

SAFETY DATA SHEET

ZOK 27

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name ZOK 27

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

Application Cleaning compound, turbine engine gas path. Corrosion inhibitor.

Details of the supplier of the safety data sheet

Supplier Solidus Industries Pty Ltd
Suite 373, 7 Clunies Ross Court
Business Technology Park
Eight Mile Plains QLD 4113
Australia
1800 60 2000
+61 7 3056 0289
info@solidus.industries

Manufacturer ZOK International Group
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West Sussex
GU29 0JT
+44 (0) 333 700 2727
zok@zok.com

Emergency telephone number

Emergency telephone +61 7 3056 0289 (Mon - Fri 08:30 - 16:30)

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Eye Irrit. 2A - H319

Label elements

Hazard pictograms



Signal word WARNING

Hazard statements H319 Causes serious eye irritation.

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Precautionary statements

P264 Wash contaminated skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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.

Other hazards

This product does not contain any substances classified as PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition and information on ingredients

Mixtures

Isotridecylalcohol, ethoxylated CAS number: 69011-36-5	10-30%
Classification Acute Tox. 4 - H302 Eye Irrit. 2A - H319	
3-butoxypropan-2-ol CAS number: 5131-66-8	1-5%
Classification	

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Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin Contact	Remove affected person from source of contamination. Take off immediately all contaminated clothing and wash it before reuse. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

Most important symptoms and effects, both acute and delayed

Inhalation	Vapours may irritate throat/respiratory system. Symptoms following overexposure to vapour may include the following: Coughing, chest tightness, feeling of chest pressure.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

Indication of any immediate medical attention and special treatment needed

Specific treatments	Treat symptomatically.
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SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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Special hazards arising from the substance or mixture

Specific hazards	None known.
Hazardous combustion products	Carbon monoxide (CO). Carbon dioxide (CO ₂).

Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
Special protective equipment for firefighters	Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
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Environmental precautions

Environmental precautions	Avoid discharge to the aquatic environment. Collect and dispose of spillage as indicated in Section 13.
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Methods and material for containment and cleaning up

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Methods for cleaning up

Stop leak if safe to do so. Small Spillages: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Collect and dispose of spillage as indicated in Section 13. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Collect and dispose of spillage as indicated in Section 13.

Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 4°C and 50°C. Store in tightly-closed, original container. Store in a dry place.

Storage class Chemical storage.

Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

SECTION 8: Exposure controls and personal protection

Triethanolamine (CAS: 102-71-6)

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and spray/mists.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Wear protective gloves made of the following material: Nitrile rubber.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate hand lotion to prevent defatting and cracking of skin. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection may be required if excessive airborne contamination occurs. Use approved respirator if air contamination is above an acceptable level. Wear a respirator fitted with the following cartridge: Organic vapour filter.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

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Appearance	Liquid.
Colour	Colourless to pale yellow.
Odour	Characteristic.
Odour threshold	Not applicable.
pH	pH (concentrated solution): 7.2-7.5
Melting point	0°C
Initial boiling point and range	100°C @ 760 mm Hg
Flash point	> 100°C Pensky-Martens closed cup.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not relevant.
Flammability Limit - Lower(%)	Lower flammable/explosive limit: Not applicable. Upper flammable/explosive limit: Not applicable.
Vapour pressure	Not relevant.
Vapour density	Not relevant.
Relative density	1.01 @ 20°C
Solubility(ies)	Miscible with water.
Partition coefficient	log Pow: < 3
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not applicable.
Viscosity	10.44 cSt @ 20°C
Explosive properties	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Volatile organic compound	This product contains a maximum VOC content of 50 g/L. Average VOC content: 41.2 g/L

SECTION 10: Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
Materials to avoid	Strong oxidising agents. Strong reducing agents.
Hazardous decomposition products	Heating may generate the following products: Carbon monoxide (CO). Carbon dioxide (CO ₂).

SECTION 11: Toxicological information

Information on toxicological effects

ZOK 27**Acute toxicity - oral**

ATE oral (mg/kg)	4,508.57
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Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	84.05
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.
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Skin sensitisation

Skin sensitisation	May cause sensitisation by skin contact.
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Germ cell mutagenicity

Genotoxicity - in vitro	Does not contain any substances known to be mutagenic.
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Genotoxicity - in vivo	Does not contain any substances known to be mutagenic.
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Carcinogenicity

Carcinogenicity	Does not contain any substances known to be carcinogenic.
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Reproductive toxicity

Reproductive toxicity - fertility	Does not contain any substances known to be toxic to reproduction.
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Reproductive toxicity - development	Does not contain any substances known to be toxic to reproduction.
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Specific target organ toxicity - single exposure

Target organs	No specific target organs known.
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Specific target organ toxicity - repeated exposure

Target organs	No specific target organs known.
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Toxicological information on ingredients.**Isotridecylalcohol, ethoxylated****Acute toxicity - oral**

ATE oral (mg/kg)	500.0
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Serious eye damage/irritation

Serious eye damage/irritation	Irritation of eyes is assumed.
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Respiratory sensitisation

Respiratory sensitisation	Not known.
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Skin sensitisation

Skin sensitisation	Not known.
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3-butoxypropan-2-ol**Acute toxicity - oral**

Acute toxicity oral (LD mg/kg)	2,100.0
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Species	Rat
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ATE oral (mg/kg)	2,100.0
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Oleoyl Sarcosinic Acid

Acute toxicity - oral

Acute toxicity oral (LD mg/kg) 9,200.0

Species Rat

ATE oral (mg/kg) 9,200.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC dust/mist mg/l) 1.37

Species Rat

ATE inhalation (dusts/mists mg/l) 1.37

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

Acute aquatic toxicity

Acute toxicity - fish LC , 96 hours: 33 mg/l, Marinewater fish
EC , 96 hours: >0.02 %, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC , 48 hours: >0.01 %, Daphnia magna

Acute toxicity - aquatic plants EC , 72 hours: 8.1 mg/l, Marinewater algae

Acute toxicity - microorganisms LC , 10 days: 1267 mg/kg, Activated sludge

Persistence and degradability

Persistence and degradability The product is biodegradable but it must not be discharged into drains without permission from the authorities.

Biodegradation The substance is readily biodegradable.

Biological oxygen demand < 0.1 g O /g substance

Chemical oxygen demand < 8.5 g O /g substance

Bioaccumulative potential

Bioaccumulative Potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient log Pow: < 3

Mobility in soil

Mobility The product is miscible with water and may spread in water systems.

Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

Waste treatment methods

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General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Collect and place in suitable waste disposal containers and seal securely. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADG).
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UN number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

Guidance

Workplace Exposure Limits EH40.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

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Japan - ENCS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Any other relevant information

General information	Only trained personnel should use this material.
Issued by	Craig Appleby - Chemist
Revision date	8/06/2020
Revision	1024
Supersedes date	1/02/2019
SDS No.	4524
SDS status	Approved.
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled.
Signature	Craig Appleby

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