

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

1.1. Product identifier

Product form : Mixture
Product name : FILZYM D4
Product code : LIQ1975
Type of product : Detergent

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

1.2.1. Relevant identified uses

Main use category : Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

REALCO S.A.
Avenue Albert Einstein, 15
B-1348 Louvain-la-Neuve - Belgium
T +32 (0)10 45 30 00 - F +32 (0)10 45 63 63
info@realco.be - www.realco.be

1.4. Emergency telephone number

Emergency number : Int+32-70-245.245

Country	Organisation/Company	Address	Emergency number	Comment
	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn B -1120 Brussels	+32 70 245 245	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1 H290
Acute toxicity (inhalation:vapour) Category 4 H332
Skin corrosion/irritation, Category 1 H314
Serious eye damage/eye irritation, Category 1 H318
Full text of H statements : see section 16

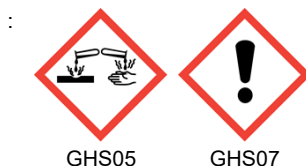
Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

GHS07

Signal word (CLP)

: Danger

Contains

: nitric acid; methanesulphonic acid

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

Hazard statements (CLP)

: H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H332 - Harmful if inhaled.

Precautionary statements (CLP)

: P261 - Avoid breathing vapours, mist, spray.
P280 - Wear protective clothing, eye protection, face protection.
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER, a doctor.
P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.. Immediately call a doctor, a POISON CENTER.
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 doctor, a POISON CENTER.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements

: EUH071 - Corrosive to the respiratory tract.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
nitric acid	(CAS-No.) 7697-37-2 (EC-No.) 231-714-2 (EC Index-No.) 007-004-00-1 (REACH-no) 01-2119487297-23	15 - 30	Ox. Liq. 2, H272 Met. Corr. 1, H290 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1A, H314 Eye Dam. 1, H318
methanesulphonic acid	(CAS-No.) 75-75-2 (EC-No.) 200-898-6 (EC Index-No.) 607-145-00-4 (REACH-no) 01-2119491166-34	5 - 15	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 STOT SE 3, H335

Specific concentration limits:

Name	Product identifier	Specific concentration limits
nitric acid	(CAS-No.) 7697-37-2 (EC-No.) 231-714-2 (EC Index-No.) 007-004-00-1 (REACH-no) 01-2119487297-23	(5 ≤C < 20) Skin Corr. 1B, H314 (20 ≤C < 100) Skin Corr. 1A, H314 (65 ≤C < 99) Ox. Liq. 3, H272 (99 ≤C < 100) Ox. Liq. 2, H272

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Obtain emergency medical attention. Never give anything by mouth to an unconscious person.

First-aid measures after inhalation

: Allow affected person to breathe fresh air. Keep victim at rest in half upright position. If not breathing, give artificial respiration.

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

First-aid measures after skin contact	: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact ophthalmologist immediately.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Take to hospital.

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

Symptoms/effects	: Causes severe skin burns and eye damage. Harmful if inhaled.
Symptoms/effects after inhalation	: Sore throat. Cough. Shortness of breath. May cause respiratory irritation.
Symptoms/effects after skin contact	: Redness, pain. Burns.
Symptoms/effects after eye contact	: Burns. Redness, pain. Blurred vision.
Symptoms/effects after ingestion	: Ingestion may cause nausea, vomiting and diarrhea. Gastrointestinal complaints.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Carbon dioxide. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide.
Explosion hazard	: Product is not explosive.
Reactivity in case of fire	: On heating/burning on exposure to temperature rise: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).
Hazardous decomposition products in case of fire	: Thermal decomposition generates : Carbon oxides (CO, CO ₂). Nitrogen oxides.

5.3. Advice for firefighters

Precautionary measures fire	: Self-contained breathing apparatus when in close proximity to fire.
Firefighting instructions	: Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ensure adequate ventilation.
------------------	--------------------------------

6.1.1. For non-emergency personnel

Protective equipment	: Breathing equipment. Avoid contact with skin and eyes.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Avoid breathing dust/fume/gas/mist/vapours/spray. Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Take up liquid spill into dry absorbent material e.g.: dry sand/earth/vermiculite.
Methods for cleaning up	: Absorb spillage to prevent material damage. Rinse with plenty of water. Use non-corrodable disposal containers.

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

6.4. Reference to other sections

See Heading 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Avoid inhalation of vapours.
Precautions for safe handling	: Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Provide for a tub to collect spills.
Incompatible products	: Strong bases. Reducing agents. Combustibles.
Incompatible materials	: May be corrosive to some metals.
Storage temperature	: 4 – 25 °C
Storage area	: Store away from heat. Store in a well-ventilated place.
Packaging materials	: Synthetic material. Do not store in corrodable metal.

7.3. Specific end use(s)

Cleaning product.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

nitric acid (7697-37-2)	
EU - Occupational Exposure Limits	
Local name	Nitric acid
IOELV STEL (mg/m ³)	26 mg/m ³
IOELV STEL (ppm)	1 ppm
Belgium - Occupational Exposure Limits	
Local name	Acide nitrique # Salpeterzuur
Short time value [mg/m ³]	26 mg/m ³
Short time value [ppm]	1 ppm

8.2. Exposure controls

Appropriate engineering controls:

Provide for a tub to collect spills. Provide local exhaust or general room ventilation.

Personal protective equipment:

Face shield. Gloves. Corrosionproof clothing.

Materials for protective clothing:

Use chemically protective clothing.

Hand protection:

Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

Eye protection:

Chemical goggles or face shield. Eye protection (standard EN 166)

Skin and body protection:

Use chemically protective clothing

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Gas mask with filter type NO

Personal protective equipment symbol(s):



Thermal hazard protection:

No specific measures are necessary.

