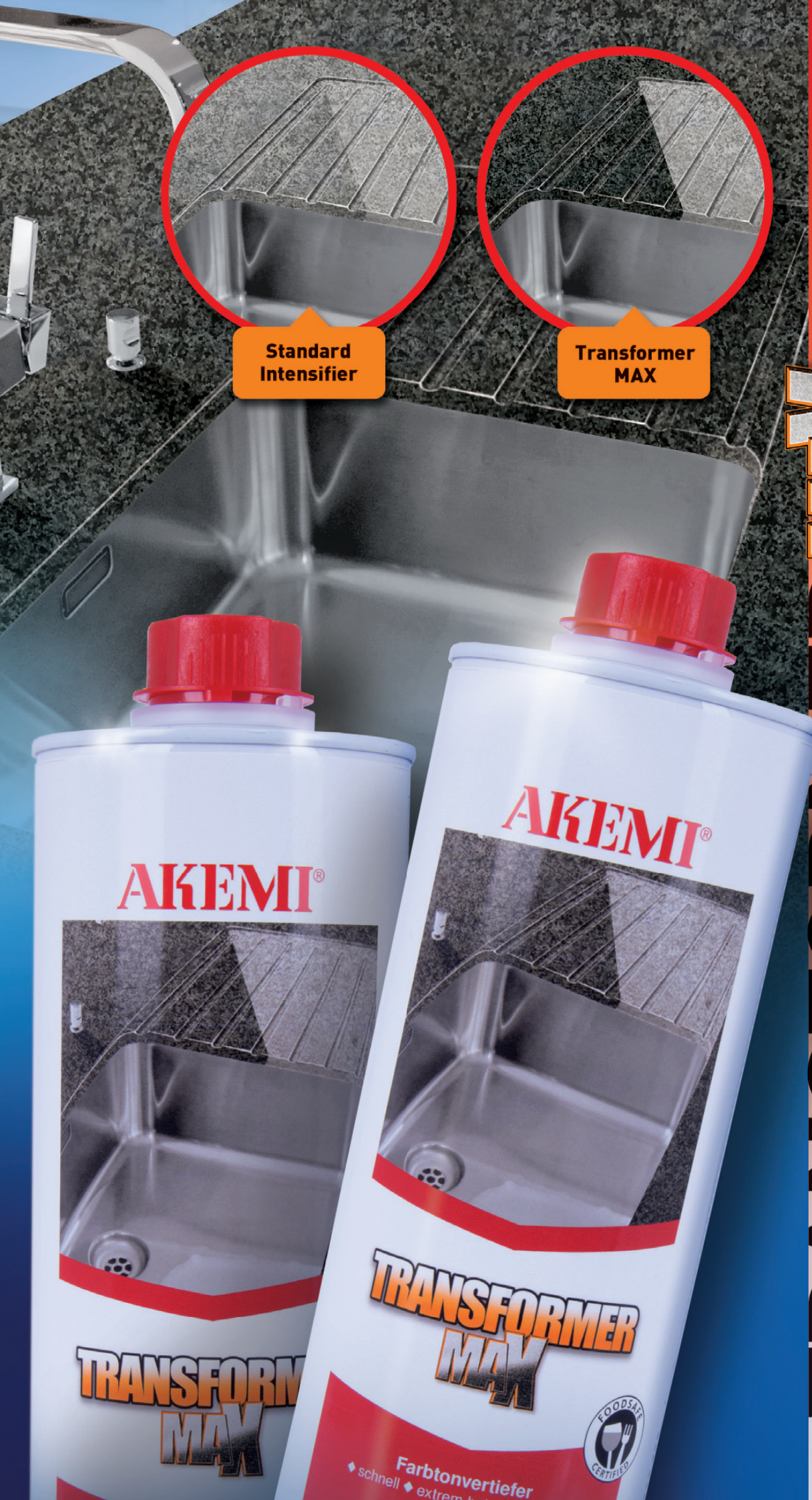

AKEMI®

FOODSAFE CERTIFIED

TRANSFORMER MAX

GB USA E I

AKEMI®

TRANSFORMER MAX

Ultra fast colour intensification on natural stone and quartz
Intensificación de color muy rápida sobre piedra natural y cuarzo compuesto
Ravvivatore di colore super-rapido su pietra naturale

