

Safety Data Sheet

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

1.1. Product identifier

Trade name **SURFZYME CDC CARBON DEPOSIT CLEANER**
 U.F.I. Not applicable
 Product code #50050-0020; #50050-1000
 Other identifiers Not applicable

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

Identified use(s) PC 35: Washing and cleaning products.
 Use as a parts carbonised deposits washer and degreaser.
 Uses advised against This product should not be used for any purpose other than intended use.

1.3. Details of the supplier of the safety data sheet

Supplier name: ZYMO Europe Inc.
 Supplier address: ZYMO Europe Inc.
 P.O Box 9240
 Fleming Island
 FL 32006
 United States of America
 Supplier telephone: +1 904-213-7994
 Email: admin@zymo.com

Manufacturer name: Grotech Production Ltd
 Manufacturer address: Grotech Production Ltd
 Britannia Road
 Goole
 East Yorkshire
 DN14 6ET
 Supplier telephone: +44 (0) 1405 761746
 Email: sales@grotechproduction.co.uk

1.4. Emergency telephone

Country/ region	Language(s)	Tel No.	Operational hours, other restrictions
United Kingdom	English	+44 (0) 999	24-hour line
United Kingdom	English	+44 (0) 111	24-hour line

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Metal corrosion (Category 1), H290
 Skin corrosion (Category 1B), H314
 Serious eye corrosion (Category 1), H318

2.2. Label elements



CLP Hazard Pictograms:



Signal Word: Danger

Hazard Statements:

H290: May be corrosive to metals
H314: Causes severe skin burns and eye damage

Precautionary Statements:

P234: Keep only in original packaging.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower)
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 to a waste collection point, empty container may be disposed of to trade or municipal waste

Supplemental information on the label: None

Label information where small pack derogation applies:

Label information requirements for packages of ≤ 125 ml



CLP Hazard Pictograms:

Signal Word: Danger

Hazard Statements:

H314: Causes severe skin burns and eye damage

Precautionary Statements:

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower)
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

2.3. Other hazards PBT Product and components not tested for PBT
vPvB Product and components not tested for vPvB

2.4. Additional Information Full text for Hazard and Precautionary Statements in Section 16.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC Classification No 1272/2008

Substance name	% w/w	Identification numbers (CAS, EC, Index)	REACH reg. no	CLP classification	M-factors, SCLs, ATEs
Sodium hydroxide	2 - <5	1310-73-2 215-185-5 011-002-00-6	01-2119457892-27	H290, H314	Skin Corr. 1A; H314: C ≥ 5% Skin Corr. 1B; H314: 2% ≤ C < 5% Skin Irrit. 2; H315: 0.5% ≤ C < 2% Eye Irrit. 2; H319: 0.5% ≤ C < 2% - -
Alcohols, C9-11, ethoxylated, 6-8 moles ethylene oxide	1 - <3	68439-46-3 614-482-0 -	-	H302, H318	- - -

SECTION 4: First aid measures

4.1. Description of first aid measures

- If inhaled: Move person away from the source of exposure and into fresh air, if casualty is not breathing give artificial respiration. If breathing is difficult consult a physician immediately.
- If on skin (or hair): Immediately wash exposed skin with plenty of water until any soapy sensation subsides, carefully remove any contaminated clothing and wash before reuse, seek medical attention if burns occur or any pain or irritation persists. Treat dry skin with a topical moisturizer.
- If in eyes: Immediately flush the eyes with plenty of water for up to fifteen minutes. Remove any contact lenses and open eyes wide apart to wash. Seek immediate medical attention if eye injury occurs or pain persists and show this document to the medical practitioner.
- If swallowed: Rinse out the mouth and give the casualty water to drink. Do not induce vomiting, but if vomiting occurs spontaneously keep the airways clear. Seek immediate medical attention if burns are suspected.
- Other first aid advice: Burns can occur to mucous membrane on exposure; initial first aid should include dilution and washing of any exposed areas.

