

SAFETY DATA SHEET

ZONAX METAL CLEANER

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME ZONAX METAL CLEANER
PRODUCT NO. 24105, 166327, POT2X04105
APPLICATION Alkaline Cleaner
SUPPLIER MacDermid plc
 Palmer Street
 Bordesley
 Birmingham
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 +44 (0) 121 606 8100
CONTACT PERSON sdsuk@macdermid.com
EMERGENCY TELEPHONE 24 Hour Emergency Incident Number +44 (0)208 762 8322

2 HAZARDS IDENTIFICATION

Causes burns. Irritating to respiratory system.

CLASSIFICATION C;R34. Xi;R37.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
SODIUM CARBONATE	207-838-8	497-19-8	60-100%	Xi;R36
DISODIUM METASILICATE PENTAHYDRATE	229-912-9	6834-92-0	10-30%	C;R34. Xi;R37.

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

Remove affected person from source of contamination. Chemical burns must be treated by a physician.

INHALATION

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention immediately!

INGESTION

Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Rinse nose, mouth and throat with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention immediately!

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothes and rinse skin thoroughly with water. Get medical attention immediately.

EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. To hospital or eye specialist.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

Beware, risk of formation of toxic and corrosive gases. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

UNUSUAL FIRE & EXPLOSION HAZARDS

Beware, risk of formation of toxic and corrosive gases.

ZONAX METAL CLEANER

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust. In case of inadequate ventilation, use respiratory protection. Eye contact MUST be prevented by means of suitable personal protection equipment.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Avoid release to the environment.

SPILL CLEAN UP METHODS

Wear necessary protective equipment. Avoid generation and spreading of dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Do not contaminate water sources or sewer. Inform Authorities if large amounts are involved.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid inhalation of dust. Do not handle broken packages without protective equipment. Use mechanical ventilation in case of handling which causes formation of dust. Avoid eating, drinking and smoking when using the product. Observe good industrial hygiene practices.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

STORAGE CLASS

Corrosive storage.

MIN. STORAGE TEMP (°C) 5

MAX. STORAGE TEMP (°C) 40

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation. All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT

Respiratory protection must be used if air contamination exceeds acceptable level. Seek advice from supervisor on the companies' respiratory protection standards.

HAND PROTECTION

Protective gloves must be used if there is a risk of direct contact or splash. Neoprene or PVC gloves are recommended.

EYE PROTECTION

Wear full-face visor or shield.

OTHER PROTECTION

Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. Eating, smoking and water fountains prohibited in immediate work area.

9 PHYSICAL AND CHEMICAL PROPERTIES

ZONAX METAL CLEANER

APPEARANCE	Solid
COLOUR	White
ODOUR	No characteristic odour.
SOLUBILITY	Soluble in water.
pH-VALUE, DILUTED SOLUTION	> 13.00 @ 1.00 %

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. Moisture. The solution is strongly alkaline and reacts with strong acids with heat generation.

MATERIALS TO AVOID

Strong acids. Powdered metal. Aluminium. Tin. Zinc.

HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions. Fire or high temperatures create: Oxides of: Sodium. Carbon.

11 TOXICOLOGICAL INFORMATION

INHALATION

Irritating to respiratory system. Prolonged inhalation of high concentrations may damage respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

INGESTION

Causes burns. May cause chemical burns in mouth, oesophagus and stomach. Swallowing concentrated chemical may cause severe internal injury.

SKIN CONTACT

Causes burns. May cause serious chemical burns of the skin.

EYE CONTACT

Causes burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

SPECIFIC EFFECTS

Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

WATER HAZARD CLASSIFICATION

WGK 1

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

DISPOSAL METHODS

Environmental manager must be informed of all major spillages. Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

14 TRANSPORT INFORMATION

ZONAX METAL CLEANER

UK ROAD CLASS	8		
PROPER SHIPPING NAME	DISODIUM TRIOXOSILICATE, MIXTURE		
UN NO. ROAD	UN3253	UK ROAD PACK GR.	III
ADR CLASS NO.	8	ADR CLASS	Class 8: Corrosive substances.
ADR PACK GROUP	III	HAZARD NO. (ADR)	80 Corrosive or slightly corrosive substance.
UN NO. SEA	UN3253	IMDG CLASS	8
IMDG PACK GR.	III	MFAG	F-A, S-B
MARINE POLLUTANT	No.	UN NO. AIR	UN3253
AIR CLASS	8	AIR PACK GR.	III

15 REGULATORY INFORMATION**LABELLING**

Corrosive

CONTAINS DISODIUM METASILICATE PENTAHYDRATE**RISK PHRASES**

R34 Causes burns.
R37 Irritating to respiratory system.

SAFETY PHRASES

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S51 Use only in well-ventilated areas.
S24/25 Avoid contact with skin and eyes.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S60 This material and its container must be disposed of as hazardous waste.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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.

16 OTHER INFORMATION

REVISION DATE 05/01/2005

REV. NO./REPL. SDS GENERATED A

ZONAX METAL CLEANER

SAFETY DATA SHEET STATUS

Approved.

DATE 14/10/2003**SIGNATURE** SB**SIGNATURE 2** BH**RISK PHRASES IN FULL**

R34 Causes burns.
R36 Irritating to eyes.
R37 Irritating to respiratory system.

DISCLAIMER

This information relates only to the specific material as supplied and may not be valid for such material if used in combination with any other material(s) or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. The data should not be construed as guaranteeing specific properties of the product described or its suitability for a particular application, nor does it make any warranty, either express or implied of merchantability for the product itself. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.