Field of Application:
- for a fast, intensive colour intensification and refreshment
- especially suited to adjust the colour of treated (light) edges and dripping surfaces to that of glazed (dark) surfaces of countertops
- for natural stone, terrazzo, concrete ashlar and quartz
- for brushed, glazed, fine ground and polished stone surfaces

Characteristics:
- higher spreading rate than other colour intensifiers: 30 - 50 m²/l on polished surfaces
- very strong and durable colour deepening effect
- foodsafe (certified by an external German testing institute)

Attention:
It is generally recommended to prepare a sample area! Observation of Technical Instruction Sheet is mandatory (www.akemi.com).

Size	Unit	Art.-Nr.
250 ml	20	1 20 42
1000 ml	6	1 20 43
5000 ml	2	1 20 44

Campo de aplicación:
- para una intensificación rápidamente de color rapida y profunda
- especialmente apto para adaptar el color de los bordes (claros) trabajados y las superficies para escurrir resinadas (oscuras) en las mesas de trabajo
- para piedra natural, terrazo, bloques de hormigón y cuarzo compuesto
- para superficies cepilladas, satinadas, finamente rectificadas y pulidas

Propriétés:
- rendimiento más alto que los otros intensificadores de color: 30 - 50 m²/l sobre superficies pulidas
- efecto de intensificación muy fuerte y duradero
- seguro para el uso con alimentos (confirmado por un instituto externo alemán de verificación)

Atención:
Preparare por principio una superficie de prueba! Es obligatorio prestar atención a la ficha técnica (www.akemi.com).

Envase	Unidad de venta	No. d. réf.
250 ml	20	1 20 42
1000 ml	6	1 20 43
5000 ml	2	1 20 44

Campo di applicazione:
- per ravvivare intenso e rinnovare il colore velocemente
- particolarmente indicato per armonizzare il colore di bordi lavorati (chiari) e gocciolatoi su superfici resinate (scure) di piani di lavoro.
- per pietra naturale, Terrazzo, conci in calcestruzzo ed composto al quarzo
- per superfici in pietra spazzolate, satinate, levigate e lucidate

Caratteristiche:
- resa elevata rispetto ad altri ravvivatori di colore: 30 - 50 m²/l per superfici lucidate
- effetto scurente molto intenso, duraturo
- compatibilità con gli alimenti (confermato da ente esaminatore tedesco esterno)

Attenzione:
Preparare sempre una superficie come campione! Osservare sempre le avvertenze contenute nella scheda tecnica (www.akemi.com).

Confezione	Unità di spedizione	Art. Nr.
250 ml	20	1 20 42
1000 ml	6	1 20 43
5000 ml	2	1 20 44

Properties Perfil de cualidades Profilo caratteristiche	TRANSFORMER MAX	Darkener SUPER Intensificador de color SUPER Ravvivatorea di colore SUPER	Colour Intensifier Intensificador de color Ravvivatore di colore
On polished, satin, fine ground surfaces Sobre superficies pulidas, satinadas, finamente rectificadas Su superfici levigate, satinate e finemente levigate	■	■	□
On rough, coarsely ground surfaces Sobre fondos rugosos, gruesamente rectificados Su superfici rugose, levigate grossolanamente	■	□	■
Time of application which is necessary to achieve an intensive colour intensification* / Tiempo necesario de aplicación para alcanzar una intensificación de color intensa* / Tempo di applicazione necessario a ottenere un'intensificazione marcata del colore*	1 - 5 min	30 - 60 min	ca. 15 min
For small areas Para superficies pequeñas Per superfici di piccole dimensioni	■	□	□
For large areas Para superficies grandes Per superfici di grandi dimensioni	★	■	■
Spreading rate per liter * Rendimiento por litro * Resa al litro *	30 - 50 m² **	20 - 40 m² **	10 - 20 m²
Weather resistance Resistencia a la intemperie Resistenza alle intemperie	✓	✓	✓
Odor during processing Olor durante el tratamiento Odore durante il trattamento	○	●	●
breathability transpirabilidad traspirabilità	✓	✓	✓
Application on humid surfaces Aplicación sobre fondos húmedos Applicazione su superfici umide	★	★	★
Foodssafe Seguro para el uso con alimentos Compatibilità con gli alimenti	✓	✓	✓