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

- If inhaled: Inhalation may occur through the generation of aerosols, mist or foam. On exposure coughing, sneezing, redness and irritation of the throat and chest pains can occur. A sore throat may develop after exposure.
- If on skin (or hair): Skin exposure can initially cause painful itching, redness and soreness, especially to already damaged skin. If not washed promptly serious skin burns can occur.
- If in eyes: Exposure to the eyes will result in immediate severe pain, redness, watering and blurred vision, and can cause serious and permanent eye damage if not washed promptly.



If swallowed: The product is expected to have a bitter and soapy taste. Prompt irritation and soreness is expected, and serious corrosive burns can occur to the mouth, throat and gastro-intestinal tract.

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

Other advice Treat symptomatically for corrosive alkali burns.

SECTION 5: Firefighting measures

5.1. Extinguishing media

All extinguishing agents permitted.

5.2. Special hazards arising from the substance or mixture

Combustion products can include Oxides of carbon and nitrogen.

5.3. Advice for firefighters

Fight fire with normal precautions. Prevent exposure by keeping a safe distance and wearing suitable protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8.2 for personal protective equipment. See section 13.1 for disposal considerations. It is advisable that procedures are in place for the handling liquid chemical spills.

6.2. Environmental precautions

Take measures to prevent material from entering drains, surface water, soil and open ground. When handling this material ensure that provisions are in place to prevent product from entering drains. An uncontrolled release may have a negative impact to bodies of water including foaming, change in water alkalinity and a drop in surface tension.

6.3. Methods and material for containment and cleaning up

Spilt product liquid can be contained with absorbent booms and other absorbative materials, such as sand or vermiculite. Shovel product-contaminated absorbent into open-topped plastic drums.

6.4. Reference to other sections

See section 8.2 for personal protective equipment. See section 13.1 for disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wash hands and exposed skin before breaks and after use. Wear appropriate PPE when handling the material. Wash hands after use and before eating and drinking. Remove contaminated clothing and PPE before entering communal and eating spaces.

7.2. Conditions for safe storage, including any incompatibilities

Protect from direct sunlight and large swings in temperature. Stabilisers and antioxidants are not used in this product.



7.3. Specific end use(s)

Use as a parts carbonised deposits washer and degreaser.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits: No product or declared constituent data available.

Substance	CAS no	LTEL (8 hr TWA mg/m ³)	STEL (15 min mg/m ³)	Note	Source
Sodium hydroxide	1310-73-2	-	2	-	EH40

PNECs and DNELs No product data available.

Data for sodium hydroxide [CAS: 1310-73-2]

DNEL
 Workers - Inhalation; Long term local effects: 1 mg/m³
 Workers – Eyes; Short term local effects: high hazard (no threshold derived)
 Workers – Dermal; Short term local effects: high hazard (no threshold derived)
 Consumer - Inhalation; Long term local effects: 1 mg/m³
 Consumer - Eyes; Short/Long term local effects: high hazard (no threshold derived)
 Consumer - Dermal; Short/Long term local effects: high hazard (no threshold derived)
 Consumer – Oral; Short/Long term local effects: high hazard (no threshold derived)

PNEC
 Fresh water; no data available: testing technically not feasible
 Marine water; no data available: testing technically not feasible
 Intermittent release; no data available: testing technically not feasible
 Sediment (Freshwater); no data available: testing technically not feasible
 Sediment (Marine water); no data available: testing technically not feasible
 Soil; no data available: testing technically not feasible
 STP; no data available: testing technically not feasible

Based on the results of the ecotoxicity studies, its dissociation in the environment and lack of bioaccumulation sodium hydroxide is not classified for the environmental compartment.

8.2. Exposure controls

Note that decanting processes involving this material may create a risk of splashing, spray and dripping, and manual handling and decanting of product is anticipated during normal use.

Personal Protection Equipment

Personal protective equipment (PPE) should be chosen according to the findings of relevant risk and COSHH assessments.

