



HARDENER PLUS

SAFETY DATA SHEET



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

1.1. Product Identifier

PRO2 Flooring Finish

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

Relevant identified uses

paint and/or paint related material

Uses advised against

Do not use for injecting or spraying.
Product is not intended for consumer use.

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor)

6817 S Harlem Ave
Chicago, IL 60638
United States

Telephone: 800-875-8698

Supplier (manufacturer/importer/downstream user/distributor)

E-mail info@pro2finish.com

1.3. Emergency telephone number

1-833-GO-CLASSIC

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 / H226
Skin Irrit. 1 / H314
Eye Dam. 1 / H318
STOT SE 3 / H336

Flammable liquids
Skin corrosion/irritation
Serious eye damage/eye irritation
STOT-single exposure

Flammable liquid and vapour.
Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause drowsiness or dizziness.

2.2. Label elements

GHS-US labeling

Hazard pictograms



Hazard statements

H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage..
H336 May cause drowsiness or dizziness.



Hazard statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe vapour.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Keep locked up.
P501	Dispose of contents/container to industrial incineration plant.

2.2. Other hazards

No information available.

Other information

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Mixtures

Description Lösung organischer Säuren

Hazardous ingredients

GHS-US classification

CAS No	Designation // Remark	weight-%
107-98-2	1-methoxy-2-propanol	50 - 100
6192-52-5	4-Methylbenzene-1-sulfonic acid, hydrate	7,5 - 10



HARDENER PLUS

SAFETY DATA SHEET



SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform comp authorities in accordance with local regulations.



HARDENER PLUS

SAFETY DATA SHEET



6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cl agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure – no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSivO). Keep container tightly closed. Do not empty containers with pressure – no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the «Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)».

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 25 °C. Protect from heat and direct sunlight.

Due to the content of organic solvents in the preparation:

Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks..

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values

Observe protective provisions (see section 7 and 8).

1-methoxy-2-propanol

Index No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

NIOSH, TWA: 360 mg/m³; 100 ppm

NIOSH, STEL: 540 mg/m³; 150 ppm

ACGIH, TWA: 184 mg/m³; 50 ppm

ACGIH, STEL: 369 mg/m³; 100 ppm

**Additional information**

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

C : peak limitation

DNEL:**1-methoxy-2-propanol**

Index No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

DNEL long-term dermal (systemic), Workers: 50,6 mg/kg

DNEL acute inhalative (local), Workers: 553,5 mg/m³

DNEL long-term inhalative (systemic), Workers: 369 mg/m³

DNEL long-term dermal (systemic), Consumer: 18,1 mg/kg

DNEL long-term inhalative (systemic), Consumer: 43,9 mg/m³

DNEL long-term exposure oral (systemic effects), Consumer: 3,3 mg/kg

4-Methylbenzene-1-sulfonic acid, hydrate

Index No. 016-030-00-2 / EC No. 203-180-0 / CAS No. 6192-52-5

DNEL long-term dermal (systemic), Workers: 7,6 mg/kg

DNEL long-term inhalative (systemic), Workers: 53,6 mg/m³

PNEC:**1-methoxy-2-propanol**

Index No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

PNEC aquatic, freshwater: 10 mg/L

PNEC aquatic, marine water: 1 mg/L

PNEC aquatic, intermittent release: 100 mg/L

PNEC sediment, freshwater: 41,6 mg/kg

PNEC sediment, marine water: 4,17 mg/kg

PNEC, soil: 2,47 mg/kg

PNEC sewage treatment plant (STP): 100 mg/L

4-Methylbenzene-1-sulfonic acid, hydrate

Index No. 016-030-00-2 / EC No. 203-180-0 / CAS No. 6192-52-5

PNEC aquatic, freshwater: 0,073 mg/L

PNEC aquatic, marine water: 0,0073 mg/L

PNEC aquatic, intermittent release: 0,73 mg/L

PNEC sediment, freshwater: 0,058 mg/kg

PNEC sediment, marine water: 0,0058 mg/kg

PNEC, soil: 0,016 mg/kg

PNEC sewage treatment plant (STP): 58 mg/L

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment**Respiratory protection**

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min. Observe the instructions and details for use,

storage, maintenance and replacement provided by the protective glo manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.



