

Safety Data Sheet

4225 NORMAL HARDENER 2,5 L

Viscosity:	> 20,5 mm ² /s (40°C)	--	--
Explosive properties:	N.D.	--	--
Oxidizing properties:	N.D.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under recommended use and storage conditions (see point 7).

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth, alloys in powder or vapours) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, and powerful oxidising agents.

It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Hexamethylene-di-isocyanate (homopolymer) - CAS: 28182-81-2

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Yes

n-butyl acetate - CAS: 123-86-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 6400 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 21.1 mg/l - Duration: 4h

Naphtha - hydrocarbons C9 aromatics

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 6193 mg/m³

Test: LD50 - Route: Oral - Species: Rat = 3592 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg

Xylene - CAS: 1330-20-7

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 6350 ppm - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 3523 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 4350 mg/kg

tosyl isocyanate - CAS: 4083-64-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2234 mg/kg

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Test: LC50 - Route: Inhalation - Species: Rat = 640 ppm - Duration: 1h
2,6-di-tert-butyl-4-methylphenol - CAS: 128-37-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 5000 mg/kg

Hexamethylene-di-isocyanate (homopolymer) - CAS: 28182-81-2

Local effects:

High vapour concentrations may cause irritation to respiratory system.

May cause slight skin irritation with prolonged or repeated contact.

May cause eye irritation.

Sensitization:

Considered as skin sensitizing.

Naphtha - hydrocarbons C9 aromatics -

Acute toxicity:

Inhalation: vapour concentrations exceeding recommended exposure levels are irritating to eyes and respiratory tract, and may cause headache, dizziness and other effects on the central nervous system.

Skin contact: Low toxicity index.

Frequent or prolonged contact may dry the skin, causing dermatitis.

Eye contact: may cause discomfort to eyes with slight irritation, but with no tissue damage.

Ingestion: even small amounts of liquid introduced into the respiratory system during ingestion may cause bronchitis or lung damage. Low toxicity index.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

n-butyl acetate - CAS: 123-86-4

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 44 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 648 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish = 18 mg/l - Duration h: 96

Naphtha - hydrocarbons C9 aromatics

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 3.2 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 2.9 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish = 9.2 mg/l

Endpoint: EC50 - Species: Algae = 1 mg/l - Notes: NOEC

Xylene - CAS: 1330-20-7

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 1 mg/l - Duration h: 24

Endpoint: EC50 - Species: Algae = 4.36 mg/l - Duration h: 73

Endpoint: LC50 - Species: Fish = 2.6 mg/l - Duration h: 96

Endpoint: NOEC - Species: Algae = 0.44 mg/l - Duration h: 73

Endpoint: NOEC - Species: Daphnia = 1.57 mg/l - Duration h: 504

Endpoint: NOEC - Species: Fish = 1.3 mg/l - Duration h: 1344

2,6-di-tert-butyl-4-methylphenol - CAS: 128-37-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 0.61 mg/l

Endpoint: EC50 - Species: Algae > 0.4 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish > 0.57 mg/l - Duration h: 96

Endpoint: NOEC - Species: Daphnia = 0.31 mg/l - Duration h: 21

12.2. Persistence and degradability

Non-readily biodegradable

12.3. Bioaccumulative potential

Not bioaccumulative

12.4. Mobility in soil

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Do not mix with waste water, rain or surface water. Floats on water, evaporates from liquid and solid surfaces but a significant amount may penetrate and pollute water table.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The empty containers must be considered special waste materials to take to dump of type 2B. If previously cleansed, they can be admitted in first class dumps.

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



Limited quantities, not subject to ADR norms for internal packaging of up to 5 litres and maximum packaging of 30kg.

14.1. UN number

ADR-UN Number: 1263
IATA-UN Number: 1263
IMDG-UN Number: 1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
IATA-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)
IMDG-Shipping Name: PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)

14.3. Transport hazard class(es)

ADR-Class: 3
ADR-Label: 3
ADR - Hazard identification number: 30
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3
IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

14.5. Environmental hazards

ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary risks: -
ADR-S.P.: 163 367 640E 650
ADR-Tunnel Restriction Code: 3 (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary risks: -
IATA-Cargo Aircraft: 366
IATA-S.P.: A3 A72 A192
IATA-ERG: 3L
IMDG-Page: 3372
IMDG-EmS: F-E , S-E
IMDG-Subsidiary risks: -
IMDG-MFAG: 310,313
IMDG-Storage category: Category A

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IMDG-Storage notes: -
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Volatile Organic compounds - VOCs = 557.60 g/Kg= 548.68 g/l
Volatile CMR substances = 0.00 %
Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %
Organic Carbon - C = 0.38
Dry weight (% wt):44.24

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):
N.A.

15.2. Chemical safety assessment
No

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H317 May cause an allergic skin reaction.
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
H312 Harmful in contact with skin.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
EUH014 Reacts violently with water.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
CCNL - Appendix 1
Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

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ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
N.A.:	Not available
N.D.:	Not determined.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).