*) depending on the absorptivity of the stone
depende de la capacidad de absorción de la piedra
in funzione del potere assorbente della pietra

**) polished surface
Superficie pulida
Superficie lucidata

■ very good / muy bueno / molto buono
□ good / bien / buono
○ low / poco / basso
● very low / muy poco / molto basso
★ none / ninguno / nessuno

Advantages are accentuated in grey colour. / Las ventajas de los productos están realzadas con el color gris. / I vantaggi dei prodotti sono evidenziati in grigio.

Notice: The above information is based on the latest stage of our development and application technology. Due to a multiplicity of different influencing factors, this information – as well as other oral or written technical advises – must be considered as non-binding hints. The user is obliged in each particular case to conduct performance tests, including but not limited to trails of the product, in an inconspicuous area or fabrication of a sample piece. Observation of Technical Data Instruction is mandatory (www.akemi.com).

Atención: Las indicaciones de arriba contienen el nivel actual de desarrollo y de la tecnología de aplicación de nuestra empresa. Debido a la multitud de diferentes factores de influencia, esta información – así como otras indicaciones técnicas en forma verbal o por escrito – deben sólo considerarse como datos orientativos. El usuario está obligado en cada caso particular a efectuar propias pruebas y exámenes; A esto cuenta especialmente probar el producto en un lugar poco visible o hacer una muestra. Es obligatorio prestar atención a nuestra ficha técnica (www.akemi.com).

N.B.: I dati che precedono sono stati redatti in base allo stato più recente dello sviluppo e della tecnica di applicazione della nostra ditta. A causa della molteplicità di diversi fattori d'influenza, questi dati, come pure altre avvertenze tecniche verbali o scritte inerenti l'applicazione, possono avere unicamente carattere indicativo. L'utilizzatore è tenuto nel caso specifico ad eseguire dei test e prove; compreso il provare il prodotto su un punto non visibile o eseguire un campione. E' strettamente necessario attenersi alla nostra scheda tecnica (www.akemi.com).

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AKEMI® The original in stone!

D-00154-360 XII/19

Technical Data Sheet

Properties:

AKEMI® Transformer MAX is a ready to use, solvent-based, special impregnation based on reactive modified siloxanes. It is absorbed by the pores through the capillary forces of the stone. A polysiloxane results from the catalytic reaction. In addition, a reaction with the siliceous substance of the stone takes place. The product is distinguished by the following qualities:

- intensifies the natural colour and structure of flamed, brushed, satin, fine ground and polished stones
- very fast evaporation of solvents
- very fast entry of colour intensification
- very high spreading rate
- maintains the lustre of the polish
- does not form a layer on the surface of the stone
- allows the stone to breathe
- excellent weather resistance and durability
- non-yellowing
- after being hardened the product is harmless to health upon contact with food products – certified by an external German testing institute
- low odour
- for indoor and outdoor use
- water- and dirt-resistant effect

Application Area:

For the treatment of polished, honed, satin, fine ground and flamed and brushed surfaces of natural stone and artificial stone, e.g. marble, slate, Solnhofer lime stone, sandstone, granite, gneis, concrete ashlar or quartz. The product is especially suited for dark and black stones (e.g. Nero Assoluto, Impala black, Galaxy and Zimbabwe black). Damaged areas (e.g. hairline cracks) can be treated with AKEMI® Transformer MAX. The surface thus obtains a homogeneous appearance. There is a very good durability of colour enhancement on silicate based stones and a good durability of colour enhancement on lime based stones.

Instructions for Use:

Disregarding the processing guidelines can lead to irreparable damage!

1. Cleaning:
   The surface must be clean completely dry and free from all layers. Depending on the type of stone and the degree of soiling, the following AKEMI® products are recommended: Stone Cleaner, Concrete Film Remover, Rust Remover, Wax Stripper, Algae and Moss Remover, Wax Stripper, Oil and Grease Remover Paste, Graffiti-Remover. Please pay attention to the respective technical data sheets. Rinse all surfaces well with water after cleaning. The stone must be completely dry (1-2 days) before treating with Transformer MAX. Optimal object temperature is 15-25°C (59-77°F). Ensure protection from rain for approx. 24 hrs. The surface must not be warmed up either by an underfloor heating or solar radiation.
2. Apply undiluted with a brush, mop or spraying device. Apply a thin, smooth layer, allowing sufficient time for the product to be absorbed by the stone.
3. Approx. 5-10 minutes after application, remove the excess totally with a soft and absorbent cloth. To increase the colour intensification on low absorbent stones, the product may be allowed to react for up to 60 minutes.
4. On very absorbent surfaces, several applications may be necessary in an interval of 1 to 2 hours.

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Technical Data Sheet

5. Tools can be cleaned with AKEMI® Nitro Dilution.
6. For regular cleaning, use AKEMI® Mild Stone Soap or Crystal Clean.

Special Notes:

- Special protective measure in case of spray application: avoid formation of aerosols and risk to third parties. Do not breathe vapours (protective mask).
- Ensure sealing of the reverse side and lateral surfaces of the stone, so that rising moisture cannot penetrate into the stone. In this context we recommend the use of AKEMI® Anti-Stain Coating 2015 to seal the reverse side and the lateral surfaces.
- Not suitable for glazed or non-absorbent surfaces.
- Treatment of smaller surfaces (< 0.5 m²) is recommended due to the short evaporation time of the solvent.
- Polished surfaces must be re-polished until the haze on the surface is completely removed.
- The degree of colour enhancement depends on the kind of stone. The deepening result on dark stones is more intensive then on light stones.
- Testing on a sample area is recommended.
- Product which has been inaccurately applied can possibly be removed with AKEMI® Impregnation Remover.
- Protect all surrounding areas sensitive to solvents (e.g. various synthetic materials, rubber, lacquered parts).
- For adequate waste disposal container must be completely emptied.
- On some natural stones like e.g. Nero Assoluto or Nero Impala the stone-imminent structures may be stronger intensified than the residual stone surface if treated with AKEMI® Transformer MAX. This might be seen as staining, however, the colour intensification is not a product defect but is attributed to the characteristics of the stone.

Technical Data:

Coverage:	approx. 30 – 50 m²/liter on polished surfaces
Colour:	slightly turbid
Density:	0.96 g/cm³

Storage:

2 years if stored in cool place free from frost in its tightly closed original container.

Health & Safety:

Read Safety Data Sheet before handling or using this product.

Important Notice:

The above information is based on the latest stage of development and application technology. Due to a multiplicity of different influencing factors, this information – as well as other oral or written technical advises – must be considered as non-binding hints. The user is obliged in each particular case to conduct performance tests, including but not limited to trails of the product, in an inconspicuous area or fabrication of a sample piece.

