

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version  
2.1

Revision Date:  
2020/11/27

SDS Number:

Date of last issue: 2020/11/27  
Country / Language: CN / 6N

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product code

#### Manufacturer or supplier's details

Supplier

JIANGXI KOSIN FRONTIER TECHNOLOGY CO., LTD.

Yuan Shangang Industrial Park, Dongxiang District, Fuzhou City, Jiangxi Province, China

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

**Appearance** : flakes

**Colour** : white

**Odour** : slight

Suspected of damaging fertility or the unborn child.

#### GHS Classification

Reproductive toxicity : Category 2

#### GHS label elements

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version 2.1      Revision Date: 2020/11/27      SDS Number:      Date of last issue: 2020/11/27  
Country / Language: CN / 6N

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H361 Suspected of damaging fertility or the unborn child.

Precautionary statements

: **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
**Storage:**  
P405 Store locked up.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

### Physical and chemical hazards

Not classified based on available information.

### Health hazards

Suspected of damaging fertility or the unborn child.

### Environmental hazards

Not classified based on available information.

### Other hazards which do not result in classification

None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
propylidynetrimethanol	77-99-6	>= 90 -<= 100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 4. FIRST AID MEASURES

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version 2.1	Revision Date: 2020/11/27	SDS Number:	Date of last issue: 2020/11/27 Country / Language: CN / 6N
----------------	------------------------------	-------------	---

General advice	: Do not leave the victim unattended.
If inhaled	: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: Wash off with plenty of water. Get medical attention if symptoms occur.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: Suspected of damaging fertility or the unborn child.
Notes to physician	: No special measures required.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: High volume water jet
Hazardous combustion products	: Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide
Specific extinguishing methods	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Avoid dust formation. Use personal protective equipment.
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. If the product contaminates rivers and lakes or drains inform respective authorities.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Kosin

Version 2.1	Revision Date: 2020/11/27	SDS Number:	Date of last issue: 2020/11/27 Country / Language: CN / 6N
----------------	------------------------------	-------------	---

Methods and materials for containment and cleaning up : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).  
Dispose of wastes in an approved waste disposal facility.

## 7. HANDLING AND STORAGE

### Handling

Advice on protection against fire and explosion : Dust can form an explosive mixture in air.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Take precautionary measures against electrostatic discharges.

Advice on safe handling : Avoid formation of respirable particles.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.

Avoidance of contact : No specific data.

### Storage

Conditions for safe storage : Protect from moisture.  
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : No materials to be especially mentioned.

Recommended storage temperature : < 50 °C

Further information on storage stability : No decomposition if stored and applied as directed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

### Personal protective equipment

Respiratory protection : In case of dust formation particle filter.

Filter type : P2 filter

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Kosin

Version	Revision Date:	SDS Number:	Date of last issue: 2020/11/27
2.1	2020/11/27		Country / Language: CN / 6N

Eye/face protection	:	Tightly fitting safety goggles
Skin and body protection	:	Dust impervious protective suit Protective suit
Hand protection	:	
Material	:	Polyvinyl chloride - PVC
Wearing time	:	< 60 min
Material	:	Natural rubber - NR
Wearing time	:	< 60 min
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	flakes
Colour	:	white
Odour	:	slight
Odour Threshold	:	No data available
pH	:	No data available
Melting point/range	:	58 °C
Boiling point/boiling range	:	304 °C (1,013 hPa)
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not classified as a flammability hazard
Self-ignition	:	not auto-flammable
Burning number	:	2 (20 °C) Method: VDI 2263-1  3 (100 °C) Method: VDI 2263-1

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Kosin

Version 2.1	Revision Date: 2020/11/27	SDS Number:	Date of last issue: 2020/11/27 Country / Language: CN / 6N
----------------	------------------------------	-------------	---

Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	Lower explosion limit 20,000 mg/m <sup>3</sup>
Vapour pressure	:	< 0.1 mmHg (20 °C)
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	1.08 - 1.09 g/cm <sup>3</sup> (20 °C)
Bulk density	:	600 kg/m <sup>3</sup>
Solubility(ies) Water solubility	:	1,000 g/l
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	480 °C
Decomposition temperature	:	370 °C Heating rate: 3 K/min Method: closed cup
Self-Accelerating decomposition temperature (SADT)	:	> 400 °C
Viscosity	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Impact sensitivity	:	Not impact sensitive.
Molecular weight	:	No data available
Dust explosion class	:	St1
Minimum ignition energy	:	10 mJ Method: Dust explosion test in the modified Hartmann tube

