



SAFETY DATA SHEET

WR2 DESOLVE PLUGHOLE MAINTAINER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name WR2 DESOLVE PLUGHOLE MAINTAINER
Internal identification C089

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

Identified uses Pipe and drain opener.
Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
 RAWDON ROAD
 MOIRA
 SWADLINCOTE
 DERBYSHIRE
 DE12 6DA
 TEL: +44 (0)1283 221044
 FAX: +44 (0)1283 225731
 sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs). +44 (0) 1865 407333 (24 hrs). MEDICAL AND ENVIRONMENTAL EMERGENCIES ONLY.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Met. Corr. 1 - H290
Health hazards Skin Corr. 1A - H314 Eye Dam. 1 - H318
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger
Hazard statements H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.

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Precautionary statements

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/ doctor.
 P501 Dispose of contents/ container in accordance with national regulations.
 P260 Do not breathe dust.
 P280 Wear protective clothing, gloves, eye and face protection.

Contains SODIUM HYDROXIDE

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SODIUM HYDROXIDE		60-100%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27
Classification	Classification (67/548/EEC or 1999/45/EC)	
Met. Corr. 1 - H290	C;R35	
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		

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

General information Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.

Skin contact Rinse immediately with plenty of water. Get medical attention immediately.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention immediately.

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

General information Chemical burns must be treated by a physician.

Inhalation Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause chemical burns in mouth and throat.

Skin contact Burning pain and severe corrosive skin damage.

Eye contact Severe irritation, burning and tearing.

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

Notes for the doctor Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid contact with skin, eyes and clothing. Use suitable respiratory protection if ventilation is inadequate. Do not touch or walk into spilled material. Avoid inhalation of dust. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. Do not handle broken packages without protective equipment. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb spillage to prevent material damage. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Avoid generation and spreading of dust. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing, gloves, eye and face protection. Avoid spilling. Avoid inhalation of dust and contact with skin and eyes. Provide adequate ventilation. Do not mix with acid. Do not reuse empty containers. Do not use in paint spraying equipment. Do not eat, drink or smoke when using this product. Do not handle broken packages without protective equipment. Wash contaminated skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 4°C and 40°C. Keep container tightly closed and dry.

Storage class Corrosive storage.

7.3. Specific end use(s)

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

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Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL

Industry - Inhalation; Short term local effects: 1 mg/m³

Industry - Inhalation; Long term local effects: 1 mg/m³

Consumer - Inhalation; Short term local effects: 1 mg/m³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 3 hours. The breakthrough time for any glove material may be different for different glove manufacturers. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. Protective gloves should have a minimum thickness of 0.15 mm. Gloves made from the following material may provide suitable chemical protection: Neoprene. Nitrile rubber. Rubber (natural, latex). The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash contaminated clothing before reuse. Wash hands after handling. Wash promptly if skin becomes contaminated.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Crystalline powder.
Colour	White.
Odour	Almost odourless.
pH	pH (diluted solution): >13.0

WR2 DESOLVE PLUGHOLE MAINTAINER

Relative density	Not determined.
Solubility(ies)	Completely soluble in water.

9.2. Other information

Other information	Not determined.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Reactions with the following materials may generate heat: Acids. Water.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

Conditions to avoid	Avoid contact with acids.
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10.5. Incompatible materials

Materials to avoid	Strong acids.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO ₂).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	Coughing, chest tightness, feeling of chest pressure. Burning sensation in mouth.
Ingestion	May cause discomfort if swallowed. May cause chemical burns in mouth and throat.
Skin contact	Causes severe burns.
Eye contact	Severe irritation, burning and tearing.

Toxicological information on ingredients.

SODIUM HYDROXIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

ATE oral (mg/kg)

SECTION 12: Ecological Information

Ecotoxicity	Not regarded as dangerous for the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
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12.1. Toxicity

WR2 DESOLVE PLUGHOLE MAINTAINER

Acute aquatic toxicity

Acute toxicity - fish Not determined.

Ecological information on ingredients.

SODIUM HYDROXIDE

Acute aquatic toxicity

Acute toxicity - fish LC50, 48 hours: ~ 145 mg/l, *Poecilia reticulata* (Guppy)
REACH dossier information.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: ~ 76 mg/l, *Daphnia magna*
REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

SECTION 14: Transport information

Special Provisions note

14.1. UN number

UN No. (ADR/RID) 1823

UN No. (IMDG) 1823

UN No. (ICAO) 1823

14.2. UN proper shipping name

Proper shipping name (ADR/RID) SODIUM HYDROXIDE, SOLID

Proper shipping name (IMDG) SODIUM HYDROXIDE, SOLID

Proper shipping name (ICAO) SODIUM HYDROXIDE, SOLID

14.3. Transport hazard class(es)

ADR/RID class 8

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IMDG class 8

ICAO class/division 8

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation 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 (as amended).
Commission Regulation (EU) No 453/2010 of 20 May 2010.
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. EC ₅₀ : 50% of maximal Effective Concentration. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. vPvB: Very Persistent and Very Bioaccumulative. UN: United Nations.
General information	Only trained personnel should use this material.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	08/09/2017
Revision	2.0
Supersedes date	02/03/2014
Risk phrases in full	R35 Causes severe burns.
Hazard statements in full	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.

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