

# Safety data sheet

Page: 1/16

---

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 10.06.2015

Version: 8.0

(ID no. 30563411/SDS\_GEN\_GB/EN)

Date of print 11.06.2015

---

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

### 1.1. Product identifier

**Down 'N' Dirty**

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

Relevant identified uses: products for water conditioning

For the detailed identified uses of the product see appendix of the safety data sheet.

### 1.3. Details of the supplier of the safety data sheet

Company:  
BASF SE  
67056 Ludwigshafen  
GERMANY

Contact address:  
BASF plc  
PO Box 4, Earl Road, Cheadle Hulme,  
Cheadle, Cheshire  
SK8 6QG, UNITED KINGDOM

Telephone: +44 161 485-6222  
E-mail address: product-safety-north@basf.com

### 1.4. Emergency telephone number

International emergency number:  
Telephone: +49 180 2273-112

---

## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Met. Corr. 1

Acute Tox. 4 (oral)  
 Acute Tox. 4 (dermal)  
 Skin Corr./Irrit. 1B  
 Eye Dam./Irrit. 1  
 STOT SE 3 (irritating to respiratory system)

For the classifications not written out in full in this section the full text can be found in section 16.

## 2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:



Signal Word:  
 Danger

Hazard Statement:

H290	May be corrosive to metals.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H335	May cause respiratory irritation.
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P271	Use only outdoors or in a well-ventilated area.
P260	Do not breathe dust or mist.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with plenty of water and soap thoroughly after handling.
P234	Keep only in original container.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P361 + P364	Remove/Take off immediately all contaminated clothing and wash before reuse.
P390	Absorb spillage to prevent material damage.

**Precautionary Statements (Storage):**

- |             |  |
|-------------|--|
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed.         |
| P405        | Store locked up.   |
| P406        | Store in corrosive resistant/... container with a resistant inner liner. |

**Precautionary Statements (Disposal):**

- |      |   |
|------|---|
| P501 | Dispose of contents/container to hazardous or special waste collection point. |
|------|---|

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: METHANESULPHONIC ACID

**2.3. Other hazards**According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered.

**SECTION 3: Composition/Information on Ingredients****3.1. Substances**

Not applicable

**3.2. Mixtures**Chemical nature

methanesulphonic acid, in water

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

methanesulphonic acid

Content (W/W): >= 50 % - < 75 %	Met. Corr. 1
CAS Number: 75-75-2	Acute Tox. 4 (oral)
EC-Number: 200-898-6	Acute Tox. 4 (dermal)
REACH registration number: 01-2119491166-34	Skin Corr./Irrit. 1B
INDEX-Number: 607-145-00-4	Eye Dam./Irrit. 1
	STOT SE 3 (irr. to respiratory syst.)
	H290, H312, H302, H335, H314

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Do not induce vomiting. Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

---

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:  
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:  
water jet

### 5.2. Special hazards arising from the substance or mixture

harmful vapours, carbon oxides

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

### 5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

---

## SECTION 6: Accidental Release Measures

| High risk of slipping due to leakage/spillage of product.

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.

### 6.2. Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

| Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

### 6.3. Methods and material for containment and cleaning up

| For large amounts: Dike spillage. Pump off product.

For residues: Pick up with suitable absorbent material.

| Dispose of absorbed material in accordance with regulations.

### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

---

## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

Take precautionary measures against static discharges.

### 7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

---

## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

No occupational exposure limits known.

