

Safety Data Sheet



Revision Date 19-May-2015
Version 1.01

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Formula 90

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

Recommended Use Professional Carpet Cleaning

1.3 Details of the supplier of the safety data sheet

Supplier Legend Brands Europe
Chemspec
22 Plover Close Interchange Park
Newport Pagnell MK16 9PS, UK
+44 (0) 1908 611211

Manufacturer Legend Brands
Chemspec
15180 Josh Wilson Road
Burlington, WA 98233
800-932-3030

For further information, please contact: msds@chemspecworld.com

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

Europe 112
Austria +43 1 406 43 43
Belgium Poison center (BE): +32 70 245 245
Denmark Poison Control Hotline (DK): +45 82 12 12 12
Finland Poison Information Centre (FI): +358 9 471 977
France ORFILA (FR): + 01 45 42 59 59
Germany Poison Center Berlin (DE): +49 030 30686 790
Poison Center Nord: +49 551 19240 (24h available English / German)
Ireland National Poisons Information Centre (IE): +353 1 8379964
Iceland +354 543 2222
Italy Poison Center, Milan (IT): +39 02 6610 1029
Luxembourg 112
Netherlands National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway Poisons Information (NO): + 47 22 591300
Portugal Poison Information Center (PT): +351 21 330 3284
Spain Poison Information Service (ES): +34 91 562 04 20
Sweden Poisons Information Center (SV): +46 8 33 12 31
Switzerland Poison Center: Tel 145; +41 44 251 51 51
United Kingdom 111

2. Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 3 - (H412)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

Symbol(s)

Xn - Harmful

R-phrases(s)

Xi;R36 - R42

2.2 Label elements**Signal Word**

Danger

Hazard Statements

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Contains TETRASODIUM EDTA

2.3 Other Hazards

No information available

3. Composition/Information on Ingredients**3.1 Substances**

This product is a mixture. Health hazard information is based on its components.

3.2 Mixtures

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548/EEC)	Classification (1272/2008/EC)	REACH Registration Number
TETRASODIUM EDTA	200-573-9	64-02-8	2.5 - 10	Xn; R22 R42	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318)	no data available
Ethoxylated Lauryl Alcohol	-	9002-92-0	1 - 2.5	Xn; R22	Acute Tox. 4 (H302)	no data available
POLY(OXY-1,2-ETHANED	-	25322-68-3	< 1	Xi; R36	Eye Irrit. 2 (H319)	no data available

IYL), A-HYDRO-O-HYDROXY- Sodium hydroxide	215-185-5	1310-73-2	< 1	C; R35	Skin Corr. 1A (H314)	01-2119457892-27 -XXXX
Sodium 2-Mercaptobenzothiazole	219-660-8	2492-26-4	< 1	N; R50-53	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available
TRISODIUM NTA	225-768-6	5064-31-3	< 1	Xn; R22 Xi; R36 Carc.Cat.3; R40	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Carc. 2 (H351)	no data available
5-Chloro-2-methyl-4-isothiazolin-3-one	247-500-7	26172-55-4	< 0.1		no data available	no data available
2-Methyl-2H-isothiazol-3-one	220-239-6	2682-20-4	< 0.1	T; R24/25 C; R34 Xi; R37 R43 N; R50	STOT SE 3 (H335) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Aquatic Acute 1 (H400)	no data available
COPPER(II) NITRATE	221-838-5	3251-23-8	< 0.1		no data available	no data available
Copper (as Cu Dust & Mists)	231-159-6	7440-50-8	< 0.1		no data available	no data available
C.I. Direct Blue 86	215-537-8	1330-38-7	< 0.1		no data available	no data available

For the full text of the R-phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First Aid Measures

4.1 Description of first-aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes.
Eye contact	Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	Gently wipe or rinse the inside of the mouth with water. Rinse mouth with water and afterwards drink plenty of water or milk.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Foam, Dry powder.

Extinguishing media which shall not be used for safety reasons

High volume water jet.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment.

Advice for emergency responders

For personal protection see section 8.

6.2 Environmental precautions

Dike to collect large liquid spills. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).

6.4 Reference to other sections

See section 8 for more information.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Wear personal protective equipment.

Hygiene measures

When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions

Use only in area provided with appropriate exhaust ventilation. Keep tightly closed in a dry and cool place.

7.3 Specific end uses

Specific use(s)

Refer to technical data sheet.

Exposure scenario

No information available.