Eye protection: Use splash goggles that have been tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Face protection: Where there is a risk of spillage, splashing or spray use a polycarbonate or other suitable face-field approved under appropriate government standards such as NIOSH (US) or EN166 (EU).



Hand protection:	For long-term handling of the product use butyl rubber, PVC, neoprene, natural rubber, nitrile or other gloves that are solvent and alkali resistant with a minimum breakthrough time of 480 minutes and a minimum thickness of 0.7 mm. For short term handling of the product use nitrile gloves with a minimum breakthrough time of 30 minutes and a minimum thickness of 0.4 mm. Use gloves to EN374 standards.
Other skin protection	When working this product for long periods an apron and rubber footwear are recommended. Non-absorbent and easy to remove clothing is recommended to minimise the risk of personal exposure. Do not wear open footwear.
Respiratory protection	Respiratory equipment should be worn if ventilation is insufficient, if there is vapour/ aerosol release and/ or risk assessment indicate additional protection is required. Respirators meeting EN143 Type P2 would be appropriate.
Thermal hazards	Not applicable
8.2.3. Environmental exposure controls	Do not release any undiluted product to drains or surface water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Slightly hazy, colourless to pale yellow liquid
State:	Liquid
Odour:	Characteristic, slight surfactant
Odour threshold:	Data not available
pH:	13 - 14
Melting point/ freezing point:	Water content expected to freeze at below 0°C
Boiling point, or initial boiling point and boiling range:	Water content will boil from 100°C
Flash point:	Not applicable
Evaporation rate:	As water for water content
Flammability (if solid or gas):	Not applicable
Lower and upper flammability or explosive limits:	Not applicable
Vapour pressure:	Data not available
Relative vapour density:	Data not available
Density and/or relative density:	1.02 – 1.05 g/ml at 20°C
Solubility:	The product is fully miscible in further water.
Partition coefficient: n-octanol/water:	Data not available



Auto-ignition temperature:	Not applicable
Decomposition temperature:	Data not available
Kinematic viscosity:	Not measured, anticipated to be <60 cPs.
Explosive properties:	Not applicable
Oxidising properties:	Not applicable
9.2. Other information	No other information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific reactions are anticipated. The product will react exothermically with acids.

10.2. Chemical stability

The product is expected to be chemically stable under anticipated storage and handling conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions are not expected to occur during storage and handling.

10.4. Conditions to avoid

There are no known hazardous conditions that would have negative effects during storage and handling.

10.5. Incompatible materials

This product will react exothermically with acids.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Not classified as acutely toxic. Based on the available data, the classification criteria are not met.

Irritation/ Corrosion

Classified as corrosive to skin and eyes.

Sensitisation

Not classified as a skin or respiratory sensitiser, based on the available data, the classification criteria are not met.

Mutagenicity

Not classified as a mutagen. Based on the available data, the classification criteria are not met.



Carcinogenicity

Not classified as a carcinogen. Based on the available data, the classification criteria are not met.

Reproductive toxicity

Not classified as a reprotoxin. Based on the available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not classified for specific target organic toxicity on single exposure. Based on the available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Not classified for specific target organic toxicity on repeated exposure. Based on the available data, the classification criteria are not met.

Aspiration hazard

Not classified as an aspiration hazard. Based on the available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

There is no specific test data for this product. Data is supplied for declared components.

C9 – C11 alcohol ethoxylate + 6-8 moles EO [CAS 68439-46-3]

Species	Test metric	Value
<i>Oncorhynchus mykiss</i> (Rainbow trout)	LC50 96H	5 mg/L
<i>Daphnia magna</i> (water flea)	EC50 48H	2.5 mg/L
<i>Pseudokirchneriella subcapitata</i> (algae)	EC50 96H	1.4 mg/L

Sodium hydroxide [CAS 1310-73-2] can have a significant negative impact on aquatic life, however this is linked to pH effects rather than direct toxicity. The presence of surfactants may also have an potentiating impact on effects from sodium hydroxide, making available data less likely to be applicable regarding exposure to this product.

