

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
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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:

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 ³

PAC-2:

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

PAC-3:

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

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 ³ , 2 ppm
REL	Short-term value: 10 mg/m ³ , 4 ppm Long-term value: 5 mg/m ³ , 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 ³
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REL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

DNELs

7697-37-2 nitric acid

Inhalative	Acute - local effects	1.3 mg/m ³ (Consumer) 2.6 mg/m ³ (Worker)
	Long-term - local effects	0.65 mg/m ³ (Consumer)
	Long-term - systemic effects	1.3 mg/m ³ (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/cm³ (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)

ADR/RID/ADN

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

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
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Section 313 (Specific toxic chemical listings):

7697-37-2	nitric acid
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7664-38-2	Phosphoric acid
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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

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