8. Exposure controls/personal protection

8.1 Control parameters

Exposure Limit Values

Chemical Name	European Union	Austria	Belgium	Denmark	Finland	France
POLY(OXY-1,2-ETHA NEDIYL), A-HYDRO-O-HYDRO XY- 25322-68-3		STEL 4000 mg/m ³ TWA: 1000 mg/m ³				
Sodium hydroxide 1310-73-2		STEL 4 mg/m ³ TWA: 2 mg/m ³	Maximum Limit Value: 2 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³ Ceiling: 2 mg/m ³	TWA: 2 mg/m ³
5-Chloro-2-methyl-4-is othiazolin-3-one 26172-55-4		Skin TWA: 0.05 mg/m ³				
2-Methyl-2H-isothiazol -3-one 2682-20-4		Skin TWA: 0.05 mg/m ³				
COPPER(II) NITRATE 3251-23-8		STEL 4 mg/m ³ STEL 0.4 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³			TWA: 1 mg/m ³	
Copper (as Cu Dust & Mists) 7440-50-8		STEL 4 mg/m ³ STEL 0.4 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³	TWA: 1.0 mg/m ³ TWA: 0.1 mg/m ³	TWA: 1 mg/m ³	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ STEL: 2 mg/m ³
C.I. Direct Blue 86 1330-38-7		STEL 4 mg/m ³ STEL 0.4 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³			TWA: 1 mg/m ³	
Chemical Name	Germany	Iceland	Ireland	Italy	Luxembourg	The Netherlands
POLY(OXY-1,2-ETHA NEDIYL), A-HYDRO-O-HYDRO XY- 25322-68-3	TWA: 1000 mg/m ³					
Sodium hydroxide 1310-73-2		STEL: 2 mg/m ³	STEL: 2 mg/m ³			
5-Chloro-2-methyl-4-is othiazolin-3-one 26172-55-4	TWA: 0.2 mg/m ³					
2-Methyl-2H-isothiazol -3-one 2682-20-4	TWA: 0.2 mg/m ³					
COPPER(II) NITRATE 3251-23-8	TWA: 0.1 mg/m ³			TWA: 1 mg/m ³		
Copper (as Cu Dust & Mists) 7440-50-8	TWA: 0.1 mg/m ³	TWA: 1.0 mg/m ³ total dust and powder TWA: 0.1 mg/m ³ respirable dust and fume Ceiling: 2 mg/m ³ total dust and powder Ceiling: 0.2 mg/m ³ respirable dust and fume	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ STEL: 0.6 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³		TWA: 0.1 mg/m ³
C.I. Direct Blue 86 1330-38-7				TWA: 1 mg/m ³		
Chemical Name	Norway	Portugal	Spain	Sweden	Switzerland	The United Kingdom
POLY(OXY-1,2-ETHA NEDIYL), A-HYDRO-O-HYDRO XY-					TWA: 1000 mg/m ³	

25322-68-3						
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³	LLV: 1 mg/m ³ CLV: 2 mg/m ³	STEL: 2 mg/m ³ TWA: 2 mg/m ³	STEL: 2 mg/m ³
5-Chloro-2-methyl-4-isothiazolin-3-one 26172-55-4					TWA: 0.2 mg/m ³	
2-Methyl-2H-isothiazol-3-one 2682-20-4					TWA: 0.2 mg/m ³	
COPPER(II) NITRATE 3251-23-8					STEL: 0.2 mg/m ³ TWA: 0.1 mg/m ³	
Copper (as Cu Dust & Mists) 7440-50-8	TWA: 0.1 mg/m ³ TWA: 1 mg/m ³ STEL: 0.3 mg/m ³ STEL: 3 mg/m ³	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³	LLV: 1 mg/m ³ LLV: 0.2 mg/m ³	STEL: 0.2 mg/m ³ TWA: 0.1 mg/m ³	STEL: 0.6 mg/m ³ STEL: 2 mg/m ³ TWA: 1 mg/m ³ TWA: 0.2 mg/m ³

TWA: Time weighted average
 STEL: Short term exposure limit
 LLV: Level Limit Value
 STV: Short Term Value

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection

Safety glasses with side-shields.

Hand Protection

Rubber/latex/neoprene or other suitable chemical resistant gloves.

Skin and body protection

Wear protective gloves/ protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures When using, do not eat, drink or smoke.

Environmental Exposure Controls Prevent product from entering drains. Do not allow material to contaminate ground water system.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear liquid
Color	Blue
Odor	Herbal
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	9.0	
Melting/freezing point		
Boiling point/boiling range	Not Determined	
Flash Point	>93 °C / >200 °F	
Evaporation rate	No data available	
Flammability (solid, gas)		
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		
Vapor density		
Specific Gravity	1.080	
Water solubility	completely soluble	
Solubility in other solvents		
Partition coefficient		
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		
Viscosity, dynamic		
Explosive properties		
Oxidizing Properties		

9.2 Other information

Volatile organic compounds (VOC) < 1%
content

10. Stability and Reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to Avoid

Direct sources of heat.

10.5 Incompatible Materials

Strong oxidizing agents

10.6 Hazardous Decomposition Products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product Information

The product itself has not been tested.

Inhalation	There are no data available for this product.
Eye contact	There are no data available for this product.
Skin contact	There are no data available for this product.
Ingestion	There are no data available for this product.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 2,203.00 mg/kg

ATEmix (inhalation-dust/mist) 26.10 mg/l

Unknown Acute Toxicity

36.76291% of the mixture consists of ingredient(s) of unknown toxicity

14.39285 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

36.1988 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

36.76291 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

36.65252 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

32.90755 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TETRASODIUM EDTA	1658 mg/kg (Rat)		

Skin corrosion/irritation No information available.