HARDENER PLUS

SAFETY DATA SHEET



Eye/face protection

Wear closely fitting protective glasses in case of splashes

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers

Protective measures

Wear closely fitting protective glasses in case of splashes

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state:

Liquid

Colour:

colourless

Odour:

characteristic

Odour threshold:

not applicable

Initial boiling point and boiling range:

117 °C

Source: 1-methoxy-2-propanol

Lower and upper explosion limit:

Lower explosion limit:

1,37 Vol-%

Upper explosion limit:

14 Vol-%

Source: (2-methoxymethylethoxy)propanol

Flash point:

32 °C

Auto-ignition temperature:

207 °C

Source: (2-methoxymethylethoxy)propanol

Decomposition temperature:

not applicable

pH at 20 °C: x

20 mm²/s

Cinematic viscosity (40°C):

20 mm²/s

Viscosity at 20 °C:

12s 4 mm

Method: DIN 53211

Solubility(ies):

Water solubility at 20 °C:

partially soluble

Partition coefficient: n-octanol/water:

see section 12

Vapour pressure at 20 °C: x

11,7 mbar

Method: calculated.

Source: 1-methoxy-2-propanol

Density and/or relative density:

Density at 20 °C:

0,97 g/cm³

Method: ISO 2811, part 3

Relative vapour density:

not applicable

particle characteristics:

not applicable

9.2. Other information

Solvent separation test:

< 3 weight-% (ADR/RID)

**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

No information available

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

Not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide smoke, nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes severe skin burns and eye damage

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Based on available data, the classification criteria are not met.

STOT-single exposure; STOT-repeated exposure

May cause drowsiness or dizziness.

1-methoxy-2-propanol

Specific target organ toxicity (single exposure), drowsiness

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers chapters 2 and 15 for details.



HARDENER PLUS

SAFETY DATA SHEET



11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: ECOLOGICAL INFORMATION

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

Do not allow to enter into surface water or drains.

12.1. Toxicity

4-Methylbenzene-1-sulfonic acid, hydrate

Fish toxicity, LC50, *Leuciscus idus* (golden orfe): > 500 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): > 103 mg/L (48 h)

Method: OECD 202

Algae toxicity, EC50, *Pseudokirchneriella subcapitata*: 73 mg/L (72 h); Evaluation static test

Method: OECD 201

Bacteria toxicity, EC10, Activated sludge: 240 mg/L (3 h); Evaluation static test

Method: OECD 209

Long-term Ecotoxicity

4-Methylbenzene-1-sulfonic acid, hydrate

Algae toxicity, NOEC, *Pseudokirchneriella subcapitata*: 44,8 mg/L (72 h)

Method: OECD 201

12.2. Persistence and degradability

Toxicological data are not available

12.3. Bioaccumulative potential

Toxicological data are not available

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.



HARDENER PLUS

SAFETY DATA SHEET



List of proposed waste codes/waste designations in accordance with EWC

080111* Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: TRANSPORT INFORMATION

- 14.1. UN number or ID number** UN 3469
- 14.2. UN proper shipping name**
Land transport (ADR/RID): Paint, flammable, corrosive
Sea transport (IMDG): PAINT, FLAMMABLE, CORROSIVE
Air transport (ICAO-TI / IATA-DGR): Paint, flammable, corrosive
- 14.3. Transport hazard class(es)** 3 (8)
- 14.4. Packing group** III
- 14.5. Environmental hazard**
Land transport (ADR/RID) not applicable
Marine pollutant not applicable
- 14.6. Special precautions for user**
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8
- Further information**
Land transport (ADR/RID)
tunnel restriction code D/E
- Sea transport (IMDG)**
EmS-No. F-E, S-E
- 14.7. Maritime transport in bulk according to IMO instruments**
No transport as bulk according IBC - Code.



HARDENER PLUS

SAFETY DATA SHEET



SECTION 15: REGULATORY INFORMATION

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

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Category: P5c FLAMMABLE LIQUIDS

Quantity 1: 5000 t / Quantity 2: 50000 t

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L) ISO 11890-2: 708

VOC-value (in g/L) ASTM D2369: 708

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Substance/product listed in the following inventories:

TSCA: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption

15.2. ChemicalSafetyAssessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: REGULATORY INFORMATION

Full text of classification in section 3:

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOTSE3/H336	STOT-single exposure	May cause drowsiness or dizziness.
STOTSE3/H335	STOT-single exposure	May cause respiratory irritation.
Skin Corr. 1C / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3	Flammable liquids	On basis of test data.
Skin Corr. 1C	Skin corrosion/irritation	Calculation method
Eye Dam. 1	Serious eye damage/eye irritation	Calculation method
STOT SE 3	STOT-single exposure	Calculation method

**Abbreviations and acronyms**

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.