

Material Safety Data Sheet

According to 1272/2008/WE(REACH),2015/830/EU

Date of compilation: 10.10.2007

Updated on: 20.07.2020

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VERSION: 5.0

NANOMAX FOR TERRAZZO

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 **Product identifier:** NANOMAX for terrazzo

1.2 **Appropriate identified uses of the substance or mixture and uses advised against:**

1.2.1 Appropriate uses: professional and concentrated agent for cleaning stone, concrete, terrazzo, marble and granite

1.2.2 Inappropriate uses: Undefined

1.3 **Details of the supplier of the safety data sheet:**

1.3.1 Producer: **DYNAMIC TECHNOLOGY SP. Z O.O. (LLC.)**

1.3.2 Address: ul. Fabryczna 12; 32-500 Chrzanów

1.3.3 Telephone no. : +48 32 611 09 38

1.3.4 e-mail address: think@dynamic.pl

1.4 **Emergency telephone no.:** +48 32 611 09 38 (weekdays: 8⁰⁰- 15⁰⁰), 112

SECTION 2: HAZARDS IDENTIFICATION

2.1 **Classification of the substance or mixture:**

2.1.1. Hazardous to humans: Product is classified as potentially hazardous to humans.

H315- Is irritating to skin

H319- Is irritating to eyes

Skin Irrit.2- Skin irritation, category 2

Eye Irrit.2- Eye irritation, category 2

2.1.2 Environmental hazards: Product is not classified as dangerous to the environment.

2.1.3 Hazards imposed by physical or chemical properties: Product is classified as dangerous.

Met. Corr.1- Substance causes metal corrosion, category 1

H290- May cause metal corrosion

2.2. **Label elements:**

2.2.1 Pictograms identifying hazard:



2.2.2 Warning: DANGER

2.2.3 Names of hazardous ingredients on label: phosphoric (V) acid, hydrochloric acid

2.2.4 Hazard statements: H315- Causes severe skin burns and eye damage, H319- Is irritating to eyes, H290- May cause metal corrosion

2.2.5 Precautionary statements: P234: Keep only in original container. P390: Absorb spillage to prevent material damage.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P332 + P313: If skin irritation occurs: Get medical advice/attention. P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P310: Immediately call a POISON CENTER or doctor/physician.

2.2.6 Additional information: Less than 5%- anionic surfactants

2.3 **Other hazards:** No information on meeting PBT/vPvB criteria in accordance to annex XIII EU Regulation no 253/2011 from 15.03.2011. Research has not been conducted.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Substances:** Non-applicable

3.2 **Mixtures:**

Substance identification	Concentration range	Number CAS	Number WE	Classification according to 1272/2008/WE
Phosphoric (V) acid Registration no.: 01-2119485924-24-xxxx	8%-10%	7664-38-2	231-633-2	Skin Corr. 1B, H314 Acute Tox. 4, H302 Met. Corr. 1, H290
2-(2-butoxyethoxy)ethanol Registration no.: 01-2119457892-27-xxxxx	4%-7%	112-34-5	203-961-6	Eye Irrit. 2, H319

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Hydrochloric acid Registration no.:01-2119484862-27- xxxx	4%-7%	7647-01-0	231-595-7	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

4.1.1 Ingestion: If swallowed rinse mouth with water, remove dentures if present. Reach the nearest medical facility to seek treatment. Have product label at hand. If spontaneous vomiting occurs, hold head beneath hips.

4.1.2. Inhalation: Remove from place of exposure to fresh air. Let subject rest and relax. In case of coughing, vomiting, nausea, wheezing seek medical attention. If unconscious put in lateral position.

4.1.3. Skin contact: Remove contaminated clothing. Wash skin with warm water and soap. In case of skin irritation seek medical advice.

4.1.4. Eye contact: Remove contact lenses immediately. Thoroughly rinse eyes with large amount of water, turning eyelids inside out. Provide immediate medical attention. Warning: persons in danger of contaminating eyes are to be instructed on the importance and methods of immediate eye washing.