Eye damage/irritation No information available.

Respiratory or skin sensitization No information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	European Union
TRISODIUM NTA	Carc. 2

Reproductive toxicity No information available.

Specific target organ systemic toxicity (single exposure) No information available.

Specific target organ systemic toxicity (repeated exposure) No information available.

Aspiration hazard No information available.

12. Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects

32.5048557999% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

No information available

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
TETRASODIUM EDTA	EC50: 72 h <i>Desmodesmus subspicatus</i> 1.01 mg/L	LC50: 96 h <i>Lepomis macrochirus</i> 41 mg/L static LC50: 96 h <i>Pimephales promelas</i> 59.8 mg/L static	
Sodium hydroxide		LC50: 96 h <i>Oncorhynchus mykiss</i> 45.4 mg/L static	
Sodium 2-Mercaptobenzothiazole	EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 0.3 mg/L	LC50: 96 h <i>Oncorhynchus mykiss</i> 0.3 - 1.1 mg/L static LC50: 96 h <i>Lepomis macrochirus</i> 3.8 mg/L static	EC50: 48 h <i>Daphnia magna</i> 1.9 - 5.1 mg/L Static
TRISODIUM NTA		LC50: 96 h <i>Pimephales promelas</i> 93 - 170 mg/L flow-through LC50: 96 h <i>Lepomis macrochirus</i> 175 - 225 mg/L static LC50: 96 h <i>Lepomis macrochirus</i> 252 mg/L LC50: 96 h <i>Pimephales promelas</i> 470 mg/L static LC50: 96 h <i>Oryzias latipes</i> 560 - 1000 mg/L LC50: 96 h <i>Oryzias latipes</i> 560 - 1000 mg/L semi-static LC50: 96 h <i>Oncorhynchus mykiss</i> 72 - 133 mg/L static LC50: 96 h <i>Poecilia reticulata</i> 560 - 1000 mg/L semi-static LC50: 96 h <i>Poecilia reticulata</i> 560 - 1000 mg/L LC50: 96 h <i>Pimephales promelas</i> 114 mg/L	LC50: 48 h <i>Daphnia magna</i> 560 - 1000 mg/L
5-Chloro-2-methyl-4-isothiazolin-3-one	EC50: 72 h <i>Pseudokirchneriella subcapitata</i> 0.11 - 0.16 mg/L static EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 0.03 - 0.13 mg/L static	LC50: 96 h <i>Oncorhynchus mykiss</i> 1.6 mg/L semi-static	EC50: 48 h <i>Daphnia magna</i> 4.71 mg/L EC50: 48 h <i>Daphnia magna</i> 0.12 - 0.3 mg/L Flow through EC50: 48 h <i>Daphnia magna</i> 0.71 - 0.99 mg/L Static
Copper (as Cu Dust & Mists)	EC50: 72 h <i>Pseudokirchneriella subcapitata</i> 0.0426 - 0.0535 mg/L static EC50: 96 h <i>Pseudokirchneriella subcapitata</i> 0.031 - 0.054 mg/L static	LC50: 96 h <i>Pimephales promelas</i> 0.0068 - 0.0156 mg/L LC50: 96 h <i>Pimephales promelas</i> 0.3 mg/L static LC50: 96 h <i>Pimephales promelas</i> 0.2 mg/L flow-through	EC50: 48 h <i>Daphnia magna</i> 0.03 mg/L Static

		LC50: 96 h Oncorhynchus mykiss 0.052 mg/L flow-through LC50: 96 h Lepomis macrochirus 1.25 mg/L static LC50: 96 h Cyprinus carpio 0.3 mg/L semi-static LC50: 96 h Cyprinus carpio 0.8 mg/L static LC50: 96 h Poecilia reticulata 0.112 mg/L flow-through	
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12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

Chemical Name	log Pow
Sodium 2-Mercaptobenzothiazole	-0.46
5-Chloro-2-methyl-4-isothiazolin-3-one	0.75

12.4 Mobility in soil**Mobility in soil**

No information available.

Mobility

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects.

Discharge into the environment must be avoided.

13. Disposal Considerations

13.1 Waste treatment methods**Waste from residues / unused products**

If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

14. Transport Information

ADR

14.1 UN Number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	III
14.4 Packing Group	V
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

IMDG

14.1 UN Number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to MARPOL 73/78 and the IBC Code	No information available

IATA

14.1 UN Number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulatory information****Germany****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	Complies
KECL	Complies
NZIoC	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical Safety Assessment

No information available

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of R-phrases referred to under sections 2 and 3

R42 - May cause sensitization by inhalation

R22 - Harmful if swallowed

R40 - Limited evidence of a carcinogenic effect

R36 - Irritating to eyes

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

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H317 - May cause an allergic skin reaction

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H302 - Harmful if swallowed

H351 - Suspected of causing cancer if inhaled

H332 - Harmful if inhaled

H318 - Causes serious eye damage

Prepared By Chemspec Regulatory Affairs/Product Safety

Revision Date 19-May-2015

Revision Note Not Applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008/EC.

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet