

# SAFETY DATA SHEET

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

# 1.1. Product identifier

**Trade name** 

Nano Remover

Product no.

# **REACH** registration number

Not applicable

Other means of identification

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

#### Relevant identified uses of the substance or mixture

Coating Remover

Uses advised against

The full text of any mentioned and identified use categories are given in section 16

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

#### Company and address

Mouldpro ApS Baltorpbakken 10 2750 Ballerup

Tel.: (+45) 7020 3131 Fax.: (+45) 7020 3151

#### E-mail

info@mouldshop.dk

#### **SDS** date

13-06-2013

#### **SDS Version**

1.0

# 1.4. Emergency telephone number

Use your national or local emergency number See section 4 "First aid measures"

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Skin Sens. 1, Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2, STOT SE 3, Asp. Tox. 1, Flam. Liq. 3 // H411, H336, H335, H318, H317, H315, H304, H226 See full text of H/R-phrases in section 2.2.

#### 2.2. Label elements

# Hazard pictogram(s)



# Signal word

Danger!

# **Hazard statement(s)**

Flammable liquid and vapour. (H226)



According to EC-Regulation 1907/2006 (REACH)

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May be fatal if swallowed and enters airways. (H304)

Causes skin irritation. (H315)

May cause an allergic skin reaction. (H317) Causes serious eye damage. (H318) May cause respiratory irritation. (H335) May cause drowsiness or dizziness. (H336)

Toxic to aquatic life with long lasting effects. (H411)

#### Identity of the substances primarily responsible for the major health hazards

ethyl lactate, 2-methylpropan-1-ol, Orange terpener

General -Prevention -

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

(P305+P351+P338)

Safety IF ON SKIN (or hair): Remove/Take off immediately all contaminated

statement(s) clothing. Rinse skin with water/shower. (P303+P361+P353)

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

(P301+P310)

Do NOT induce vomiting. (P331)

Specific treatment (see ... on this label). (P321)

Immediately call a POISON CENTER or doctor/physician. (P310)

Storage Store locked up. (P405)

Disposal Dispose of contents/container to an approved waste disposal plant. (P501)

#### 2.3. Other hazards

This product contains an organic solvent. Repeated exposure to organic solvents can result in damage to the nervous system and inner organs, such as the liver and kidneys.

#### Additional labelling

# **DPD/DSD Classification**



Harmful. (Xn). Dangerous for the environment. (N).

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.(R50/53). Irritating to respiratory system and skin.(R37/38). Vapours may cause drowsiness and dizziness.(R67). Harmful: may cause lung damage if swallowed.(R65). May cause sensitisation by skin contact.(R43). Risk of serious damage to eyes.(R41). Flammable.(R10).

# **SECTION 3: Composition/information on ingredients**

# 3.1/3.2. Substances

NAME: ethyl lactate

IDENTIFICATION NOS.: CAS-no: 97-64-3 EC-no: 202-598-0 Index-no: 607-129-00-7

CONTENT: 20-80% DSD CLASSIFICATION: R10 Xi; R37-41

CLP CLASSIFICATION: Flam. Liq. 3, Eye Dam. 1, STOT SE 3

H226, H318, H335

NOTE:

NAME: 2-methylpropan-1-ol

IDENTIFICATION NOS.: CAS-no: 78-83-1 EC-no: 201-148-0 Index-no: 603-108-00-1

CONTENT: 1-50%

DSD CLASSIFICATION: R10 Xi; R37/38-41 R67

CLP CLASSIFICATION: Flam. Liq. 3, Skin Irrit. 2, Eye Dam. 1, STOT SE 3

H226, H315, H318, H335, H336

NOTE:

NAME: Orange terpener

IDENTIFICATION NOS.: CAS-no: 8028-48-6 EC-no: 232-433-8

CONTENT: 20-80%





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DSD CLASSIFICATION:

R10 Xn;R65 Xi;R38 R43 N;R50/53

CLP CLASSIFICATION: Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1

H226, H304, H315, H317, H400, H410

(\*) See full text of H/R-phrases in chapter 16. Occupational limits are listed in section 8, if these are available.

S = Organic solvent

Other informations

#### **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### **General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

#### Inhalation

Get the person into fresh air and stay with them.

#### Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

Remove contact lenses. Flush eyes with plenty of water (20-30 °C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

#### Ingestion

Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

# **Burns**

Rinse with water until the pain stops and continue for 30 minutes.

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

This product contains substances that can give chemical pneumonia if inhaled. The symptoms of chemical pneumonia can appear after several hours.

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

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

IF exposed or concerned:

Get immediate medical advice/attention.

# Information to medics

Bring this safety data sheet.

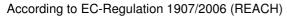
# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

# 5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, as in the case of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in thick black smoke. Exposure to catabolic products





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can damage your health. Fire fighters should use proper protection gear. Closed containers, which are exposed to fire, should be cooled with water. Do not let fire-extinguishing water run into sewers and other water courses.

# 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from waste material. Avoid direct contact with spilled substances. Stores that have not ignited must be cooled by water mist. Where possible, remove flammable materials. Make sure there is sufficient ventilation.

# 6.2. Environmental precautions

Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. Avoid discharge to lakes, streams, sewers, etc. In the event of a leakage to the surroundings, contact the local environmental authorities.

# 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

#### 6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Smoking, consumption of food or liquid, and storage of tobacco, food or liquids are not allowed in the workrooms. Consider putting up waste collecting trays/basins to prevent leakage to the surroundings. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

# 7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and ventilated area, away from possible sources of combustion.

#### 7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

#### **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

#### **OEL**

2-methylpropan-1-ol (EH40/2005) Long-term exposure limit (8-hour TWA reference period): 50 ppm | 154 mg/m3 Short-term exposure limit (15-minute reference period): 75 ppm | 231 mg/m3

# **DNEL / PNEC**

No data available.

# 8.2. Exposure controls

Compliance with the stated exposure limits values should be checked on a regular basis.

# **General recommendations**

Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom.

#### **Exposure scenarios**

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

#### **Exposure limits**

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values below.

# **Appropriate technical measures**



# According to EC-Regulation 1907/2006 (REACH)

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> Airborne gas and dust concentrations must be kept as low as possible and below the current threshold values (see below). Use for example an exhaust system if the normal air flow in the work room is not sufficient. Make sure that eyewash and emergency showers are clearly marked.

#### **Hygiene measures**

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

# Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible collect spillage during work.

#### Individual protection measures, such as personal protective equipment



#### Generally

Only CE-marked personal protection equipment should be used.

#### **Respiratory Equipment**

If the ventilation at the work place is not sufficient, use a half or whole mask with an appropriate filter or an air-supplied respiratory protector. The choice depends on the concrete work situation and how long you will be using the product.

#### Skin protection

Special work clothing should be used. When working with this product for a long period of time, use a protective suit.

# **Hand protection**

Use protective gloves. The concrete work situation is not known. Contact the suppliers of the gloves for help on the glove type. Please note that elastic gloves stretch when used. The thickness of the gloves, and therefore their penetration time, will be reduced. Moreover, the temperature of the glove in use is about 35 °C, while the standard test, EN 374-3, is done at 23 °C. The penetration time is therefore reduced by a factor of 3.

#### Eve protection

Use face shield. Use safety glasses with a side shield as an alternative.

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Colour Form Odour Viscosity Density (g/cm3) pΗ

Liquid Clear Characteristic 0,894

**Phase changes** 

Melting point (°C) Boiling point (°C) Vapour pressure (mm Hg)

113 ~7-12

Data on fire and explosion hazards

Flashpoint (°C) Self ignition (°C) Ignition (°C)

Explosion limits (Vol %) Oxidizing properties

Solubility

Solubility in water

n-octanol/water coefficient

Insoluble

9.2. Other information

Solubility in fat Additional information

N/A

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

No data available

# 10.2. Chemical stability

The product is stable under the conditions, noted in the section on "Handling and storage".

10.3. Possibility of hazardous reactions

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No special

# 10.4. Conditions to avoid

Avoid static electricity. Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.

# 10.5. Incompatible materials

Strong acids, strong bases, strong oxidising agents, and strong catabolic agents.

#### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# **Acute toxicity**

Substance	Species	Test	Route of exposure	Result
2-methylpropan-1-ol	Rat	LD50	Oral	2460 mg/kg
2-methylpropan-1-ol	Rabbit	LD50	Dermal	4200 mg/kg
2-methylpropan-1-ol	Rabbit	LC50	Inhalation	24,6 mg/l 4 hour
Orange terpener	Rat	LD50	Oral	4400 mg/kg
Orange terpener	Rat	LD50	Dermal	>5000 mg/kg

#### Skin corrosion/irritation

Causes skin irritation.

