

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2023

Reviewed on 08/06/2023

### 1 Identification

#### Product identifier

Trade name: **MEMBRANE CLEANER B**

Article number: 0654

Application of the substance / the mixture Industrial cleaner

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

#### Manufacturer / Importer / Supplier:

Romaco BV  
Edisonstraat 11  
NL - 3261 LD Oud-Beijerland  
The Netherlands  
Tel: +31 186 615244  
Fax: +31 186 619385  
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Information department: Last edition of Material Safety Data Sheet on: www.rochem.nl

#### Emergency telephone number:

Europe, Middle East & Africa: +44 1865 407333  
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Canada: +1 800 579 7421 (Toll Free)  
United States: +1 866 928 0789 (Toll Free)  
East/South East Asia: +65 3158 1412  
Australia: +61 18000 74234 (Toll Free) acces from Austalia only

### 2 Hazard(s) identification

#### Classification of the substance or mixture



GHS05 Corrosion

Skin Corrosion 1A H314 Causes severe skin burns and eye damage.

Eye Damage 1 H318 Causes serious eye damage.

#### Label elements

**Keep out of reach of children** The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms GHS05

Signal word Danger

#### Hazard-determining components of labeling:

nitric acid  
Phosphoric acid

#### Hazard statements

Causes severe skin burns and eye damage.

#### Precautionary statements

Do not breathe dusts or mists.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash thoroughly after handling.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Wash contaminated clothing before reuse.  
Specific treatment (see on this label).  
If swallowed: Rinse mouth. Do NOT induce vomiting.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Classification system:

#### NFPA ratings (scale 0 - 4)



Health = 3  
Fire = 0  
Reactivity = 0

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**HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = 3
FIRE	0	Fire = 1
REACTIVITY	0	Reactivity = 0

### Other hazards

### Results of PBT and vPvB assessment

**PBT:** Not applicable.






**vPvB:** Not applicable.

### 3 Composition/information on ingredients

## Mixtures

**Description:** Cleansing agent

**Dangerous components:**

Dangerous components:		
7697-37-2	nitric acid  Oxidizing Liquids 2, H272;  Corrosive to Metals 1, H290; Skin Corrosion 1A, H314;  Acute Toxicity - Oral 4, H302; Acute Toxicity - Inhalation 4, H332	2.5-10%
7664-38-2	Phosphoric acid  Skin Corrosion 1B, H314;  Acute Toxicity - Oral 4, H302	2.5-10%

## 4 First-aid measures

### Description of first aid measures

**General information:**

Persons, providing assistance, should avoid exposure and danger for themselves or others.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Never give anything by mouth to an unconscious person.

**After inhalation:**

Remove the victim to fresh air and keep him/her at rest in a position that facilitates breathing.

Seek medical treatment in case of complaints.

**After skin contact:**

Take off contaminated clothing immediately and wash the skin with plenty of water (possibly showering).

If skin irritation continues, consult a doctor.

**After eye contact:**

If possible, remove contact lenses.

Rinse opened eye for several minutes (at least 15 minutes) under running water. If symptoms persist, consult a doctor.

**After ingestion:**

**DO NOT INDUCE VOMITING!**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

## Extinguishing media

**Suitable extinguishing agents:**

Extinguishing powder, foam or water spray.

Use fire fighting measures that suit the environment.

**Special hazards arising from the substance or mixture** No further relevant information available.

### Advice for firefighters

**Protective equipment:** Wear self-contained respiratory protective device.

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## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:** for disposing to sewer: seek approval from Sewer System Operator

### Methods and material for containment and cleaning up:

Dilute remainder with plenty of water.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

### Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### Protective Action Criteria for Chemicals

#### PAC-1:

7697-37-2	nitric acid	0.16 ppm
7664-38-2	Phosphoric acid	3 mg/m <sup>3</sup>

#### PAC-2:

7697-37-2	nitric acid	24 ppm
7664-38-2	Phosphoric acid	30 mg/m <sup>3</sup>

#### PAC-3:

7697-37-2	nitric acid	92 ppm
7664-38-2	Phosphoric acid	150 mg/m <sup>3</sup>

## 7 Handling and storage

### Handling:

#### Precautions for safe handling

Use only in well ventilated areas (eg natural ventilation).