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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**

Substance:

Trade Name: **Transformer MAX**
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
Skin Effects	Category 2
Eye Effects	Category 2
Reproductive Toxicity	Category 2
STOT – RE	Category 1
STOT – SE NE	Category 3
Aspiration	Category 1
Chronic Aquatic Hazard	Category 3

Hazard Statements:

H226	Flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H336	May cause drowsiness or dizziness
H304	May be fatal if swallowed and enters airways
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 discharges
P260	Do not breathe mist/ vapours/ sprays
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/ protective clothing/ eye protection and face protection
P264	Wash all exposed external body parts thoroughly after handling
P273	Avoid release to the environment

Precautionary Statement: Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE/ doctor/ physician/ first aider
P331	Do NOT induce vomiting
P302+P361+P352	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
P305+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

P403+P235	Store in a well-ventilated place. Keep cool
P405	Store locked up

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

Section 3 - Composition/Information on Ingredients

Substances	**CAS No**	**Conc.%**
Hydrocabons C_{9-10} n-alkanes, isoalkanes, cycloalkanes, <2% aromatics	EC 927-241-2	25 – 50
Tetra-n-butoxytitanium	5593-70-4	1 – 5
Methanol	67-56-1	< 1
Dioctyltin dilaurate	3648-18-8	< 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.

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:

Quickly but gently, wipe material off skin with a dry, clean cloth. Immediately 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. Transport to hospital, or doctor.

Inhalation:

remove from contaminated area. Lay patient down. Keep warm and rested. 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. Transport to hospital, or doctor, without delay.

Ingestion:

For advice, contact a Poisons Information Centre or a doctor. Urgent hospital treatment is likely to be needed. In the meantime, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.

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:

Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.

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 breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting 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 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 (CO_2) Carbon dioxide (CO_2) metal oxides and other pyrolysis products typical of burning organic material. May emit corrosive fumes

HAZCHEM 3Y

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. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. 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. Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling discharging or handling operations. 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

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:

Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks

Section 8 - Exposure Controls and Personal Protection

Australia

Exposure limits	TWA (mg/m³)	STEL (mg/m³)
Hydrocarbons C_{9-10} n-alkanes, isoalkanes, cycloalkanes, <2% aromatic	5	
Methanol	262	328
Di-n-octyl tin dilaurate	0.1	0.2

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. Butyl or neoprene. 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 AX-P filter of sufficient capacity is recommended

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear Liquid	
Odour:	Characteristic	
Odour threshold:	no data	
pH:	no data	
Melting Point:	no data	
Boiling Point:	110 °C	
Flash point:	27 °C	
Flammability:	no data	
Evaporation Rate:	> 1	butyl acetate = 1
Lower Explosion Limit:	2.1 %	
Upper Explosion Limit:	11.5 %	

Vapour Pressure:	no data
Relative Vapour Density:	> 1
Specific Gravity:	0.89 g/cm^3
Water Solubility:	immiscible
Coeff Octanol/water distribution	no data
Auto ignition temp:	450 °C
Decomposition temp:	material is stable under normal conditions
SADT:	no data available
Dynamic viscosity:	no data
Kinematic viscosity:	no data
Volatiles:	40 %

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 can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. 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. There is strong evidence to suggest that this material can cause, if inhaled once, serious, irreversible damage of organs. Not normally a hazard due to non-volatile nature of product The material has NOT been classified by EC Directives or other classification systems as "harmful by inhalation". This is because of the lack of corroborating animal or human evidence. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. 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. Nerve damage can be caused by some non-ring hydrocarbons. Symptoms are temporary, and include weakness, tremors, increased saliva, some convulsions, excessive tears with discolouration and incoordination lasting up to 24 hours.

Ingestion:

Strong evidence exists that exposure to the material may cause irreversible damage (other than cancer, mutations and birth defects) following a single exposure by swallowing. 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. Isoparaffinic hydrocarbons cause temporary lethargy, weakness, incoordination and diarrhoea.

Skin Contact:

This material can cause inflammation of the skin on contact in some persons. There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs. The material may accentuate any pre-existing dermatitis condition Skin exposure to isoparaffins may produce slight to moderate irritation in animals and humans. Rare sensitisation reactions in humans have occurred. 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. The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.