Environmental exposure controls:

Prevent entry to sewers and public waters. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Nitric acid.
Odour threshold	: Not determined
pH	: 0 – 1
Relative evaporation rate (butylacetate=1)	: The product has not been tested
Melting point	: The product has not been tested
Freezing point	: The product has not been tested
Boiling point	: The product has not been tested
Flash point	: The product has not been tested
Critical temperature	: The product has not been tested
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: Not applicable
Vapour pressure	: The product has not been tested
Relative vapour density at 20 °C	: The product has not been tested
Relative density	: 1,14 – 1,24
Solubility	: Material highly soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: The product has not been tested
Viscosity, kinematic	: No data available
Viscosity, dynamic	: The product has not been tested
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.
Explosive limits	: No data available

9.2. Other information

No additional information available

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Reacts violently with : Reducing agents (combustibles). Bases.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

Contact with metals produces hydrogen gas which may form explosive mixtures with air.

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

metals. Reducing agents. Strong bases. Combustibles.

10.6. Hazardous decomposition products

In the event of fire, may decompose : Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

FILZYM D4

ATE CLP (vapours)	12,669 mg/l/4h
-------------------	----------------

nitric acid (7697-37-2)

LC50 Inhalation - Rat (Vapours)	2,65 mg/l/4h
---------------------------------	--------------

LDLo, Human exposure, Oral	> 400 mg/kg
----------------------------	-------------

Skin corrosion/irritation : Corrosive to eyes and skin.
pH: 0 – 1
Serious eye damage/irritation : Corrosive to eyes
pH: 0 – 1
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not mutagenic
Carcinogenicity : Not classifiable as a human carcinogen
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

methanesulphonic acid (75-75-2)

LOAEC (inhalation, rat, dust/mist/fume)	0,23 mg/l/4h
---	--------------

STOT-repeated exposure : Not classified

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

methanesulphonic acid (75-75-2)

NOAEL, mammalian, Inhalation, rat	0,026 mg/l (1 months)
-----------------------------------	-----------------------

Aspiration hazard : Corrosive to respiratory system. Risk of lung oedema

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

nitric acid (7697-37-2)

LC50, Fish, Gambusia affinis (Mosquito fish)	70 mg/l (96 Hours)
--	--------------------

12.2. Persistence and degradability

nitric acid (7697-37-2)

Persistence and degradability	Mineral.
-------------------------------	----------

methanesulphonic acid (75-75-2)

Biodegradation	100 % 28 days (OCDE 301A)
----------------	---------------------------

12.3. Bioaccumulative potential

FILZYM D4

Partition coefficient n-octanol/water (Log Pow)	The product has not been tested
---	---------------------------------

nitric acid (7697-37-2)

Bioaccumulative potential	Slightly or not bioaccumulative.
---------------------------	----------------------------------

methanesulphonic acid (75-75-2)

Partition coefficient n-octanol/water (Log Kow)	-2,38
---	-------

12.4. Mobility in soil

nitric acid (7697-37-2)

Ecology - soil	Soluble in water.
----------------	-------------------

methanesulphonic acid (75-75-2)

Partition coefficient n-octanol/water (Log Koc)	0
Ecology - soil	Highly mobile in soils.

12.5. Results of PBT and vPvB assessment

FILZYM D4

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

Component

nitric acid (7697-37-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
methanesulphonic acid (75-75-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available






SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Remove to an authorized waste treatment plant.
Product/Packaging disposal recommendations	: When totally empty, containers are recyclable like any other packing. Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Collect all waste in suitable and labelled containers and dispose according to local legislation. Avoid release to the environment.
European List of Waste (LoW) code	: 20 01 29* - detergents containing dangerous substances
HP Code	: H8 - 'Corrosive': substances and preparations which may destroy living tissue on contact.
R code/ D code	: D9 - Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcination, etc.)

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3264	UN 3264	UN 3264	UN 3264	UN 3264
14.2. UN proper shipping name				
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	Corrosive liquid, acidic, inorganic, n.o.s.	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Transport document description				
UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS : Nitric acid ; Methanesulfonic Acid), 8, II, (E)	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS : Nitric acid ; Methanesulfonic Acid), 8, II	UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS : Nitric acid ; Methanesulfonic Acid), 8, II	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS : Nitric acid ; Methanesulfonic Acid), 8, II	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS : Nitric acid ; Methanesulfonic Acid), 8, II
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
II	II	II	II	II

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

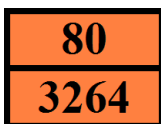
14.5. Environmental hazards

Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C1
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	: T11
Portable tank and bulk container special provisions (ADR)	: TP2, TP27
Tank code (ADR)	: L4BN
Tank special provisions (ADR)	: TU42
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Hazard identification number (Kemler No.)	: 80
Orange plates	:



Tunnel restriction code (ADR)	: E
-------------------------------	-----

Transport by sea

Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP2, TP27
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Segregation (IMDG)	: SGG1, SG36, SG49
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

Inland waterway transport

Classification code (ADN)	: C1
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: C1
---------------------------	------

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

Special provisions (RID)	: 274
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T11
Portable tank and bulk container special provisions (RID)	: TP2, TP27
Tank codes for RID tanks (RID)	: L4BN
Special provisions for RID tanks (RID)	: TU42
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Met. Corr. 1	Corrosive to metals, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Ox. Liq. 3	Oxidising Liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H302	Harmful if swallowed.

FILZYM D4

Safety Data Sheet

according to Regulation (EU) 2015/830

H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
EUH071	Corrosive to the respiratory tract.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.