#### PNEC

freshwater: 0.012 mg/l

marine water: 0.0012 mg/l

intermittent release: 0.12 mg/l

sediment (freshwater): 0.0251 mg/kg

soil: 0.00183 mg/kg

STP: 100 mg/l

#### DNEL

worker:

Long-term exposure - local effects, Inhalation: 2.89 mg/m<sup>3</sup>

worker:

Long-term exposure- systemic effects, dermal: 19.44 mg/kg

consumer:

Long-term exposure- systemic effects, Inhalation: 1.44 mg/m<sup>3</sup>

consumer:

Short-term exposure - systemic effects, Inhalation: 1.44 mg/m<sup>3</sup>

consumer:

Long-term exposure- systemic effects, dermal: 8.33 mg/kg

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

polyvinylchloride (PVC) - 0.7 mm coating thickness

butyl rubber (butyl) - 0.7 mm coating thickness

fluoroelastomer (Viton)

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

Body protection:

Body protection must be chosen based on level of activity and exposure., acid- resp. lye-proof apron, e.g. of rubber (f.e. according to EN 14605), protection boots, f.e. of rubber (e.g. according to EN 20346), acid-proof chemical protection suit (f.e. according to EN 14605)

#### General safety and hygiene measures

No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse.

---

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	liquid	
Colour:	colourless	
Odour:	product specific	
Odour threshold:	not determined	
pH value:	< 1 (25 °C) (measured with the undiluted substance)	
solidification temperature:	-54 °C	
boiling temperature:	135 °C	
Flash point:	approx. 157 °C The data given are those of the active ingredient.	(DIN EN 22719; ISO 2719)
Evaporation rate:	not determined	
Flammability:	not flammable	(other)
Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.	

Upper explosion limit:	For liquids not relevant for classification and labelling.	
Ignition temperature:	> 600 °C	(DIN 51794)
Vapour pressure:	4 mbar (20 °C) 22 mbar (50 °C)	
Density:	approx. 1.35 g/cm <sup>3</sup> (20 °C)	(DIN 51757)
Relative density:	approx. 1.35 (20 °C)	
Relative vapour density (air):	not determined	
Solubility in water:	soluble	
Partitioning coefficient n-octanol/water (log Kow):	-5.17	(OECD Guideline 117)
Self ignition:	not self-igniting	Test type: Spontaneous self-ignition at room-temperature. (Method: other)
Thermal decomposition:	not determined	
Viscosity, dynamic:	not determined	
Viscosity, kinematic:	7.63 mm <sup>2</sup> /s (25 °C)	
Explosion hazard:	not explosive	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	(other)

## 9.2. Other information

Surface tension:		(other)
	Based on chemical structure, surface activity is not to be expected.	
Grain size distribution:	The substance / product is marketed or used in a non solid or granular form.	

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:	Corrosive effect on metals.	
Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.



### 10.3. Possibility of hazardous reactions

In aqueous solution, evolves hydrogen on contact with metals.

### 10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

### 10.5. Incompatible materials

Substances to avoid:  
bases, oxidizing agents

### 10.6. Hazardous decomposition products

Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition products:  
sulfur oxides, Acid fumes

---

## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:  
The toxicity of the product is based on its corrosivity. Of moderate toxicity after short-term skin contact. Of moderate toxicity after single ingestion.

Experimental/calculated data:  
LD50 rabbit (dermal): > 1,000 - 2,000 mg/kg

*Information on: methanesulphonic acid*

*Experimental/calculated data:*

**|** LD50 rat (oral): 649 mg/kg  
-----

*Information on: methanesulphonic acid*

*Experimental/calculated data:*

**|** LC0 mouse (by inhalation): > 1.88 mg/m<sup>3</sup> 1 h  
-----

#### Irritation

Assessment of irritating effects:  
Corrosive! Damages skin and eyes.

Experimental/calculated data:

Skin corrosion/irritation mouse: Corrosive. (other)

Serious eye damage/irritation rabbit: irreversible damage (OECD Guideline 405)

#### Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Buehler test guinea pig: Non-sensitizing.

#### Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in bacteria. The substance was not mutagenic in a test with mammals.

#### Carcinogenicity

Assessment of carcinogenicity:

Study does not need to be conducted.

#### Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Experimental/calculated data:

other rat (gavage); 250, 500 and 1000 mg/kg bw

NOAEL Mat.:  $\geq 1,000$  mg/kg

NOAEL F1:  $\geq 1,000$  mg/kg

#### Developmental toxicity

Assessment of teratogenicity:

In animal studies the substance did not cause malformations.