Avoid inhalation of vapors and contact with eyes, skin and clothing.

Store in cool, dry place in tightly closed receptacles.

**Information about protection against explosions and fires:** No special measures required.

### Conditions for safe storage, including any incompatibilities

#### Storage:

**Requirements to be met by storerooms and tanks:** Store only in the original receptacle.

**Information about storage in one common storage facility:** Do not store together with alkalis (caustic solutions).

#### Further information about storage conditions:

Protect from frost.

Keep receptacle tightly sealed.

**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see section 7.

### Control parameters

#### Components with limit values that require monitoring at the workplace:

##### 7697-37-2 nitric acid

PEL	Long-term value: 5 mg/m <sup>3</sup> , 2 ppm
REL	Short-term value: 10 mg/m <sup>3</sup> , 4 ppm Long-term value: 5 mg/m <sup>3</sup> , 2 ppm
TLV	Short-term value: (4) NIC-0.025* ppm Long-term value: (2) ppm *inh. fraction + vapor, NIC-A4

##### 7664-38-2 Phosphoric acid

PEL	Long-term value: 1 mg/m <sup>3</sup>
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REL	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
TLV	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>

### DNELs

#### 7697-37-2 nitric acid

Inhalative	Acute - local effects	1.3 mg/m3 (Consumer)
		2.6 mg/m3 (Worker)
	Long-term - local effects	0.65 mg/m3 (Consumer)
	Long-term - systemic effects	1.3 mg/m3 (Worker)

**Additional information:** The lists that were valid during the creation were used as basis.

### Exposure controls

#### Personal protective equipment:

#### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Breathing equipment:** Not necessary if room is well-ventilated.

#### Protection of hands:

Only use chemical-protective gloves with CE-labeling of category III.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

### Material of gloves

Gloves Neo-Nitrile™ 300 – AQL or 0.65 (level 3). Thickness-0.35 mm.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### Penetration time of glove material

Permeation: Breakthrough time > 360 min

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Eye protection:



Tightly sealed goggles

Use safety glasses that meets the requirements of EN 166; latest versions.

**Body protection:** Protective work clothing

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

#### Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Characteristic

pH-value at 20 °C (68 °F): 1.5

#### Change in condition

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)

Flash point: Not applicable.

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**Ignition temperature:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

**Density at 20 °C (68 °F):** 1.041 g/cm<sup>3</sup> (8.687 lbs/gal)

**Solubility in / Miscibility with Water:** Fully miscible.

**Viscosity:**

**Dynamic at 20 °C (68 °F):** 2 mPas

**Solvent content:**

**Organic solvents:** 0.0 %

**Water:** 98.3 %

**VOC (USA, EPA Method 24/24A 0**

**Other information** No further relevant information available.

## 10 Stability and reactivity

**Reactivity** No further relevant information available.

**Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions** Reacts with strong alkali.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** Nitrogen oxides

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

#### LD/LC50 values that are relevant for classification:

#### ATE (Acute Toxicity Estimate)

Oral	LD50	5,640 mg/kg
Inhalative	LC50/4 h	>1,238 mg/l (Rat)

#### 7697-37-2 nitric acid

Oral	LD50	430 mg/kg (Human)
Inhalative	LC50/4 h	>80 mg/l (Rat) (OECD TG 403)

#### 7664-38-2 Phosphoric acid

Oral	LD50	1,530 mg/kg (Rat)
Dermal	LD50	2,740 mg/kg (Rabbit)
Inhalative	LC50 / 1h	3,846 mg/l (Rat) (OECD TG 403)

#### Primary irritant effect:

**on the skin:** Irritant to skin and mucous membranes.

**on the eye:** Irritating effect.

**Respiratory or skin sensitization:** No sensitizing effects known.

#### Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

#### Carcinogenic categories

#### IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### NTP (National Toxicology Program)

None of the ingredients is listed.

