

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

97 - Thinner 1005 Product no.

97

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture Additive

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

HBC System Smarttool Production ApS Hobrovej 961-963 9530 Stövring Denmark tel:+45 70 22 70 70

Contact person

Vibeke Jørgensen

E-mail

info@hbc-system.com SDS date 2016-06-29 SDS Version

3.0

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

V2.1. Classification of the substance or mixture

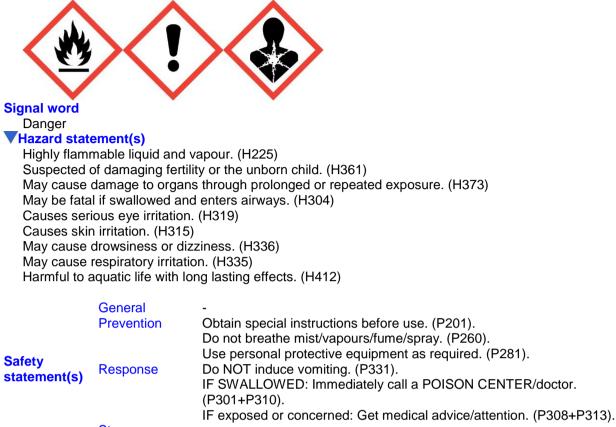
Flam. Liq. 2; H225 Repr. 2; H361 STOT RE 2; H373 Asp. Tox. 1; H304 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H336 STOT SE 3; H335 Aquatic Chronic 3; H412

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)





Storage Disposal

Identity of the substances primarily responsible for the major health hazards

acetone propan-2-one propanone, 4-methylpentan-2-one isobutyl methyl ketone, toluene, Naphtha (petroleum), hydrodesulfurized light, dearomatized Low boiling point naphtha - unspecified

2.3. Other hazards

This product contains teratogenic substances, which can cause long-term damage to the human embryo. This product contains substances that can give chemical pneumonia if inhaled. The symptoms of chemical pneumonia can appear after several hours.

The product contains substances that can damage the reproductive system.

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

Additional warnings

voc

VOC-MAX: 735 g/l, MAXIMUM VOC CONTENT (B/a1): 850 g/l.

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME: IDENTIFICATION NOS.: CONTENT: CLP CLASSIFICATION: NOTE:	toluene CAS-no: 108-88-3 EC-no: 203-625-9 Index-no: 601-021-00-3 40-60% Flam. Liq. 2, STOT RE 2, STOT SE 3, Skin Irrit. 2, Asp. Tox. 1, Repr. 2 H225, H304, H315, H336, H361, H373 S
NAME: IDENTIFICATION NOS.: CONTENT: CLP CLASSIFICATION:	acetone propan-2-one propanone CAS-no: 67-64-1 EC-no: 200-662-2 REACH-no: 01-2119471330-49 Index-no: 606-001-00-8 15-25% Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336, EUH066



NOTE:	S
NAME: IDENTIFICATION NOS.: CONTENT: CLP CLASSIFICATION:	4-methylpentan-2-one isobutyl methyl ketone CAS-no: 108-10-1 EC-no: 203-550-1 Index-no: 606-004-00-4 15-25% Flam. Liq. 2, Acute Tox. 4, STOT SE 3, Eye Irrit. 2
NOTE:	H225, H302, H319, H332, H335, EUH066 S
NAME: unspecified	Naphtha (petroleum), hydrodesulfurized light, dearomatized Low boiling point naphtha -
IDENTIFICATION NOS.: CONTENT:	CAS-no: 92045-53-9 EC-no: 295-434-2 Index-no: 649-383-00-1 10-15%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2 H225, H304, H315, H336, H411

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

S = Organic solvent Other informations

ATEmix(inhale, vapour) > 20 ATEmix(inhale, dust/mist) > 20000 ATEmix(oral) > 2000 Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 3.2 - 0Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 4,8 - 7.2 N chronic (CAT 3) Sum = Sum(Ci/M(chronic)i*25*0.1*10^CATi) = 3,2 - 4,8

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.

Eve contact

Remove contact lenses. Flush eyes with water (20-30°C) for at least 15 minutes. Call a doctor. Indestion

In the case of ingestion, contact a doctor immediately and take this safety data sheet or the label from the material with you. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down so that no vomit runs back into the mouth and throat. Prevent shock by keeping the injured person warm and calm. Give mouth-to-mouth resuscitation if breathing stops. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

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.

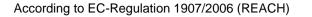
4.2. Most important symptoms and effects, both acute and delayed

Reproductive toxicity: This product contains teratogenic substances which can do long-term damage to human offspring. The effects on the child can be: death, deformity, delayed development, and functional disorders.