12.2. Persistence and degradability

The product has not been tested for biodegradability. It contains multiple surfactants that are expected to be biodegradable. Sodium hydroxide is an inorganic material, the methods for determining biodegradability are not applicable to inorganic substances. Inorganic salts are expected to be dispersible in the environment, and dissolve, react and change form if present in the wider environment.

12.3. Bioaccumulative potential

Data not available.

12.4. Mobility in soil

No test data available. The product and constituent components are readily miscible in water and expected to be mobile in water and soil.

12.5. Results of PBT and vPvB assessment



The product has not been assessed for PBT or vPvB. The component substances have are not classified as PBT/ vPvB.

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment containers to be used for product include IBCs or steel/ plastic drums. Recycle the product where possible. The product should be considered a hazardous waste stream. Product disposal to sewer should be avoided, and only be carried out after treatment including neutralisation, and under relevant rules, e.g. Consent to Discharge.

Packaging should be recycled where possible. Waste treatment method for contaminated packaging should include a triple rinse with water, when dilute this effluent is eligible for disposal down domestic drains.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	1824	1824	1824
14.2. UN proper shipping name	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	Sodium hydroxide solution
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	II	II	II
14.5. Environmental hazards	No	Marine pollutant: No	No

Additional information

LQE: 1L, E2
Packing instructions: P001, IBC02
Mixed packing provisions: MP15
Tunnel code: 2E
Hazard ID Number: 80

14.6. Special precautions for user

No specific precautions known.

14.7. Maritime transport in bulk according to Annex II of MARPOL L73/78 and the IBC Code

Portable tanks and bulk containers: T7, TP2
ADR tank code: L4BN
Vehicle for tank carriage: AT



SECTION 15: Regulatory information

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

This SDS has been compiled according to UK SI 2019/758 and EC 1272/2008 as amended in the UK.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for this product. A chemical safety assessment has been carried out for component sodium hydroxide [CAS: 1310-73-2], appropriate safety information has been placed in the body of this SDS.

SECTION 16: Other information

a) Changes made to SDS:

Changes from revision 3 to revision 4:

Section 1; Identified uses updated. Supplier information updated to include manufacturer information. Emergency contact details updated.

Section 2; CHIP elements removed. P-Statements updated. Small scale packaging information added.

Section 3; Water removed as a component. REACH No removed for surfactant component, this is due to inconsistency against degree of ethoxylation in dossier. CHIP elements removed.

Section 4; First aid advice and symptom information updated.

Section 5; Section simplified.

Section 6; Rewritten with additional details included.

Section 7; Rewritten, section simplified.

Section 8; Rewritten, WEL data updated, DNEL/PNEC data added, PPE recommendations updated.

Section 9; Physical properties updated.

Section 10; Information updated.

Section 11; Section rewritten.

Section 12; Rewritten with additional details included.

Section 13; Rewritten with additional details included.

Section 14; Section reformatted.

Section 15; Rewritten, additional information included, section simplified.

b) Key (or legend)

PPE Personal Protective Equipment

LC50 Lethal Concentration affecting 50% of sample population

EC50 Effective Concentration affecting 50% of sample population

c) Literature references

Data gathered for raw materials from European Chemicals Agency:

<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

Last accessed (12/07/2023)

Some physical properties reported from direct laboratory testing performed at manufacturer site.

Some properties gathered from supplier SDS of constituent components.

d) Details of relevant hazard information

H290: May be corrosive to metals

H302: Harmful if swallowed

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage



P234:	Keep only in original packaging.
P260:	Do not breathe dust/fume/gas/mist/vapours/spray.
P280:	Wear protective gloves/ protective clothing/ eye protection/ face protection
P303 + P361 + P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower)
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
P391:	Collect spillage
P406:	Store in a corrosive resistant/ container with a resistant liner
P501:	Dispose of contents/ container to a waste collection point, empty container may be disposed of to trade or municipal waste

e) Appropriate training for workers

Training for spillage and chemical handling is recommended.

f) Classification method

Classification on the basis of components and specific test data.