Safety Data Sheet

Revision Date 28-Aug-2018
Version 1.04

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

For further information, please contact: **sds@legendbrands.com**

1.4 Emergency telephone number

Emergency telephone number INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

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 / + 353 1 8092566
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 / 0300 020 0155

2. Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 2 - (H411)

2.2 Label elements

Signal Word
Danger

Hazard Statements
H314 - Causes severe skin burns and eye damage
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
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 Benzene,1,1-oxybis, tetrapropylene derivatives, 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 (1272/2008/EC)	REACH Registration Number
Benzene,1,1-oxybis, tetrapropylene derivatives	-	119345-04-9	10 - 25	no data available	no data available
TETRASODIUM EDTA	200-573-9	64-02-8	2.5 - 10	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318)	01-2119486762-27-XXXX
Ethoxylated Lauryl Alcohol	-	9002-92-0	1 - 2.5	Acute Tox. 4 (H302)	no data available
POLY(OXY-1,2-ETHANEDIYL), A-HYDRO-O-HYDROXY-	-	25322-68-3	< 1	NA	no data available
Sodium hydroxide	215-185-5	1310-73-2	< 1	Skin Corr. 1A (H314)	01-2119457892-27-XXXX
Sodium 2-Mercaptobenzothiazole	219-660-8	2492-26-4	< 1	Aquatic Acute 1 (H400) Aquatic Chronic 1	no data available

				(H410)	
TRISODIUM NTA	225-768-6	5064-31-3	< 1	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Carc. 2 (H351)	no data available
magnesium nitrate	233-826-7	10377-60-3	< 0.1	Ox.Liq 2 (H272) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	01-2119491164-38-XXXX
5-Chloro-2-methyl-4-isothiazolin-3-one	247-500-7	26172-55-4	< 0.1	STOT SE 3 (H335) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Eye Dam. 1 (H318) \par Aquatic Acute 1 (H400)	no data available
2-Methyl-2H-isothiazol-3-one	220-239-6	2682-20-4	< 0.1	STOT SE 3 (H335) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Eye Dam. 1 (H318) Aquatic Acute 1 (H400)	no data available
Benzyl acetate	205-399-7	140-11-4	< 0.1	no data available	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 H-Statements mentioned in this Section, see Section 16

4. First Aid Measures

4.1 Description of first-aid measures

General advice Show this 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 Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If irritation persists, call a physician.

Ingestion Gently wipe or rinse the inside of the mouth with water. Clean mouth with water and drink afterwards plenty of water.

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

No information available.

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 spillage, and then collect 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-ETHANEDIYL), A-HYDRO-O-HYDROXY- 25322-68-3		STEL 4000 mg/m³ TWA: 1000 mg/m³				
Sodium hydroxide 1310-73-2		STEL 4 mg/m³ TWA: 2 mg/m³	Maximum Limit Value: 2 mg/m³	Ceiling: 2 mg/m³	STEL: 2 mg/m³ Ceiling: 2 mg/m³	TWA: 2 mg/m³
5-Chloro-2-methyl-4-isothiazolin-3-one 26172-55-4		Skin TWA: 0.05 mg/m³				
2-Methyl-2H-isothiazol-3-one 2682-20-4		Skin TWA: 0.05 mg/m³				
Benzyl acetate 140-11-4			TWA: 10 ppm TWA: 62 mg/m³	TWA: 10 ppm TWA: 61 mg/m³		
COPPER(II) NITRATE 3251-23-8		STEL 4 mg/m³ STEL 0.4 mg/m³ TWA: 1 mg/m³ TWA: 0.1 mg/m³			TWA: 1 mg/m³	
Copper (as Cu Dust & Mists) 7440-50-8		STEL 4 mg/m³ STEL 0.4 mg/m³ TWA: 1 mg/m³ TWA: 0.1 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 1.0 mg/m³ TWA: 0.1 mg/m³	TWA: 1 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³ STEL: 2 mg/m³
C.I. Direct Blue 86 1330-38-7		STEL 4 mg/m³ STEL 0.4 mg/m³ TWA: 1 mg/m³ TWA: 0.1 mg/m³			TWA: 1 mg/m³	

Chemical Name	Germany	Iceland	Ireland	Italy	Luxembourg	The Netherlands
POLY(OXY-1,2-ETHANEDIYL), A-HYDRO-O-HYDROXY- 25322-68-3	TWA: 1000 mg/m³					
Sodium hydroxide 1310-73-2		STEL: 2 mg/m³	STEL: 2 mg/m³			
5-Chloro-2-methyl-4-isothiazolin-3-one 26172-55-4	TWA: 0.2 mg/m³					
2-Methyl-2H-isothiazol-3-one 2682-20-4	TWA: 0.2 mg/m³					
Benzyl acetate 140-11-4				TWA: 10 ppm TWA: 61 mg/m³		
COPPER(II) NITRATE 3251-23-8	TWA: 0.1 mg/m³			TWA: 1 mg/m³		
Copper (as Cu Dust & Mists) 7440-50-8	TWA: 0.1 mg/m³	TWA: 1.0 mg/m³ total dust and powder TWA: 0.1 mg/m³ respirable dust and fume Ceiling: 2 mg/m³ total dust and powder Ceiling: 0.2 mg/m³ respirable dust and fume	TWA: 0.2 mg/m³ TWA: 1 mg/m³ STEL: 0.6 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³		TWA: 0.1 mg/m³
C.I. Direct Blue 86 1330-38-7				TWA: 1 mg/m³		

