

# SAFETY DATA SHEET



Revision date: 02-Sep-2020

Revision Number 1

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** KE-445-T  
**Product Code(s)** 000000026359

### Other means of identification

**Pure substance/mixture** Mixture

### Recommended use of the chemical and restrictions on use

**Recommended use** Rubber products. Industrial applications.  
**Uses advised against** No information available.

### Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia  
ABN:51 600 546 512  
70 Marple Avenue  
Villawood NSW 2163  
Australia

Telephone Number: +61 2 8717 2929  
Facsimile: +61 2 9755 9611

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

<b>Skin corrosion/irritation</b>	Category 2
<b>Serious eye damage/eye irritation</b>	Category 1
<b>Skin sensitization</b>	Category 1
<b>Reproductive toxicity</b>	Category 1A

**SIGNAL WORD**

Danger

**Label elements**Health hazard  
Corrosion  
Exclamation mark**Hazard statements**H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H360 - May damage fertility or the unborn child**Precautionary Statements - Prevention**Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wash hands thoroughly after handling  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves/protective clothing  
Use personal protective equipment as required**Precautionary Statements - Response**IF exposed or concerned: Get medical advice/attention  
Specific treatment (see First aid on this SDS)  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation or rash occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
Wash contaminated clothing before reuse  
Avoid breathing vapour or spray mist.  
Collect spillage**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Other hazards which do not result in classification****Poisons Schedule (SUSMP)** None allocated**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Not applicable

**Mixture**

Chemical name	CAS No.	Weight-%
Vinyltri (methylethylketoxime) silane	2224-33-1	3-10
Aminopropyl triethoxysilane	919-30-2	0.3-1
Stannane, dibutylbis[(2-ethyl-1-oxohexyl)oxy]-	2781-10-4	0.1-0.3

Toluene	108-88-3	0.1-0.3
Other component(s)	-	to 100

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
<b>Emergency telephone number</b>	Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766
<b>Inhalation</b>	Remove to fresh air. Call a physician if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Avoid contact with skin, eyes, and clothing. See section 8 for more information.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** May cause allergic skin reaction.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically. Can cause corneal burns.

#### 5. FIRE FIGHTING MEASURES

##### Suitable Extinguishing Media

**Suitable Extinguishing Media** Dry chemical, CO<sub>2</sub>, water spray or regular foam.

##### Unsuitable extinguishing media

##### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Combustible material.

##### Special protective actions for fire-fighters

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Evacuate personnel to safe areas. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. See section 8 for more information.
<b>Other information</b>	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.

**Environmental precautions**

<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Refer to protective measures listed in Sections 7 and 8.
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**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Never return spill or leaks to original containers for re-use.

**7. HANDLING AND STORAGE****Precautions for safe handling**

<b>Advice on safe handling</b>	Use personal protection equipment. Avoid breathing vapors or mists. Avoid contact with skin, eyes, and clothing.
<b>General hygiene considerations</b>	Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves.

**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Protect from moisture. Store away from sources of heat or ignition. Keep container closed when not in use.
<b>Incompatible materials</b>	Strong oxidizing agents. Water. Moisture.
<b>Poisons Schedule (SUSMP)</b>	None allocated

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

<b>Exposure Limits</b>	No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):
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Toluene: 8hr TWA = 191 mg/m<sup>3</sup> (50 ppm), 15 min STEL = 574 mg/m<sup>3</sup> (150 ppm), Sk  
Tin, organic compounds (as Sn): 8hr TWA = 0.1 mg/m<sup>3</sup>, 15 min STEL = 0.2 mg/m<sup>3</sup>, Sk, see Note (g)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

'Sk' (skin) Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Notes (a) to (o) - refer to Safe Work Australia document 'Workplace Exposure Standards for Airborne Contaminants, Date of Effect: 16 December 2019'.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls

#### **Engineering controls**

Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

### Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



#### **Eye/face protection**

Tight sealing safety goggles.

#### **Skin and body protection**

Wear suitable protective clothing. Boots. Overalls.

#### **Hand protection**

Impervious gloves.

