# Safety Data Sheet

*according to the (US) Hazard Communication Standard (29 CFR 1910.1200)*

*Revision date: 28.05.2015* *Version: 1.0* *Print date: 31.05.2015*

## SECTION 1: Identification

### Product identifier

| | |
|---|---|
| Trade name/designation: | Nitric acid 50% v/v |
| Product No.: | BDH7335 |
| Substance name: | |
| CAS No.: | |
| INDEX No.: | 000-000-00-0 |
| REACH registration No.: | Not yet communicated down the supply chain. |
| Other means of identification: | |

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

| | |
|---|---|
| Relevant identified uses: | General chemical reagent |

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

***VWR International, LLC***

| | |
|---|---|
| Street | 100 Matsonford Road |
| Postal code/city | Radnor, PA 19087-8660 |
| Telephone | 610-386-1700 |
| E-mail | www.vwr.com |

### Emergency telephone

| | |
|---|---|
| Telephone | +1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA) |

***VWR International Co.***

| | |
|---|---|
| Street | 2360 Argentia Road |
| Postal code/city | Mississauga, ON, L5N 5Z7 |
| Telephone | 800-932-5000 |
| E-mail | www.vwr.com |

### Emergency telephone

| | |
|---|---|
| Telephone | +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada) |

## SECTION 2: Hazards identification

### Classification of the substance or mixture

### Classification according GHS

| Hazard classes and hazard categories | Hazard statements |
|---|---|
| Skin corrosion, category 1A | H314 |

### Classification according to Directive 67/548/EEC or 1999/45/EC

| | | |
|---|---|---|
| | | |

### Label elements

### Labelling according GHS

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. |
| P301+P330+P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P310 | IF exposed or concerned: Immediately call a POISON CENTER/doctor/… |

### Labelling (67/548/EEC or 1999/45/EC)

Hazard symbols

| R-phrases | |
|---|---|
| | |

| S-phrases | |
|---|---|
| | |

Other hazards

SVHC No

## SECTION 3: Composition / information on ingredients

**Hazardous ingredients Classification according to the OSHA Hazard Communication Standard 29 CFR 1910.1200**

| Substance name | Concentration | Product identifier | Hazard classes and hazard categories |
|---|---|---|---|
| | | | |

## SECTION 4: First aid measures

### General information

IF exposed: Immediately call a POISON CENTRE/doctor/…. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

### After inhalation

Immediately call a POISON CENTRE/doctor/…. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

### In case of ingestion

Immediately call a POISON CENTRE/doctor/…. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

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

no data available

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

no data available

### Self-protection of the first aider

First aider: Pay attention to self-protection!

### Information to physician

no data available

## SECTION 5: Firefighting measures

### Extinguishing media

**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Extinguishing media which must not be used for safety reasons**

no data available

### Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic

### Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

### Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety. Use personal protection equipment. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so.

### Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided. Ensure waste is collected and contained.

### Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.

### Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation skin contact Eye contact Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

### Conditions for safe storage, including any incompatibilities

storage temperature:

Storage class:

Keep in a cool, well-ventilated place. Keep/Store only in original container.

### Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### Exposure controls

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Personal protection equipment**

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

*Eye/face protection*

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

Recommendation: VWR 111-0432

*Skin protection*

no data available

By short-term hand contact

| | |
|---|---|
| Suitable material: | no data available |
| Thickness of the glove material: | no data available |
| Breakthrough time (maximum wearing time): | no data available |
| Recommended glove articles: | no data available |

By long-term hand contact

| | |
|---|---|
| Suitable material: | no data available |
| Thickness of the glove material: | no data available |
| Breakthrough time (maximum wearing time): | no data available |
| Recommended glove articles: | no data available |

*Respiratory protection*

no data available

Suitable respiratory protection apparatus:

| | |
|---|---|
| Recommendation: | no data available |
| Suitable material: | no data available |
| Recommendation: | no data available |

*Additional information*

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

*Environmental exposure controls*

no data available

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

| | |
|---|---|
| (a) Appearance | |
| Physical state: | liquid |
| Colour: | no data available |
| (b) Odour: | no data available |
| (c) Odour threshold: | no data available |

### Safety relevant basic data

| | |
|---|---|
| (d) pH: | no data available |
| (e) Melting point/freezing point: | no data available |
| (f) Initial boiling point and boiling range: | no data available |
| (g) Flash point: | no data available |
| (h) Evaporation rate: | no data available |
| (i) Flammability (solid, gas): | not applicable |
| (j) Upper/lower flammability or explosive limits | |
| Lower explosion limit: | no data available |
| Upper explosion limit: | no data available |
| (k) Vapour pressure: | no data available |
| (l) Vapour density: | no data available |
| (m) Relative density: | no data available |
| (n) Solubility(ies) | |
| at 20 °C: | no data available |
| Soluble (g/L) in: | no data available |
| (o) Partition coefficient: n-octanol/water: | no data available |
| (p) Auto-ignition temperature: | no data available |
| (q) Decomposition temperature: | no data available |
| (r) Viscosity | |
| Kinematic viscosity: | no data available |
| Dynamic viscosity: | no data available |
| (s) Explosive properties: | not applicable |
| (t) Oxidising properties: | not applicable |