#### Specific target organ toxicity (single exposure)

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation. Prolonged repeated exposure caused inflammable degenerative processes in the respiratory tract of rats.

#### Aspiration hazard

not applicable

---

## SECTION 12: Ecological Information

### 12.1. Toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) > 10 - 100 mg/l, *Oncorhynchus mykiss* (OECD Guideline 203, static)

The details of the toxic effect relate to the nominal concentration.

LC50 (96 h) > 10,000 mg/l, *Cyprinodon variegatus* (OECD Guideline 203, static)

The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates:

EC50 (48 h) > 10 - 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Aquatic plants:

EC50 (72 h) > 10 - 100 mg/l (growth rate), *Selenastrum capricornutum* (OECD Guideline 201)

The details of the toxic effect relate to the nominal concentration.

Microorganisms/Effect on activated sludge:

EC20 (30 min) > 1,000 mg/l, activated sludge, domestic (DIN EN ISO 8192-OECD 209-88/302/EEC, P. C, aquatic)

Nominal concentration.

Chronic toxicity to fish:

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates:

Study scientifically not justified.

Assessment of terrestrial toxicity:

Study scientifically not justified.

### 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

Readily biodegradable (according to OECD criteria).

**Elimination information:**

> 70 % DOC reduction (OECD 301 A (new version)) Based on OECD criteria the product is readily biodegradable.

**Assessment of stability in water:**

Study scientifically not justified.

**12.3. Bioaccumulative potential****Assessment bioaccumulation potential:**

Significant accumulation in organisms is not to be expected.

**12.4. Mobility in soil****Assessment transport between environmental compartments:**

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

**12.5. Results of PBT and vPvB assessment**

According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

**12.6. Other adverse effects**

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

**12.7. Additional information****Adsorbable organically-bound halogen (AOX):**

This product contains no organically-bound halogen.

**Other ecotoxicological advice:**

Do not allow to enter soil, waterways or waste water channels.

---

**SECTION 13: Disposal Considerations****13.1. Waste treatment methods**

| Must be disposed of or incinerated in accordance with local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (United Kingdom)

Contaminated packaging:  
Uncontaminated packaging can be re-used.  
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

---

## SECTION 14: Transport Information

### Land transport

ADR

UN number UN3265  
UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains METHANESULPHONIC ACID)  
Transport hazard class(es): 8  
Packing group: II  
Environmental hazards: no  
Special precautions for user: Tunnel code: E

RID

UN number UN3265  
UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains METHANESULPHONIC ACID)  
Transport hazard class(es): 8  
Packing group: II  
Environmental hazards: no  
Special precautions for user: None known

### Inland waterway transport

ADN

UN number UN3265  
UN proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains METHANESULPHONIC ACID)  
Transport hazard class(es): 8  
Packing group: II  
Environmental hazards: no  
Special precautions for user: None known  
Transport in inland waterway vessel: Not evaluated

### Sea transport

IMDG

UN number:	UN 3265
UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains METHANESULPHONIC ACID)
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	no
	Marine pollutant: NO
Special precautions for user:	None known

### **Air transport**

#### IATA/ICAO

UN number:	UN 3265
UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains METHANESULPHONIC ACID)
Transport hazard class(es):	8
Packing group:	II
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	None known

#### **14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

#### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

#### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

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

Regulation:	Not evaluated
-------------	---------------

Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

**Further information**

This product is subject to the most recent edition of "The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations" and their amendments (United Kingdom).

**SECTION 15: Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

This product is classified under the Chemicals (Hazard Information and Packaging) Regulations, (CHIP) (United Kingdom).

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment performed

**SECTION 16: Other Information**

Information on intended use: This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

Met. Corr.	Corrosive to metals
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
H290	May be corrosive to metals.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H335	May cause respiratory irritation.
H314	Causes severe skin burns and eye damage.

If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: [product-safety-north@basf.com](mailto:product-safety-north@basf.com)

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

---

Vertical lines in the left hand margin indicate an amendment from the previous version.