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**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

### 12 Ecological information

#### Toxicity

##### Aquatic toxicity:

##### 7697-37-2 nitric acid

LC100/96h	3-3.5 mg/l (Fish)
LC50/96h	>100 mg/l (Fish)
EC50/48h	180 mg/l (Daphnia Magna)
EC50/96h	490 mg/l (Daphnia Magna)

##### 7664-38-2 Phosphoric acid

LC100/96h	3-3.25 mg/l (Lepomis macrochirus)
EC50/96h	>100 mg/l (Daphnia Magna)

**Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**
**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

**Additional ecological information:**
**General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water

**Results of PBT and vPvB assessment**
**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

### 13 Disposal considerations

#### Waste treatment methods

##### Recommendation:

Dilute concentrate with water and neutralize afterwards with suitable alkali material (sodium hydroxide solution, lime). The formed neutral salts are relatively environment-friendly.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

#### Uncleaned packagings:

**Recommendation:** Packaging can be reused or recycled after cleaning.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

#### UN-Number

DOT, ADR/RID/ADN, IMDG, IATA

UN3264

UN proper shipping name

DOT

Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)  
3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(NITRIC ACID)

ADR/RID/ADN

IMDG, IATA

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)

Transport hazard class(es)

DOT



Class

8 Corrosive substances

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**Label**

8

**ADR/RID/ADN**



**Class**

8 (C1) Corrosive substances

**Label**

8

**IMDG, IATA**



**Class**

8 Corrosive substances

**Label**

8

**Packing group**

**DOT, ADR/RID/ADN, IMDG, IATA**

II

**Environmental hazards:**

**Marine pollutant:**

No

**Special precautions for user**

Warning: Corrosive substances

**Hazard identification number (Kemler code):**

80

**EMS Number:**

F-A,S-B

**Segregation groups**

(SGG1) Acids

**Stowage Category**

B

**Stowage Code**

SW2 Clear of living quarters.

**Segregation Code**

SG36 Stow "separated from" SGG18-alkalis.

SG49 Stow "separated from" SGG6-cyanides

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

Not applicable.

**Transport/Additional information:**

Not dangerous according to the above specifications.

**ADR/RID/ADN**

**Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**IMDG**

**Limited quantities (LQ)**

1L

**Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**UN "Model Regulation":**

UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID), 8, II

## 15 Regulatory information

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

No further relevant information available.

**Sara**

**Section 355 (extremely hazardous substances):**

7697-37-2 nitric acid

**Section 313 (Specific toxic chemical listings):**

7697-37-2 nitric acid

7664-38-2 Phosphoric acid

**Hazardous Air Pollutants**

None of the ingredients is listed.

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## Proposition 65

### Chemicals known to cause cancer:

None of the ingredients is listed.

### Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

### Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

## Carcinogenicity categories

### EPA (Environmental Protection Agency)

None of the ingredients is listed.

### TLV (Threshold Limit Value)

None of the ingredients is listed.

### NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

**Keep out of reach of children** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms** GHS05

**Signal word** Danger

## Hazard-determining components of labeling:

nitric acid

Phosphoric acid

## Hazard statements

Causes severe skin burns and eye damage.

## Precautionary statements

Do not breathe dusts or mists.

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

Wash thoroughly after handling.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

Specific treatment (see on this label).

If swallowed: Rinse mouth. Do NOT induce vomiting.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

### Relevant phrases

H272 May intensify fire; oxidizer.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

**Department issuing SDS:** Environment protection department.

**Contact:**
**Date of previous version** 01-03-2020

### Abbreviations and acronyms:

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADN: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation Intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

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ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

EC50: Effective Concentration, 50 percent

IOELVS: Indicative Occupational Exposure Limit Values

mPa.s: milliPascal per second

Oxidizing Liquids 2: Oxidizing liquids – Category 2

Corrosive to Metals 1: Corrosive to metals – Category 1

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Skin Corrosion 1A: Skin corrosion/irritation – Category 1A

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Eye Damage 1: Serious eye damage/eye irritation – Category 1

## Disclaimer

The information provided in this Material Safety Data Sheet has been prepared with the utmost care and corresponds to the most recent information available to the supplier on the date of publication mentioned in the header of every page. The contents of this Material Safety Data Sheet should not be considered as a guarantee for certain product properties or fitness for particular purposes. It is the obligation of the user to determine whether the product is suitable for the specific purpose, intended use and the method of application. This Safety Data Sheet only relates to the product described and does not apply to any not defined use or the use of the product in combination with other materials, substances or products. It is the responsibility of the user to use and handle the product with care and to comply with all applicable laws and regulations. The supplier accepts no liability for direct or indirect damages resulting from improper use of this Material Safety Data Sheet and / or the products described therein.

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