### Other information

| | |
|---|---|
| Bulk density: | no data available |
| Refraction index: | no data available |
| Dissociation constant: | no data available |
| Surface tension: | no data available |
| Henry constant: | no data available |

## SECTION 10: Stability and reactivity

### Reactivity

no data available

### Chemical stability

no data available

### Possibility of hazardous reactions

no data available

### Conditions to avoid

no data available

### Incompatible materials

no data available

### Hazardous decomposition products

no data available

### Additional information

no data available

## SECTION 11: Toxicological information

### Information on toxicological effects

**Acute effects**

*Acute oral toxicity*:
no data available

*Acute dermal toxicity*:
no data available

*Acute inhalation toxicity*:
no data available

**Irritant and corrosive effects**

*Primary irritation to the skin:*
Causes severe skin burns and eye damage.

*Irritation to eyes:*
Causes serious eye damage.

*Irritation to respiratory tract:*
not applicable

**Respiratory or skin sensitisation**

In case of skin contact: not sensitising
After inhalation: not sensitising

**STOT-single exposure**

not applicable

**STOT-repeated exposure**

not applicable

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

No indication of human carcinogenicity.

**Germ cell mutagenicity**

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

## SECTION 12: Ecological information

### Ecotoxicity

**Acute (short-term) fish toxicity:**

no data available

**Chronic (long-term) fish toxicity**:

no data available

**Acute (short-term) daphnia toxicity:**

no data available

**Chronic (long-term) daphnia toxicity:**

no data available

**Acute (short-term) algae toxicity:**

no data available

**Chronic (long-term) algae toxicity:**

no data available

### Persistence and degradability

no data available

### Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

### Mobility in soil:

no data available

### Results of PBT/vPvB assessment

no data available

### Other adverse effects

no data available

## SECTION 13: Disposal considerations

### Waste treatment methods

**Appropriate disposal / Product**

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

**Appropriate disposal / Package**

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

**Additional information**

no data available

## SECTION 14: Transport information

### Land transport (ADR/RID/DOT)

| | |
|---|---|
| UN-No.: | 2031 |
| Proper Shipping Name: | NITRIC ACID |
| Class(es): | 8 |
| Classification code: | C1 |
| Hazard label(s): | 8 |
| Packing group: | II |
| Environmental hazards: | No |
| Special precautions for user: | |
| Hazard identification number (Kemler No.): | 80 |
| Tunnel restriction code: | E<br>(Passage forbidden through tunnels of category E.) |

### Sea transport (IMDG)

| | |
|---|---|
| UN-No.: | 2031 |
| Proper Shipping Name: | NITRIC ACID other than red fuming, with less than 65% nitric acid |
| Class(es): | 8 |
| Classification code: | |
| Hazard label(s): | 8 |
| Packing group: | II |
| Environmental hazards: | No |
| MARINE POLLUTANT: | No |
| Special precautions for user: | |
| Segregation group: | 1 |
| EmS-No. | F-A S-B |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not relevant

### Air transport (ICAO-TI / IATA-DGR)

| | |
|---|---|
| UN-No.: | 2031 |
| Proper Shipping Name: | NITRIC ACID, other than red fuming, with > 20% but < 65% nitric acid |
| Class(es): | 8 |
| Classification code: | C1 |
| Hazard label(s): | 8 |
| Packing group: | II |
| Special precautions for user | not relevant |

## SECTION 15: Regulatory information

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

**General rules**

Water hazard class (WGK): no data available

**California Prop 65 Components**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

### Chemical Safety Assessment

no data available

## SECTION 16: Other information

**Abbreviations and acronyms**

ACGIH - American Conference of Governmental Industrial Hygiensts
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)
CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures
DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)
DOT – U.S. Department of Transportation
Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)
IATA-DGR - International Air Transport Association-Dangerous Goods Regulations
ICAO-TI - International Civil Aviation Organization-Technical Instructions
IMDG - International Maritime Code for Dangerous Goods
LTV - Long Term Value
NIOSH - National Institute for Occupational Safety and Health
OSHA - Occupational Safety & Health Administration
PBT - Persistent, Bioaccumulative and Toxic
RID - Regulation concerning the International Carriage of Dangerous Goods by Rail
STV - Short Term Value
SVHC - Substances of Very High Concern
vPvB - very Persistent, very Bioaccumulative

**Additional information**

Indication of changes: general update

*The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.*