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

Reproductive toxicity: This product contains substances which can do damage to reproductive capacity, e.g. damage to germ cells or hormonal regulation. The effects can be: sterility, reduced fertility, menstruation disorders, etc.

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.

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 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

V 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

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

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

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. Must be stored in a cool and ventilated area, away from possible sources of combustion.

Please be aware that this is a chemical that forms peroxides. The content of peroxide must be controlled regularly after opening for example every 6th month.

Storage temperature

No data available.

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

4-methylpentan-2-one isobutyl methyl ketone (EH40/2005) Long-term exposure limit (8-hour TWA reference period): 50 ppm | 208 mg/m3 Short-term exposure limit (15-minute reference period): 100 ppm | 416 mg/m3 Comments: sk bmgv (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin.) acetone propan-2-one propanone (EH40/2005) Long-term exposure limit (8-hour TWA reference period): 500 ppm | 1210 mg/m3 Short-term exposure limit (15-minute reference period): 1500 ppm | 3620 mg/m3 toluene (EH40/2005) Long-term exposure limit (8-hour TWA reference period): 50 ppm | 191 mg/m3 Short-term exposure limit (15-minute reference period): 100 ppm | 384 mg/m3 Comments: Sk (Sk = Can be absorbed through skin.) **DNEL / PNEC** DNEL (acetone propan-2-one propanone): 186 mg/kg Exposure: Dermal Duration of Exposure: Long term - Systemic effects - Workers DNEL (acetone propan-2-one propanone): 62 mg/kg Exposure: Dermal Duration of Exposure: Long term - Systemic effects - General population DNEL (acetone propan-2-one propanone): 2420 mg/m3 Exposure: Inhalation Duration of Exposure: Short term - Systemic effects - Workers DNEL (acetone propan-2-one propanone): 1210 mg/m3 Exposure: Inhalation Duration of Exposure: Long term - Systemic effects - Workers DNEL (acetone propan-2-one propanone): 200 mg/m3 Exposure: Inhalation Duration of Exposure: Long term - Systemic effects - General population DNEL (acetone propan-2-one propanone): 62 mg/kg Exposure: Oral Duration of Exposure: Long term - Systemic effects - General population DNEL (toluene): 384 mg/m3 Exposure: Inhalation Duration of Exposure: Short term - Local effects - Workers DNEL (toluene): 384 mg/m3 Exposure: Inhalation Duration of Exposure: Short term - Systemic effects - Workers DNEL (toluene): 192 mg/m3 Exposure: Inhalation Duration of Exposure: Long term - Local effects - Workers DNEL (toluene): 384 mg/kg bw/day Exposure: Dermal Duration of Exposure: Long term - Systemic effects - Workers DNEL (toluene): 226 mg/m3 Exposure: Inhalation Duration of Exposure: Short term - Local effects - Workers DNEL (toluene): 226 mg/m3 Exposure: Inhalation Duration of Exposure: Short term - Systemic effects - Workers DNEL (toluene): 56,5 mg/m3 Exposure: Inhalation Duration of Exposure: Long term - Systemic effects - General population

DNEL (toluene): 226 mg/kg bw/day Exposure: Dermal



Duration of Exposure: Long term - Systemic effects - General population

DNEL (toluene): 8,13 mg/kg bw/day Exposure: Oral Duration of Exposure: Long term – Systemic effects - General population

PNEC (acetone propan-2-one propanone): 21 mg/L Exposure: Intermittent release

PNEC (acetone propan-2-one propanone): 30,4 mg/kg Exposure: Freshwater sediment

PNEC (acetone propan-2-one propanone): 3,04 mg/kg Exposure: Marine water sediment

PNEC (acetone propan-2-one propanone): 33,3 mg/kg Exposure: Soil

PNEC (acetone propan-2-one propanone): 10,6 mg/kg Exposure: Freshwater

PNEC (acetone propan-2-one propanone): 1,06 mg/kg Exposure: Marine water

PNEC (toluene): 0,68 mg/L Exposure: Freshwater

PNEC (toluene): 0,68 mg/L Exposure: Marine water

PNEC (toluene): 16,39 mg/L Exposure: Freshwater sediment

PNEC (toluene): 2,89 mg/kg Exposure: Soil

PNEC (toluene): 13,61 mg/L Exposure: Sewage Treatment Plant

8.2. Exposure controls

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

General recommendations

Observe general occupational hygiene.

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

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



Use only CE marked protective equipment.



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.

Eye protection

Use safety glasses with a side shield.

