₅₀ 39 mg/L 4h
Styrene	LD ₅₀ 316 mg/Kg	LD ₅₀ >2,000 mg/Kg	LC ₅₀ 6.8 mg/L 4h
Limestone	LD ₅₀ 6450 mg/Kg		
Titanium dioxide	LD ₅₀ >2000 mg/Kg	LD ₅₀ >10000 mg/Kg	LC ₅₀ >2.28 mg/L 4h
Ethanol	LD ₅₀ >7692 mg/Kg	LD ₅₀ 17100 mg/Kg	LC ₅₀ 39 mg/L 4h
1,1'-(p-tolylimino)dipropan-2-ol	LD ₅₀ 4100 mg/Kg	LD ₅₀ >18000 mg/Kg	LC ₅₀ >18 mg/L 4h

Section 12 - Ecological Information

Toxicity refer ingredients

	Fish	Crustacea	Algae
Product			
Styrene	LC _{50 96hr} 4.02 mg/L	EC _{50 48hr} 4.7 mg/L	EC _{50 24hr} 1.4 mg/L EC _{50 96hr} 0.72 mg/L NOEC _{96hr} 0.063 mg/L
Limestone	LC _{50 96hr} >165200 mg/L		EC _{50 72hr} >14 mg/L

	NOEC _{6h} 4-320 mg/L		
Titanium dioxide	LC _{50 96hr} 1.85-3.06 mg/L	EC _{50 48hr} 1,9 mg/L NOEC _{504hr} 0.02 mg/L	EC _{50 72hr} 3.75-7.58 mg/L EC _{50 96hr} 179.05 mg/L
Ethanol	LC _{50 96hr} >100 mg/L	EC _{50 48hr} >79mg/L	EC _{50 72hr} 275 mg/L EC _{50 96hr} <0.001 mg/L
1,1'-(p-tolylimino)dipropan-2-ol	LC _{50 96hr} 17 mg/L	EC _{50 48hr} 28.8 mg/L	EC _{50 72hr} 245 mg/L

Harmful to aquatic life. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. DO NOT discharge into sewer or waterways.

	Persistence Water/Soil	Persistence Air	Bioaccumulation	Mobility
Styrene	HIGH	LOW	LOW	LOW
Titanium dioxide	HIGH	HIGH	LOW	LOW
Ethanol	LOW	LOW	LOW	HIGH
1,1'-(p-tolylimino)dipropan-2-ol	HIGH	HIGH	LOW	LOW

Section 13 - Disposal Considerations

Disposal:

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Recycling Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf-life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. **DO NOT allow wash water from cleaning or process equipment to enter drains.**

It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

Dispose of by burial in a landfill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 - Transport Information

Labels Required



MARINE POLLUTANT NO
HAZCHEM 2YE

Land Transport ADG

UN Number **3269**
UN Proper Shipping Name **POLYESTER RESIN KIT, liquid base material**
Class **3**
Subrisk not applicable
Packing Group **III**
Environmental Hazard not applicable

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Special Provisions **226 340**
 Limited Quantity **5L**

Air Transport ICAO-IATA/ DGR

UN Number **3269**
 UN Proper Shipping Name **POLYESTER RESIN KIT, liquid base material**
 ICAO/ IATA Class **3**
 ICAO/ IATA Subrisk not applicable
 ERG Code **3L**
 Packing Group **III**
 Environmental Hazard not applicable
 Special Provisions **A66 A163**
 Cargo Only Packing Instructions **370**
 Cargo only Max Qty/ Pack **10 Kg**
 Passenger/ Cargo Packing Instruction **370**
 Passenger/ Cargo Max Qty/ Pack **10 Kg**
 Passenger/ Cargo LQ Packing Instruction **Y370**
 Passenger/ Cargo LQ Qty/ Pack **1 Kg**

Marine Transport IMDG Code /GGVSee

UN Number **3269**
 UN Proper Shipping Name **POLYESTER RESIN KIT, liquid base material**
 IMDG Class **3**
 IMDG Subrisk not applicable
 Packing Group **III**
 Environmental Hazard not applicable
 EMS Number **F-E S-D**
 Special Provisions **236 340**
 Limited Quantities **5 L**

Section 15 - Regulatory Information

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

Montreal Protocol Not applicable
 Stockholm Convention Not applicable
 Rotterdam Convention Not applicable
 Kyoto Protocol Not applicable

Inventory Status

Australia	AICS	Yes
Canada	DSL	Yes
	NDSL	No
China	IECS	Yes
EU	EINECS	Yes
Japan	ENCS	Yes
Korea	KECI	Yes
New Zealand	NZIOC	Yes
Philippines	PICCS	Yes
Taiwan	CSNN	Yes
US	TSCA	Yes
Taiwan	TCSI	Yes
Mexico	INSQ	No
Vietnam	NCI	Yes
Russia	FBEPH	No



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Section 16 - Other Information

Revision History

July 2021 origination

This SDS contains only safety-related information. For other data see product literature.

Please read all labels carefully before using product.

Acronyms:

CAS number

Chemical Abstracts Service Registry Number

Hazchem Code

Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters.

IARC

International Agency for Research on Cancer

NOS

Not otherwise specified.

UN Number

United Nations Number

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material in combination with any other material or in any process, unless specified in the text.

This SDS was prepared by Collievale Enterprises Ltd
<http://www.collievale.com> Phone +64 7 5432428

End of SDS