4.2 Acute and delayed symptoms:

4.2.1 Eye contact: Pain, reddening and tearing can occur.

4.2.2 Ingestion: Nausea, vomiting and stomach pains may occur.

4.2.3 Skin contact: May cause skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed: Symptomatic treatment. In case of ingestion immediately call a poison centre.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media:

5.1.1 Suitable extinguishing media: Use conventional media, depending on surroundings.

5.1.2 Unsuitable extinguishing media: Dense stream of water.

5.2 Specific hazards related to ingredients: Avoid inhaling fumes. Due to phosphoric (V) acid content, harmful phosphorus oxides can form as a result of it's thermal decomposition. Decomposition products may include hazardous materials: halogen compounds (formed from hydrochloric acid).

5.3 Advice for firefighters: Use regular fire-protection equipment. Do not stay in environment in danger of fire without chemical resistant equipment and breathing apparatus with independent air supply. If not too dangerous remove containers which are exposed to fire or cool with water spray from safe distance. Isolate area by evacuating all people from immediate surroundings of the fire. Do not take any action which could pose risk to anyone unless one is specially trained.

SECTION 6: ACCIDENTAL RELEASE GUIDELINES

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-personnel eliminating effects of accident: Restrict access of bystanders to area of accident until it is clear of danger. Do not touch, do not walk over spilled material. Do not breathe fumes or vapours. Wear appropriate protective equipment.

6.1.2 For personnel eliminating effects of accident: Eliminating the breakdown and it's effects can only be carried out by specially trained personnel. In case of large spills isolate exposed area. Avoid prolonged skin contact. Avoid contact with eyes. Act in accordance to Health and Safety regulations for handling chemicals. Use chemical resistant protective equipment.

6.2 Environmental safety precautions: Prevent drinking water, soil, sewage contamination. If possible eliminate spill (ie. seal leaking container, close off water source, encapsulate leaking container in a sealed one). Contact appropriate public services if needed.

6.3 Methods and materials for containment and cleaning up: Wipe small spills with paper towel. Or absorb with pH neutral absorbent and put into appropriate waste container. In case of large spills: stop leakage if safe. Rampart area of spill and fill with absorbent material like sand, dirt and collect in a sealed, marked container. Wash exposed area with large amount of water. Hire a licensed waste disposal company. Contaminated absorbent material could pose the same risks as spilled product.

6.4 References to other sections: waste disposal guidelines – section 13, personal protection equipment – section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling: Act in accordance to health and safety regulations. Avoid eye contact. Do not inhale fumes or vapors. Wash hands before break and after work. Keep unused containers sealed. Maintain appropriate ventilation of area where product is used. Use product according to guidelines on the label.

7.2 Conditions of safe storage, and information on incompatibility with other substances: Keep well sealed in original containers, away from heat and sources of ignition. Keep away from children. Do not store with food products. Do not store with bases.

7.3 Special requirements: Non-applicable

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SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters: Based on mixture ingredients:

Phosphoric (V) acid NDS: 1mg/ m3, NDSCh: 2 mg/m3

DNEL for personnel (long-term): 2,92mg/m3

DNEL for general society (long-term): 0,73 mg/m3

PNEC – considering pH- safe pH value is between 6-9

Hydrochloric acid NDS: 5mg/m3; NDSCh: 10 mg/m3

2-(2-butoxyethoxy)ethanol NDS 67 mg/m3; NDSCh 100 mg/m3

DNEL for personnel:

In respiratory tract acute toxicity conditions (local effect) 101,2 mg/m3

In long-term exposure to skin conditions 20 mg/kg/1d

In long-term exposure to respiratory tract conditions 67,5 mg/m3

In long-term exposure to respiratory tract conditions (local effect) 67,5 mg/m3

DNEL for consumers:

In respiratory tract acute toxicity conditions (local effect) 50,6 mg/m3

In long-term exposure to skin conditions 10 mg/kg/1d

In long-term exposure to respiratory tract conditions 34 mg/m3

In long-term exposure to digestive tract conditions 1,25 mg/kg/1d

In long-term exposure to respiratory tract conditions (local effect) 34 mg/m3

PNEC:

For fresh water environment 1 mg/l

For salt water environment 0,1 mg/l

For fresh water sediment environment 4 mg/kg

For salt water sediment environment 0,4 mg/kg

For soil environment 0,4 mg/kg

8.2 Exposure control: Act in accordance to health and safety regulations. Do not eat, drink or smoke while working. Avoid eye contact. Ensure proper ventilation. Provide eye-cleaning facilities near work station. Immediately remove contaminated clothing.

8.2.1 Respiratory tract protection: Usually not necessary. In cases when vapours/mists form it is advised to wear gasmasks with acid absorbers. If product concentration in air is unknown use automatic breathing apparatus.

8.2.2 Eye/face protection: Use skin-tight protective eyewear or face protection.

8.2.3 Skin protection: Use acid-resistant protective gloves, acid-resistant clothing, rubber boots.

8.2.4 Technical protection measures: Room ventilation. Provide eye-cleaning facilities near workstations.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	liquid
Colour:	light ivory
Smell:	characteristic
Smell threshold:	Undefined
pH:	around 1,7
Melting/freezing point:	no data
Boiling point:	no data
Flash point temperature:	no data
Evaporation rate :	no data
Flammability:	no data
Upper/lower flammability/ explosiveness threshold:	no data
Vapour pressure:	no data
Vapour density:	no data
Relative density:	1,08 g/ml
Solubility:	very good in water
Coefficient of n-octanol/water:	no data
Self-ignition temperature :	non-applicable
Decomposition temperature:	no data
Viscosity:	no data
Explosive properties:	non-applicable
Oxidizing properties:	no data
9.2 Other information:	no data

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Stable in regular storing conditions. Manufacturer does not possess test data on product's reactivity.

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10.2 Chemical stability: Stable in regular use conditions.

10.3 Risk of dangerous reactions: No data.

10.4 Conditions which are to be avoided: Extreme temperatures, sources of ignition.

10.5 Incompatible substances: Due to low pH do not mix with bases.

10.6 Hazardous decomposition products: No data. In regular storage and handling conditions hazardous decomposition should not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

a)acute toxicity: Based on available data the product is not qualified for classification.

b)causticity/skin irritation: Is irritating to skin.

c)severe eye damage/eye irritation: Is irritating to eyes.

d)skin or respiratory tract Allergenic effects: Based on available data the product is not qualified for classification.

e)CMR effects (carcinogenicity, mutagenicity, reproductive toxicity): Based on available data the product is not qualified for classification.

h)specific target organ toxicity (STOT) – single exposure: Based on available data the product is not qualified for classification.

i)specific target organ toxicity (STOT) – repeated exposure: Based on available data the product is not qualified for classification.

j)hazards caused by aspiration: Based on available data the product is not qualified for classification.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: Product is not classified as hazardous to the environment.

12.2 Stability and degradability: Surfactant ingredient is biodegradable according to the criteria in regulation 648/2004/WE

12.3 Bioaccumulative potential: No data

12.4 Mobility in soil: No data

12.5 PBT and vPvB properties: No data

12.6 Other harmful effects: No data.

Information based on ingredients:

Hydrochloric acid:

Ecotoxicity for fish LC50 20,5 mg/l/96h (Lepomis macrochirus)

Ecotoxicity for daphnia EC50/LC50 0,045 mg/l/4l

Ecotoxicity for algae EC50 0,76 mg/l/72h; NOEC 0,364 mg/l/72h; EC50/LC50 0,73 mg/l (algae- freshwater)

SECTION 13: WASTE DISPOSAL MANAGEMENT

13.1 Methods for waste disposal:

13.1.1 Recommendations for mixture disposal: Act accordingly to local laws. Assign waste code at place of use.

13.1.2 Recommendations for empty containers: Recycle/dispose of according to local laws. Only completely empty containers can be recycled.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number: Non-applicable. Product is not classified as hazardous in transport.

