



SAFETY DATA SHEET ZOK mx

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ZOK mx

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

Identified uses Engine cleaner.

1.3. Details of the supplier of the safety data sheet

Supplier ZOK International Group
Airworthy House
Elsted Marsh
Midhurst
West Sussex
GU29 0JT
Tel: +44 1730 811920
Tel: +44 333 700 2727
Fax: +44 333 700 2728
Email: zok@zok.com

Manufacturer ZOK International Group Limited
Airworthy House
Elsted Marsh
Midhurst
West Sussex
GU29 0JT
Tel: +44 333 700 2727
Tel: +44 1730 811920
Fax: +44 333 700 2728
Email: zok@zok.com

1.4. Emergency telephone number

Tel: +44 333 700 2727 Monday-Friday 0900-1700

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Eye Irrit. 2 - H319
Environment	Not classified.

Classification (1999/45/EEC)

Xi;R36.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Detergent Labelling

5 - < 15%	non-ionic surfactants
< 5%	anionic surfactants

Label In Accordance With (EC) No. 1272/2008



Signal Word	Warning	
Hazard Statements	H319	Causes serious eye irritation.
Precautionary Statements	P280 P264 P305+351+338 P337+313 P501	Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated skin thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ISOTRIDECYLALCOHOL, ETHOXYLATED		5-10%
CAS-No.: 9043-30-5	EC No.:	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318	Classification (67/548/EEC) Xn;R22. Xi;R41.	
3-BUTOXYPROPAN-2-OL		1-5%
CAS-No.: 5131-66-8	EC No.: 225-878-4	Registration Number: 2119475527-28
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed 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. Get medical attention if any discomfort continues.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Remove victim immediately from source of exposure. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

May cause irritation to the respiratory system. 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 and may cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

None under normal conditions. Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Use air-supplied respirator during fire fighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid discharge to the aquatic environment. Do not allow to enter drains, sewers or watercourses. Collect and dispose of spillage as indicated in section 13.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not use in confined spaces without adequate ventilation and/or respirator.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store at temperature below 50°C.

Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand protection

Use suitable protective gloves if risk of skin contact.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Odour	Characteristic.
Solubility	Miscible with water
Initial boiling point and boiling range (°C)	100@ 760 mm Hg
Melting point (°C)	0
Relative density	1 @ 20°C
Vapour density (air=1)	
Not relevant	
Vapour pressure	
Not relevant	
Evaporation rate	
Not relevant	
pH-Value, Conc. Solution	8.0-8.5
Viscosity	15.66 cSt @20°C
Solubility Value (G/100G H ₂ O@20°C)	
No information available.	
Decomposition temperature (°C)	
Not relevant	
Flash point (°C)	>100 PM Closed cup.
Auto Ignition Temperature (°C)	
Not relevant	
Flammability Limit - Lower(%)	
Not applicable.	
Flammability Limit - Upper(%)	
Not applicable.	
Partition Coefficient (N-Octanol/Water)	log Pow < 3
Explosive properties	
Not relevant	
Oxidising properties	
Not relevant	

9.2. Other information

Volatile Organic Compound (VOC) <50 g/litre

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with oxidisers or reducing agents.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong reducing agents.

10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**Germ cell mutagenicity:

Does not contain any substances known to be mutagenic.

Carcinogenicity:

Does not contain any substances known to be carcinogenic.

Reproductive Toxicity:

Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

Aspiration hazard:

Not relevant, due to the form of the product.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

May cause discomfort if swallowed.

Skin contact

Liquid may irritate skin.

Eye contact

Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATIONEcotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Does not contain any substances known to be mutagenic. Does not contain any substances known to be toxic to reproduction. Does not contain any substances known to be carcinogenic.

12.2. Persistence and degradability

This product does not contain any PBT or vPvB substances.

12.3. Bioaccumulative potential

Bioaccumulative potential

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

Partition coefficient

log Pow < 3

12.4. Mobility in soil

Mobility:

The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes	Not Classified
Rail Transport Notes	Not classified.
Sea Transport Notes	Not classified.
Air Transport Notes	Not classified.

14.1. UN number

Not relevant

14.2. UN proper shipping name

Not classified for transportation.

14.3. Transport hazard class(es)

Not classified for transportation.

14.4. Packing group

Not classified for transportation.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

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

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	23/09/2013
Revision	2015
Supersedes date	29/03/2012
Risk Phrases In Full	
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
Hazard Statements In Full	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H302	Harmful if swallowed.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.