#### **Respiratory protection**

If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

#### **Environmental exposure controls**

No information available.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Paste
<b>Appearance</b>	No information available.
<b>Color</b>	White
<b>Odor</b>	Oxime
<b>Odor threshold</b>	No information available.

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	Not applicable	None known
<b>Melting point / freezing point</b>	No data available	
<b>Boiling point / boiling range</b>	No data available	
<b>Flash point</b>	>70°C (does not sustain combustion)	CC (closed cup)
<b>Evaporation rate</b>	<1 (Butyl acetate = 1)	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	Negligible @25°C	
<b>Vapor density</b>	>1 (air=1)	
<b>Relative density</b>	1.05 @25°C	
<b>Water solubility</b>	Insoluble in water	
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	5 Pa.s @25°C	None known

**Other information****10. STABILITY AND REACTIVITY****Reactivity**

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** Reaction with water or moist air will release toxic, corrosive or flammable gases.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid**

**Conditions to avoid** Incompatible materials.

**Incompatible materials**

**Incompatible materials** Strong oxidizing agents. Water. Moisture.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides. Nitrogen oxides. Oxides of silicon. Formaldehyde.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

**Inhalation** May cause irritation.

**Eye contact** Causes serious eye damage.

**Skin contact** Causes skin irritation. May cause sensitization by skin contact.

**Ingestion** May cause gastrointestinal discomfort if consumed in large amounts

**Symptoms** Irritation. May cause redness and tearing of the eyes.

**Numerical measures of toxicity - Product Information**

No information available.

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Aminopropyl triethoxysilane	= 1780 mg/kg ( Rat )	= 4290 mg/kg ( Rabbit ) = 4 mL/kg ( Rabbit )	> 7.35 mg/L ( Rat ) 4 h
Toluene	= 2600 mg/kg ( Rat )	= 12000 mg/kg ( Rabbit )	= 12.5 mg/L ( Rat ) 4 h

See section 16 for terms and abbreviations

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Irritating to skin. Classification is based on mixture calculation methods based on component data.

**Serious eye damage/eye irritation** Causes serious eye damage. Classification is based on mixture calculation methods based on component data.

**Respiratory or skin sensitization** May cause sensitization by skin contact. Classification is based on mixture calculation methods based on component data.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** H360FD - May damage fertility. May damage the unborn child.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

Aspiration hazard No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Aminopropyl triethoxysilane	-	LC50: >934mg/L (96h, Danio rerio)	-	-
Toluene	EC50: >433mg/L (96h, Pseudokirchneriella subcapitata) EC50: =12.5mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 15.22 - 19.05mg/L (96h, Pimephales promelas) LC50: =12.6mg/L (96h, Pimephales promelas) LC50: 5.89 - 7.81mg/L (96h, Oncorhynchus mykiss) LC50: 50.87 - 70.34mg/L (96h, Poecilia reticulata) LC50: 14.1 - 17.16mg/L (96h, Oncorhynchus mykiss) LC50: =5.8mg/L (96h, Oncorhynchus mykiss) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: =54mg/L (96h, Oryzias latipes) LC50: =28.2mg/L (96h, Poecilia reticulata)	-	EC50: 5.46 - 9.83mg/L (48h, Daphnia magna) EC50: =11.5mg/L (48h, Daphnia magna)

### Persistence and degradability

Persistence and degradability No information available.

### Bioaccumulative potential

Bioaccumulation No information available.

### Component Information

Chemical name	Partition coefficient
Toluene	2.7

### Mobility

Mobility in soil No information available.

### Other adverse effects

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.



**14. TRANSPORT INFORMATION****ADG**

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**IATA**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**IMDG**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

**Poisons Schedule (SUSMP)**                      None allocated

**National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Toluene - 108-88-3	10 tonne/yr Threshold category 1

**International Inventories****AICS**

All the constituents of this material are listed on the Australian Inventory of Chemical Substances.

**Legend:**

**AICS** - Australian Inventory of Chemical Substances

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

## 16. OTHER INFORMATION

Supplier Safety Data Sheet 10/ 2018

**Reason(s) For Issue:** First Issue Primary SDS

**Issuing Date:** 02-Sep-2020

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australian Industrial Chemicals Introduction Scheme (AICIS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.**

**End of Safety Data Sheet**