Eye Contact:

This material can cause eye irritation and damage in some persons. Instillation of isoparaffins into rabbit eyes produces only slight irritation.

Chronic Health Effects:

Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Implantation studies in rats show that paraffin oils may cause tumours. As a general rule, the highly refined paraffins are believed to contain less suspect polyaromatic hydrocarbons than less refined grades or waxes derived from napthenic base-stocks.

Toxicity *refer ingredients*

	Oral	Dermal	Inhalation
Product	LD_{50} 18574 mg/Kg	LD_{50} 55721 mg/Kg	LC_{50} 634 mg/L 4hr
Hydrocarbons C_{9-10} n-alkanes, isoalkanes, cycloalkanes, <2% aromatics	LD_{50} >5000 mg/Kg	LD_{50} >2000 mg/Kg	LC_{50} 5.266 mg/L 4hr
Titanium (IV) Butoxide	LD_{50} >2000 mg/Kg		
Methanol	LD_{50} >1187 mg/Kg	LD_{50} 15800 mg/Kg	LC_{50} 83.2 mg/L 4hr
di-n-octyl tin dilaurate	LD_{50} >2000 mg/Kg	LD_{50} >2000 mg/Kg	

Section 12 - Ecological Information

Toxicity *refer ingredients*

	Fish	Crustacea	Algae
Product			
Hydrocarbons C_{9-10} n-alkanes, isoalkanes, cycloalkanes, <2% aromatic			$EC_{50\ 96hr}$ 64 mg/L
Titanium (IV) butoxide	$LC_{50\ 96hr}$ 1740 mg/L NOEC $_{96hr}$ 28 mg/L	$EC_{50\ 48hr}$ 590 mg/L NOEC $_{504hr}$ 4 mg/L	$EC_{50\ 72hr}$ 400 mg/L
Methanol	$LC_{50\ 96hr}$ >100 mg/L	$EC_{50\ 48hr}$ >1000 mg/L	$EC_{50\ 962hr}$ <0.001 mg/L
di-n-octyl tin dilaurate	$LC_{50\ 96hr}$ 0.09 mg/L	$EC_{50\ 48hr}$ 0.21 mg/L	$EC_{50\ 72hr}$ >0.002 mg/L

Harmful to aquatic life with long lasting effects. 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
Titanium (IV) butoxide	LOW	LOW	LOW	MEDIUM
Methanol	LOW	LOW	LOW	HIGH

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	**3Y**

Land Transport ADG

UN Number	**1993**
UN Proper Shipping Name	**FLAMMABLE LIQUID, N.O.S.**
Class	**3**
Subrisk	not applicable
Packing Group	**III**
Environmental Hazard	not applicable
Special Provisions	**223 274**
Limited Quantity	**5L**

Air Transport ICAO-IATA/ DGR

UN Number	**1993**	
UN Proper Shipping Name	**FLAMMABLE LIQUID, N.O.S.**	
ICAO/ IATA Class	**3**	
ICAO/ IATA Subrisk	not applicable	
ERG Code	**3L**	
Packing Group	**III**	
Environmental Hazard	not applicable	
Special Provisions	**A3**	
Cargo Only Packing Instructions	**366**	
Cargo only Max Qty/ Pack	**220 L**	
Passenger/ Cargo Packing Instruction		**355**
Passenger/ Cargo Max Qty/ Pack		**60 L**
Passenger/ Cargo LQ Packing Instruction	**Y344**	

Passenger/ Cargo LQ Qty/ Pack	**10 L**

Marine Transport IMDG Code /GGVSee

UN Number	**1993**
UN Proper Shipping Name	**FLAMMABLE LIQUID, N.O.S.**
IMDG Class	**3**
IMDG Subrisk	not applicable
Packing Group	**III**
Environmental Hazard	not applicable
EMS Number	**F-E S-E**
Special Provisions	**223 274 955**
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	No
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

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.

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End of SDS