# Serious eye damage/irritation

Causes serious eye damage.

# Respiratory or skin sensitisation

May cause an allergic skin reaction.

# Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

### Reproductive toxicity

No data available.

#### **STOT-single exposure**

May cause respiratory irritation. May cause drowsiness or dizziness.

# **STOT-repeated exposure**

No data available.

# **Aspiration hazard**

May be fatal if swallowed and enters airways.

#### Long term effects

This product contains substances that can give chemical pneumonia if inhaled. The symptoms of chemical pneumonia can appear after several hours.

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

Sensitivity effects: This product contains substances which can give an allergic reaction on contact with skin. The allergic reaction will typically set in 12-72 hours after exposure as the substance penetrates the skin and reacts with proteins in the outer skin. The body's immune system sees the chemically changed protein as a foreign body and will try to destroy it.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Substance Species Test Test duration Result



# According to EC-Regulation 1907/2006 (REACH)

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2-methylpropan-1-ol

Algae

EC50

350 mg/l

LC50 2-methylpropan-1-ol Daphnia 1220 mg/l Daphnia LC50 48 h Orange terpener 0,421 mg/l Orange terpener EC50 96 h 0,72 mg/l Fish Orange terpener Algae LC50 72 h 8 mg/l

12.2. Persistence and degradability

Substance Biodegradability Test Result

No data available.

12.3. Bioaccumulative potential

Substance Potential bioaccumulation LogPow BFC

No data available.

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

This product contains ecotoxic substances which can have damaging effects on water-organisms. This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Must not be disposed together with household garbage.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Waste

Specific labelling

Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

#### **SECTION 14: Transport information**

This product is covered by the conventions on dangerous goods.

14.1 - 14.4

ADR/RID	14.1. UN number	14.2. UN proper shipping name FLAMMABLE LIQUID, N.O.S.  Proper Shipping Name	14.3. Transport hazard class(es)		14.4. Packing group		Notes
	1993		3		III		-
IMDG	UN-no.		Class	PG*	EmS	MP**	Hazardous constituent
	1993	FLAMMABLE LIQUID, N.O.S.	3	III	F-E, S- E	Yes	-

# 14.5. Environmental hazards

This product contains substances which can cause undesirable long-term effects in the water environment, due to its poor biodegradability.

# 14.6. Special precautions for user

# 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

- (\*) Packing group
- (\*\*) Marine pollutant

#### **SECTION 15: Regulatory information**

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

# **Restrictions for application**

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC. For exceptions, see the Danish Working Environment Authority's Executive Order No. 239 of 6 April 2005.

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Hazard pictogram(s) and phrases.



#### H-phrases.

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

# P-phrases.

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P321 Specific treatment (see ... on this label).
- P331 Do NOT induce vomiting.

Do NOT induce vomiting.

P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant.



#### R-phrases.

- R10 Flammable.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R65 Harmful: may cause lung damage if swallowed.
- R67 Vapours may cause drowsiness and dizziness.
- R37/38 Irritating to respiratory system and skin.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### S-phrases.

- S7/9 Keep container tightly closed and in a well-ventilated place
- S23 Do not breathe vapour
- S24 Avoid contact with skin
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S37/39 Wear suitable gloves and eye/face protection
- S57 Use appropriate containment to avoid environmental contamination

# 15.2. Chemical safety assessment

Dispose of contents/container to an approved waste disposal plant. (P501)

# SECTION 16: Other information'

# **Sources**

EC regulation 1907/2006 (REACH) Directive 2000/532/EC EC Regulation 1272/2008 (CLP)

# Full text of H/R-phrases as mentioned in section 3

R10 - Flammable.

R37 - Irritating to respiratory system.

R38 - Irritating to skin.

R41 - Risk of serious damage to eyes.

R43 - May cause sensitisation by skin contact.

R65 - Harmful: may cause lung damage if swallowed.

R67 - Vapours may cause drowsiness and dizziness.

R37/38 - Irritating to respiratory system and skin.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H226 - Flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eve damage.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

# The full text of identified uses as mentioned in section 1

Other symbols mentioned in section 2

#### **Other**

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

# The safety data sheet is validated by

SRS

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Date of last essential change (First cipher in SDS version)

Date of last minor change (Last cipher in SDS version)