



Safety Data Sheet dated 28/5/2019, version 2

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

1.1. Product identifier

Mixture identification:

Trade name: DPD 1B PER CENTRALINE

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

Identified use:

Reagent for the analysis of active chlorine with automatic control units. To be used only in combination with DPD1 B.

Uses advised against:

Any other use different from the identified uses.

1.3. Details of the supplier of the safety data sheet

Company:

BARCHEMICALS SRL

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

ITALY

PHONE. +39 059/536502

FAX. +39 059/536742

www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it

1.4. Emergency telephone number

Barani Dr.Corrado - MOBILE PHONE. +39 335/6109383

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)



Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.



Danger, Eye Dam. 1, Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P102 Keep out of reach of children.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

Safety Data Sheet
DPD 1B PER CENTRALINE

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

Special Provisions:
None

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
 vPvB Substances: None - PBT Substances: None
 Other Hazards:
 No other hazards


SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
0.2 %	sulphuric acid ... %	Index number: CAS: EC: REACH No.: 016-020-00-8 7664-93-9 231-639-5 01-21194588 38-20	 3.2/1 Skin Corr. 1 H314

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.
 Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
 Protect uninjured eye.

In case of Ingestion:

Rinse well your mouth
 Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.
 In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.
 If breathing is irregular or stopped, administer artificial respiration.

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

If inhaled it can cause the following symptoms: cough, labored breathing, sore throat and difficulty breathing.

Safety Data Sheet
DPD 1B PER CENTRALINE

Contact with the skin produces redness, burning and pain.
Accidental ingestion may cause abdominal pain.
After contact with the eyes produces redness and pain.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Immediately take off contaminated clothing.

After contact with skin, wash immediately with plenty of soap and water.

In case of contact with eyes, rinse immediately for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed, rinse mouth. Consult a doctor as soon as possible.

If inhaled, move the victim to fresh air and keep warm and at rest.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

Water.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons to safety.

Evacuate the surrounding areas.

Prevent entry of foreign and unprotected personnel.

Do not touch or walk on spilled material.

Provide adequate ventilation.

Avoid breathing vapors or mists.

Provide adequate ventilation.

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Stop the escape if there is no risk. Move the containers from the spill area. Get closer to the source of overwhelming emission. Prevent spills in sewage systems, waterways, basements or restricted areas. Wash and convey the spilled amounts in a waste treatment plant.

In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and

Safety Data Sheet
DPD 1B PER CENTRALINE

start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Store at room temperature and away from direct sunlight.
Do not eat, drink or smoke at the workplace. Foods and beverages should be consumed only in areas specifically identified after removing contaminated clothing and protective equipment and after washing your hands. Wash in any case hands after handling the substance / mixture.
Keep away from food, drink and feed.
Incompatible materials:
See the next paragraph 10.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
See section 1.2.

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
sulphuric acid ... % - CAS: 7664-93-9
EU - TWA(8h): 0,05 mg/m³ - Notes: thoracic fraction
ACGIH - TWA(8h): 0.2 mg/m³ - Notes: (T), A2(M) - Pulm func
- DNEL Exposure Limit Values
sulphuric acid ... % - CAS: 7664-93-9
Worker Professional: 0.05 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Professional: 0.1 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects
- PNEC Exposure Limit Values
sulphuric acid ... % - CAS: 7664-93-9
Target: Fresh Water - Value: 0.0025 mg/l
Target: Marine water - Value: 0.00025 mg/l
Target: Freshwater sediments - Value: 0.002 mg/kg
Target: Marine water sediments - Value: 0.002 mg/kg
Target: Microorganisms in sewage treatments - Value: 8.8 mg/l
- 8.2. Exposure controls
Eye/face protection:
Eye glasses with side protection. EN166
Protection for skin:
Clothing resistant to corrosive products CLASS I, EN 340
Protection for hands:
Gloves resistant to chemicals. EN 374
Respiratory protection:
Not necessary in normal use.

Safety Data Sheet
DPD 1B PER CENTRALINE
Thermal Hazards:

Not applicable (the product is handled at room temperature)

Environmental exposure controls:

Do not allow the product to be absorbed from the soil or from entering waterways or sewers.

Do not let product enter drains. Discharge into the environment must be avoided.

Appropriate engineering controls:

Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.