### 10. STABILITY AND REACTIVITY

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
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# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE

Version 2.1	Revision Date: 2020/11/27	SDS Number:	Date of last issue: 2020/11/27 Country / Language: CN / 6N
----------------	------------------------------	-------------	---

Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take measures to prevent the build up of electrostatic charge.
Incompatible materials	:	No specific data.
Hazardous decomposition products	:	No hazardous decomposition products are known.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Not classified based on available information.

#### Components:

##### propylidynetrimethanol:

Acute oral toxicity	:	LD50 (Rat, male): 14,700 mg/kg GLP: no
Acute inhalation toxicity	:	LC50 (Rat, male): > 0.85 mg/l Exposure time: 4 h Test atmosphere: dust/mist GLP: no Remarks: Dosage caused no mortality
Acute dermal toxicity	:	LD50 (Rabbit): > 10,000 mg/kg GLP: no

#### Skin corrosion/irritation

Not classified based on available information.

#### Components:

##### propylidynetrimethanol:

Species: Rabbit  
Exposure time: 24 h  
Result: No skin irritation  
GLP: no

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

##### propylidynetrimethanol:

Species: Rabbit  
Result: No eye irritation  
GLP: no

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version  
2.1

Revision Date:  
2020/11/27

SDS Number:

Date of last issue: 2020/11/27  
Country / Language: CN / 6N

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### Respiratory sensitisation

Not classified based on available information.

#### Components:

##### propylidynetrimethanol:

Exposure routes: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

### Germ cell mutagenicity

Not classified based on available information.

#### Components:

##### propylidynetrimethanol:

Genotoxicity in vitro

: Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: yes

Test Type: Ames test

Test system: Escherichia coli

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: yes

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

GLP: yes

Test Type: gene mutation test

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

GLP: yes

### Carcinogenicity

Not classified based on available information.



# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version  
2.1

Revision Date:  
2020/11/27

SDS Number:

Date of last issue: 2020/11/27  
Country / Language: CN / 6N

### Reproductive toxicity

Suspected of damaging fertility or the unborn child.

#### Components:

##### propylidynetrimethanol:

- Effects on fertility : Species: Rat, male and female  
Application Route: Oral  
Dose: 12,5 - 50 - 200 - 800 mg/kg  
General Toxicity - Parent: NOAEL: 200 mg/kg body weight  
General Toxicity F1: NOAEL: 800 mg/kg body weight  
Fertility: NOAEL: 800 mg/kg body weight  
Method: OECD Test Guideline 422  
GLP: yes
- Effects on foetal development : Species: Rat, female  
Application Route: Oral  
Duration of Single Treatment: 15 d  
General Toxicity Maternal: NOAEL: 100 mg/kg body weight  
Developmental Toxicity: NOAEL: 100 mg/kg body weight  
Method: OECD Test Guideline 414  
GLP: yes
- Species: Rabbit, female  
Application Route: Oral  
Duration of Single Treatment: 22 d  
General Toxicity Maternal: NOAEL:  $\geq$  450 mg/kg body weight  
Developmental Toxicity: NOAEL:  $\geq$  450 mg/kg body weight  
Method: OECD Test Guideline 414  
GLP: yes
- Species: Rat, male and female  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 800 mg/kg body weight  
Developmental Toxicity: NOAEL: 800 mg/kg body weight  
Method: OECD Test Guideline 422  
GLP: yes
- Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments., Some evidence of adverse effects on development, based on animal experiments.