14.2 Correct shipping name/class: Non-applicable

14.3 Transport hazard class: Non-applicable

14.4 Hazard number: Non-applicable

14.5 Packaging group: Non-applicable

14.6 Environmental hazard: Mixture does not impose threat to environment.

14.7 Special safety precautions for handlers: Non-applicable

14.8 Loose transport according to annex II to MARPOL convention and the IBC codex: Non-applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental protection legal provisions, specific for the substance and mixture:

1272/2008 / EC Regulation of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548 / EEC and 1999/45 / EC and amending Regulation (EC) No. 1907/2006 (Journal of Laws UE L 353 of 31 December 2008) Act of November 24, 2017 on the publication of the uniform text of the Act on chemical substances and mixtures (Journal of Laws 2018 item 143)

Announcement of the Minister of Health of 2 March 2015. on the publication of a uniform text of the regulation of the Minister of Health on labeling packaging of hazardous substances and mixtures and certain mixtures (Journal of Laws of 2015, item 450)

Regulation of the Ministry of Labor and Social Policy of June 6, 2014. on the highest allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws 2014, item 817) Government Statement of February 18,

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2019 on the entry into force of amendments to Annexes A and B to the European Agreement on the International Carriage of Dangerous Goods by Road (ADR), drawn up in Geneva on September 30, 1957 (Journal of Laws No. 2019, Item 769)

Regulation of the Minister of Economy of December 21, 2005 on the essential requirements for personal protective equipment (Journal of Laws No. 259, item 2173)

15.2 Chemical safety assessment:

The manufacturer did not assess chemical safety of the mixture. Chemical safety assessments have been done for phosphoric (V) acid and hydrochloric acid.

SECTION 16: OTHER INFORMATION

The information contained in this Safety Data Sheet has been based on sources and technical knowledge as well as applicable law at European and national level, and its accuracy cannot be fully guaranteed. This information cannot be treated as a guarantee of product properties, as it is only a description of safety requirements.

The methods and working conditions of the users of this product are beyond the reach of our knowledge and control, so the user is solely responsible for taking appropriate measures to comply with legal requirements regarding the handling, storage, use and disposal of chemical products. The information contained in this Safety Data Sheet applies only to the product that must not be used for purposes other than those specified therein.

Every employee handling this product should be trained in appropriate workplace health and safety procedures.

Specific concentrations ranges:

Phosphoric (V) acid

Eye Irrit.2, H319 10% $\leq c < 25\%$

Skin Irrit.2, H315 10% $\leq c < 25\%$

Skin Corr.1B, H314 $c \geq 25\%$

Hydrochloric acid

Eye Irrit.2, H319 10% $\leq c < 25\%$

Skin Irrit.2, H315 10% $\leq c < 25\%$

Skin Corr.1B, H314 $c \geq 25\%$

STOT SE 3, H335 $c \geq 10\%$

Abbreviations used in the text:

H302- Harmful if swallowed

H314- Causes severe skin burns and eye damage

H318- Causes serious eye damage

H319- Causes serious eye irritation

H335- May cause respiratory irritation

Acute Tox. 4 – Acute Toxicity, category 4

Skin Corr. 1B- Skin corrosion, category 1B

Eye Dam. 1 – Severe eye damage/eye irritation, category 1

STOT SE 3 – Specific target organ toxicity, single exposure, category 3

Eye Irrit.2- Eye irritation, category 2

Classification method (WE) 1272/2008 (CLP)

Skin Irrit.2, H315- classification based on calculation

Eye Irrit.2, H319- classification based on calculation

Mett. Corr.1, H290- classification based on calculation