Predict the presence of showers and eye wash fountains at the workplace.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid Clear Colorless	--	--
Odour:	Odorless	--	--
Odour threshold:	N.A.	--	--
pH:	1,5	--	at 20 °C
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	105 °C	--	--
Flash point:	N.A.	--	--
Evaporation rate:	Not Available	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	Not Available	--	--
Vapour density:	Not Available	--	--
Relative density:	1.01 Kg/l	--	at 20 °C
Solubility in water:	Complete	--	at 20 °C
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	Not applicable	--	Solution of ionizing substances
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	Not Available	--	--
Explosive properties:	Prodotto non Esplosivo	--	--
Oxidizing properties:	Not oxidizing product	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

Safety Data Sheet
DPD 1B PER CENTRALINE

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions.
- 10.2. Chemical stability
Stable under recommended storage and handling. Please refer to section 7 of the MSDS.
- 10.3. Possibility of hazardous reactions
No hazardous reactions when stored and handled properly.
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
No one in particular.
- 10.6. Hazardous decomposition products
Sulfur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

DPD 1B PER CENTRALINE

- a) acute toxicity
Not classified
Based on available data, the classification criteria are not met
- b) skin corrosion/irritation
The product is classified: Skin Corr. 1A H314
- c) serious eye damage/irritation
The product is classified: Eye Dam. 1 H318
- d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
- e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
- f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
- g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
- h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
- j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

sulphuric acid ... % - CAS: 7664-93-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2140 mg/kg - Source: SMYTH HF
JR,CARPENTER CP,WEIL CS,POZZANI UC,STRIEGEL JA & NYCUM JS(1969)
OECD

Test: LC50 - Route: Inhalation Mist - Species: Rat = 375 mg/m³ - Source: RUNKLE BK
& HAHN FF (1976)

Safety Data Sheet
DPD 1B PER CENTRALINE

- Test: LC50 - Route: Inhalation Mist - Species: Mouse = 0.85 mg/l - Duration: 4h -
Source: RUNKLE BK & HAHN FF (1976)
Test: LC50 - Route: Inhalation Mist - Species: Mouse = 0.6 mg/l - Duration: 8h -
Source: RUNKLE BK & HAHN FF (1976)
- e) germ cell mutagenicity:
Test: Mutagenesis - Species: Generic Bacteria Negative - Source: HERBOLD BA
(1988A)
- f) carcinogenicity:
Test: Carcinogenicity - Route: Oral - Species: Rat Negative

SECTION 12: Ecological information

- 12.1. Toxicity
No information is available on the mixture as a whole. This is the information on
eco-toxicological effects of the individual components.
- DPD 1B PER CENTRALINE
Not classified for environmental hazards
Based on available data, the classification criteria are not met
- sulphuric acid ... % - CAS: 7664-93-9
- a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: OECD
GUIDELINE 201
Endpoint: LC50 - Species: Fish > 16 mg/l - Duration h: 96
Endpoint: NOEC - Species: Fish = 0.31 mg/l
Endpoint: NOEC - Species: activated sludge = 26000 mg/l - Duration h: 888
- 12.2. Persistence and degradability
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled
conditions. In so doing, comply with the local and national regulations currently in force.
- Additional disposal information:
Retrieve if possible. Send to authorized disposal plants or incineration under controlled
conditions. Work according to local and national regulations. Recover if possible. Send to
authorized disposal plants or for incineration under controlled conditions. Operate according
to local and national regulations.

SECTION 14: Transport information



- 14.1. UN number
ADR-UN Number: 3264

Safety Data Sheet
DPD 1B PER CENTRALINE

- IATA-UN Number: 3264
IMDG-UN Number: 3264
- 14.2. UN proper shipping name
ADR-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(sulphuric acid ... %)
IATA-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(sulphuric acid ... %)
IMDG-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(sulphuric acid ... %)
- 14.3. Transport hazard class(es)
ADR-Class: 8
ADR - Hazard identification number: 88
IATA-Class: 8
IATA-Label: 8
IMDG-Class: 8
- 14.4. Packing group
ADR-Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
ADR-Subsidiary risks: -
ADR-S.P.: 274
ADR-Transport category (Tunnel restriction code): 1 (E)
IATA-Passenger Aircraft: 850
IATA-Subsidiary risks: -
IATA-Cargo Aircraft: 854
IATA-S.P.: A3 A803
IATA-ERG: 8L
IMDG-EmS: F-A , S-B
IMDG-Subsidiary risks: -
IMDG-Stowage and handling: Category B SW2
IMDG-Segregation: -
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)

Safety Data Sheet
DPD 1B PER CENTRALINE

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

For professional use.

Full text of phrases referred to in Section 3:

H314 Causes severe skin burns and eye damage.

Hazard class and hazard category	Code	Description
Skin Corr. 1	3.2/1	Skin corrosion, Category 1
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Eye Dam. 1	3.3/1	Serious eye damage, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Liability exclusion clause: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

Safety Data Sheet
DPD 1B PER CENTRALINE

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.