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

#### Components:

##### propylidynetrimethanol:

Species: Rat, male and female

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version	Revision Date:	SDS Number:	Date of last issue: 2020/11/27
2.1	2020/11/27		Country / Language: CN / 6N

NOAEL: 67 mg/kg  
Application Route: Oral  
Exposure time: 90 d  
Number of exposures: daily  
Dose: 20 - 67 - 200 - 667 mg/kg  
GLP: no  
Remarks: Subchronic toxicity

### Aspiration toxicity

Not classified based on available information.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **propylidynetrimethanol:**

Toxicity to fish	:	LC50 (Alburnus alburnus (Bleak)): > 1,000 mg/l Exposure time: 96 h Analytical monitoring: no GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 13,000 mg/l End point: Immobilization Exposure time: 48 h GLP: no Remarks: Fresh water
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): > 1,000 mg/l End point: Biomass Exposure time: 72 h GLP: no Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 21 d GLP: no Remarks: Fresh water
Toxicity to microorganisms	:	EC50 (activated sludge): > 1,000 mg/l Exposure time: 3 h Method: Regulation (EC) No. 440/2008, Annex, C.11 GLP: yes Remarks: Fresh water

### Persistence and degradability

#### Components:

##### **propylidynetrimethanol:**

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 6 %
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# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Kosin

Version  
2.1

Revision Date:  
2020/11/27

SDS Number:

Date of last issue: 2020/11/27  
Country / Language: CN / 6N

Exposure time: 28 d  
Method: OECD Test Guideline 301E  
GLP: yes

aerobic  
Result: Inherently biodegradable.  
Biodegradation: 100 %  
Exposure time: 28 d  
Method: OECD Test Guideline 302B  
GLP: yes

### Bioaccumulative potential

#### Components:

##### **propylidynetrimehanol:**

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Bioconcentration factor (BCF): < 17  
Method: OECD Test Guideline 305C  
GLP: yes

Partition coefficient: n-octanol/water : log Pow: -0.47 (26 °C)  
Method: measured

### Mobility in soil

#### Components:

##### **propylidynetrimehanol:**

Distribution among environmental compartments : Koc: 1.499, log Koc: 0.176

### Other adverse effects

#### Product:

Additional ecological information : No data available

#### Components:

##### **propylidynetrimehanol:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version	Revision Date:	SDS Number:	Date of last issue:2020/11/27
2.1	2020/11/27		Country / Language: CN / 6N

---

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

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### 14. TRANSPORT INFORMATION

#### National Regulations

##### China-DG GB 6944/12668

Not regulated as a dangerous good

#### Transportation Notes:

- Appropriate & sufficient fire-fighting facilities and spill emergency handling apparatus should be equipped with the transport vehicles.
- In case of products with explosive, flammable, self-reactive, pyrophoric, self-heating and oxidizing properties:
- Tank cars used in transport should be equipped with a grounding chain; a porous separator plate may be provided in the tank car to reduce static electricity shocks.
- The exhaust pipes of vehicles used for shipping this product must be equipped with fire retardant devices. The use of mechanical equipment or tools prone to sparking is prohibited.
- Protect against exposure to sun, rain and high temperatures during transit; in summer, transport should ideally be in the morning or evening.
- Keep away from fire, heat and high temperature zones during stopovers.
- When transporting over public roads, select routes compliant with regulations and do not stop over in residential or densely populated areas.

#### International Regulations

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

Not applicable for product as supplied.

**Hazard statements** : Not dangerous cargo.  
Avoid heat above +50 °C.  
Has a slight odour.  
Keep dry.  
Keep separated from foodstuffs.

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### 15. REGULATORY INFORMATION

#### National regulatory information

Further information : 1. Regulations of the Safety Administration of Dangerous Chemicals  
2. Rules for classification and labeling of chemicals  
(GB30000.2~29)

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# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## TRIMETHYLOLPROPANE



Version  
2.1

Revision Date:  
2020/11/27

SDS Number:

Date of last issue: 2020/11/27  
Country / Language: CN / 6N

- 3. Lists of dangerous goods (GB12268)
- 4. Classification & code of Dangerous Goods (GB6944)
- 5. Safety Data Sheet for Chemical Products -Content and Order of Sections (GB/T16483)
- 6. Guidance on the compliance of safety data sheet for chemical products (GB/T17519)
- 7. Catalogue of hazardous chemicals
- 8. National list of hazardous waste
- 9. Occupational exposure limits for hazardous agents in the workplace Part 1: Chemical hazardous agents GBZ 2.1)

### Other international regulations

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## 16. OTHER INFORMATION

### Full text of other abbreviations

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

### Disclaimer

The information provided in this Safety Data Sheet 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 a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.