SECTION 9: Physical and chemical properties

9.1. Information on bas	sic physical a	nd chemical properties				
Form	Colour	Odour	рΗ	Viscosity	Density (g/cm3)	
Liquid	Colourless	Solvent	-	-	0,819	
Phase changes						
Melting point (°C)		Boiling point (°C) Vapour pressur		re (mm Hg)		
-				-		
Data on fire and exp	plosion hazar					
Flashpoint (°C)		Ignition (°C)		Self ignition (°C)		
0		-		-		
Explosion limits (Vol %)		Oxidizing properties				
-		-				
Solubility						
Solubility in water		n-octanol/water coefficient				
Soluble						
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
- No special
- **V** 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 oxidizing agents, and strong reductants 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
4-methylpentan-2-one isobuty	Guinea pig
4-methylpentan-2-one isobuty	Guinea pig
4-methylpentan-2-one isobuty	Guinea pig
acetone propan-2-one propan	Rabbit
acetone propan-2-one propan	Rat

Test LD50 LD50 LC50 LD50 LD50

Route of exposure

Oral Intraperitoneal Inhalation

Result 1900 mg/kg

1900 mg/kg 268 mg/kg 23300 mg/m3 > 20 ml/kg 5500 mg/kg



acetone propan-2-one propan	Rat	LD50	Oral
acetone propan-2-one propan	Rat	LC50	Inhalation
toluene	Rat	LD50	Oral
toluene	Rabbit	LD50	Dermal
toluene	Rat	LC50	Inhalation

5800 mg/kg 21,09 ppm/8H 636 mg/kg > 5000 mg/kg 28,1 mg/L/4H

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation. Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT-single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs.

Aspiration hazard

May be fatal if swallowed and enters airways.

Long term effects

Reproductive toxicity: This product contains teratogenic substances which can do long-term damage to human offspring. The effects on the child can be: death, deformity, delayed development, and functional disorders. This product contains substances that can give chemical pneumonia if inhaled. The symptoms of chemical pneumonia can appear after several hours.

Reproductive toxicity: This product contains substances which can do damage to reproductive capacity, e.g. damage to germ cells or hormonal regulation. The effects can be: sterility, reduced fertility, menstruation disorders, etc.

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.

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	Species	Teet	Test duration	Deput
Substance	Species	Test	Test duration	Result
4-methylpentan-2-one isobuty	Daphnia	EC50	24 H	1550 mg/L
4-methylpentan-2-one isobuty	Fish	LC50	96 H	540 mg/L
acetone propan-2-one propan	Algae	EC50	120 H	14444 mg/L
acetone propan-2-one propan	Crustacean	LC50	48 H	7550 mg/L
acetone propan-2-one propan	Daphnia	EC50	48 H	13500 mg/L
toluene	Daphnia	LC50	48h	3,8 mg/L
toluene	Fish	LC50	96h	5,5 mg/L
toluene	Algae	EC50	72 h	12,5 mg/L
12.2. Persistence and degradabilit	y			
Substance	Biodegradabil	itv	Test	Result
acetone propan-2-one propan	Yes		No data available	No data available
12.3. Bioaccumulative potential				
Substance	Potential bioa	ccumulation	LogPow	BFC
4-methylpentan-2-one isobuty	No		1,31	No data available
acetone propan-2-one propan	No		-0.24	No data available
			2,73	No data available



12.4. Mobility in soil

4-methylpentan-2-one isobuty...: Log Koc= 1,115789, Calculated from LogPow (High mobility potential.). acetone propan-2-one propan...: Log Koc= -0,111656, Calculated from LogPow (High mobility potential.). toluene : Log Koc= 2,240287, Calculated from LogPow (Moderate mobility potential.).

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. This product contains substances which can accumulate in the food chain because they are bioaccumulative substances. Bioaccumulative substances can accumulate in fat tissue and are not easily secreted

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Waste

EWC code

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.<u>1 -</u> 14.4

ADR/RID	
14.1. UN number	1263
14.2. UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
14.3. Transport hazard class(es)	3
14.4. Packing group	I
Notes	
Tunnel restriction code	D/E
UN-no.	1263
Proper Shipping Name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Class	3
PG*	II
EmS	F-E, S-E
MP**	Yes
Hazardous constituent	-
UN-no.	1263
Proper Shipping Name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Class	3
PG*	I

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. Pregnant and nursing women must not be exposed to the effects of this product. The risk, and possible technical precautions or design of the workplace to avoid such risk, must therefore be evaluated. Demands for specific education

Additional information

Sources

COUNCIL DIRECTIVE 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

IDirective 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

EC Regulation 1272/2008 (CLP).

EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

- H225 Highly flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

EUH066 - Repeated exposure may cause skin dryness or cracking.

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

kbb

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

2016-06-21 Date of last minor change (Last cipher in SDS version) 2016-06-21



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