according to 1907/2006/EC, Article 31

2.2022 Version number 2 (replaces version 1)



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

- · 1.1 Product identifier
- · Trade name: Q 40-250HN HS Hardener normal
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Hardening agent/ Curing agent
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Q-Company Int. GmbH

Lentföhrdener Strasse 12 – 14

D-24576 Weddelbrook, Germany

msds@grefinish.com

Tel +49 (0)4192 891420

www.qrefinish.com

· 1.4 Emergency telephone number: +49 (0)551-19240 (Giftinformationszentrum-Nord)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



Skin Sens. 1 H317

May cause an allergic skin reaction.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms





GHS02

GHS07

- · Signal word Warning
- · Hazard-determining components of labelling:

Hexamethylene diisocyanate, oligomers

n-Butyl acetate

2-Methoxy-1-methylethyl acetate

Xylene

· Hazard statements

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· Precautionary statements

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

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.

P312 Call a POISON CENTER/doctor if you feel unwell.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking. EUH204 Contains isocyanates. May produce an allergic reaction.

 $Restricted\ to\ professional\ users.$

- · 2.3 Other hazards · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-Butyl acetate Flam. Liq. 3, H226; ♦ STOT SE 3, H336, EUH066	25-50%
NLP: 500-060-2 Reg.nr.: 01-2119485796-17		25-50%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-Methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	10-25%
EINECS: 215-535-7	Xylene ♠ Flam. Liq. 3, H226; ♦ STOT RE 2, H373; Asp. Tox. 1, H304; ♠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-<5%

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

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 \cdot 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Hydrogen cyanide (HCN)

- · 5.3 Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Contain and collect spillages with non-combustible absorbent materials (e.g. sand, earth, diatomaceous earth) and place in a suitable container.

Decontaminate immediately with suitable mixture (flammable):

- as such usable (inflammatory!):

water 45 Vol.% ethanol or isopropanol 50 Vol.% ammonia solution (Density= 0.88) 5 Vol.%

- alternatively (non-flammable):

sodium carbonate 5 Vol.% water 95 Vol.%

Add the same decontaminant to any residues and allow to stand for several days in an non-sealed container until no further reaction occurs. Once this stage is reached, close the container and dispose of in accordance with the waste regulations (see Section 13).

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Persons with a history of asthma, allergies or chronic or recurrent respiratory diseases should only be employed in processes in which this product is used under appropriate medical supervision.

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· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility:

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

Store away from foodstuffs.

· Further information about storage conditions:

Keep container tightly sealed.

Store separately from oxidising agents, strongly alkaline and strongly acidic materials, amines, alcohol and water.

- · Storage class: 3
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:			
123-86-4 n-Butyl acetate			
	Short-term value: 966 mg/m³, 200 ppm		
	Long-term value: 724 mg/m³, 150 ppm		

28182-81-2 Hexamethylene diisocyanate, oligomers

EBW Short-term value: 0.5 mg/m³ exposition evaluation valu TRGS 430 (EBW)

108-65-6 2-Methoxy-1-methylethyl acetate

Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

1330-20-7 Xylene

WEL	Short-term value: 441 mg/m³, 100 ppm
	Long-term value: 220 mg/m³, 50 ppm
	Sk; BMGV

· Ingredients with biological limit values:

1330-20-7 Xylene

BMGV 650 mmol/mol creatinine

Medium: urine

Sampling time: post shift Parameter: methyl hippuric acid

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

· General protective and hygienic measures:

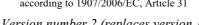
Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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· Respiratory protection:

Filter A/P2 (EN 141, EN 143)



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Breakthrough time of glove material

For the mixture of chemicals the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 3).

· Eye/face protection



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Fluid

· Colour: According to product specification

· Odour: Characteristic · Odour threshold: Not determined.

· Melting point/freezing point: Undetermined. · Boiling point or initial boiling point and boiling

124-128 °C (123-86-4 n-Butyl acetate) range

· Flammability Flammable.

· Lower and upper explosion limit

· Lower: 1.2 Vol % (123-86-4 n-Butyl acetate)

10.8 Vol % (108-65-6 2-Methoxy-1-methylethyl acetate) · Upper:

· Flash point: 27 °C (DIN 53213)

· Ignition temperature: 315 °C (DIN 51794, 108-65-6 2-Methoxy-1-methylethyl

acetate)

· Decomposition temperature: Not determined. Not determined. $\cdot pH$

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· Viscosity:

• Kinematic viscosity at 20 °C 10-15 s (DIN 53211/4)
• Dynamic: Not determined.

· Solubility

· water: Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value) Not determined.

· Vapour pressure at 20 °C: 10.7 hPa (123-86-4 n-Butyl acetate)

· Density and/or relative density

• **Density at 20 °C:** 0.976 g/cm³ (DIN 53217)

Relative densityVapour densityNot determined.Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health and

environment, and on safety.

· Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Solvent content:

· VOC (EC) 63.95 % *· Solids content (weight-%):* 36.0 %

· Change in condition

· Evaporation rate Not determined.

Information with regard to physical hazard classes

Explosives Void
Flammable gases Void
Aerosols Void
Oxidising gases Void
Gases under pressure Void

· Flammable liquids Flammable liquid and vapour.

Flammable solids
 Self-reactive substances and mixtures
 Pyrophoric liquids
 Pyrophoric solids
 Self-heating substances and mixtures
 Substances and mixtures, which emit flammable
 gases in contact with water

Substances and mixtures, which emit flammable gases in contact with water Void
Oxidising liquids Void
Oxidising solids Void
Organic peroxides Void
Corrosive to metals Void
Desensitised explosives Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.

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· 10.6 Hazardous decomposition products:

Possible in traces.
Nitrogen oxides
Hydrogen chloride (HCl)
Hydrogen cyanide (prussic acid)
Carbon monoxide
Nitrogen oxides (NOx)

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Respiratory or skin sensitisation May cause an allergic skin reaction.
- · STOT-single exposure May cause respiratory irritation. May cause drowsiness or dizziness.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

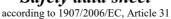
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

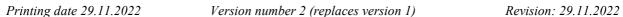
SECTION 14: Transport information

- · 14.1 UN number or ID number
- · ADR, IMDG, IATA

UN1263

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(Contd. of page 7) · 14.2 UN proper shipping name UN1263 PAINT RELATED MATERIAL PAINT RELATED MATERIAL · IMDG, IATA · 14.3 Transport hazard class(es) $\cdot ADR$ · Class 3 (F1) Flammable liquids. ·Label · IMDG, IATA · Class 3 Flammable liquids. ·Label · 14.4 Packing group · ADR, IMDG, IATA III· 14.5 Environmental hazards: · Marine pollutant: No Warning: Flammable liquids. · 14.6 Special precautions for user · Hazard identification number (Kemler code): 30 · EMS Number: F-E,S-E· Stowage Category · 14.7 Maritime transport in bulk according to IMO Not applicable. instruments · Transport/Additional information: 5L· Limited quantities (LQ) · Transport category 3 · Tunnel restriction code D/E \cdot IMDG · Limited quantities (LQ) 5LUN 1263 PAINT RELATED MATERIAL, 3, III · UN "Model Regulation":

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

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· National regulations:

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· Additional classification according to Decree on Hazardous Materials, Annex II:

Class	Share in %
NK	50-100

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH204 Contains isocyanates. May produce an allergic reaction.

· Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Asp. Tox. 1: Aspiration hazard - Category 1

* * Data compared to the previous version altered.