Chemical Name	Norway	Portugal	Spain	Sweden	Switzerland	The United Kingdom

POLY(OXY-1,2-ETHANEDIYL), A-HYDRO-O-HYDROXY- 25322-68-3					TWA: 1000 mg/m³	
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m³	Ceiling: 2 mg/m³	STEL: 2 mg/m³	LLV: 1 mg/m³ CLV: 2 mg/m³	STEL: 2 mg/m³ TWA: 2 mg/m³	STEL: 2 mg/m³
5-Chloro-2-methyl-4-isothiazolin-3-one 26172-55-4					TWA: 0.2 mg/m³	
2-Methyl-2H-isothiazol-3-one 2682-20-4					TWA: 0.2 mg/m³	
Benzyl acetate 140-11-4		TWA: 10 ppm	TWA: 10 ppm TWA: 62 mg/m³			
COPPER(II) NITRATE 3251-23-8					STEL: 0.2 mg/m³ TWA: 0.1 mg/m³	
Copper (as Cu Dust & Mists) 7440-50-8	TWA: 0.1 mg/m³ TWA: 1 mg/m³ STEL: 0.3 mg/m³ STEL: 3 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³	LLV: 1 mg/m³ LLV: 0.2 mg/m³	STEL: 0.2 mg/m³ TWA: 0.1 mg/m³	STEL: 0.6 mg/m³ STEL: 2 mg/m³ TWA: 1 mg/m³ TWA: 0.2 mg/m³

TWA: Time weighted average
STEL: Short term exposure limit
LLV: Exposure Limit Values
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
Color	Blue
Odor	Herbal
Odor Threshold	No information available

Property	Values	Remarks
pH	13.0	
Melting/freezing point		
Boiling point/boiling range		No information available
Flash Point	>93 °C / >200 °F	
Evaporation rate		
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) content < 1%

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 (NOx), 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)	2,355.00 mg/kg
ATEmix (dermal)	7,857.00 mg/kg ppm
ATEmix (inhalation-dust/mist)	38.90 mg/l
ATEmix (inhalation-vapor)	285.00 mg/l

Unknown Acute Toxicity
< 1% of the mixture consists of ingredient(s) of unknown toxicity
< 1 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
< 1 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
< 1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
< 1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
< 1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TRISODIUM NTA	920 mg/kg (Rat)		> 5 mg/L (Rat) 4 h

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation Causes serious eye damage.

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

18.6704108099 % of the mixture consists of components(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 Desmodesmus subspicatus 1.01 mg/L	LC50: 96 h Lepomis macrochirus 41 mg/L static LC50: 96 h Pimephales promelas 59.8 mg/L static	
Sodium hydroxide		LC50: 96 h Oncorhynchus mykiss 45.4 mg/L static	
Sodium 2-Mercaptobenzothiazole	EC50: 96 h Pseudokirchneriella subcapitata 0.3 mg/L	LC50: 96 h Oncorhynchus mykiss 0.3 - 1.1 mg/L static LC50: 96 h Lepomis macrochirus 3.8 mg/L static	EC50: 48 h Daphnia magna 1.9 - 5.1 mg/L Static
TRISODIUM NTA		LC50: 96 h Pimephales promelas 93 - 170 mg/L flow-through LC50: 96 h Lepomis macrochirus 175 - 225 mg/L static LC50: 96 h Lepomis macrochirus 252 mg/L LC50: 96 h Pimephales promelas 470 mg/L static LC50: 96 h Oryzias latipes 560 - 1000 mg/L LC50: 96 h Oryzias latipes 560 - 1000 mg/L semi-static LC50: 96 h Oncorhynchus mykiss 72 - 133 mg/L static LC50: 96 h Poecilia reticulata 560 - 1000 mg/L semi-static LC50: 96 h Poecilia reticulata 560 - 1000 mg/L LC50: 96 h Pimephales promelas 114 mg/L	LC50: 48 h Daphnia magna 560 - 1000 mg/L
5-Chloro-2-methyl-4-isothiazolin-3-one	EC50: 72 h Pseudokirchneriella subcapitata 0.11 - 0.16 mg/L static EC50: 96 h Pseudokirchneriella subcapitata 0.03 - 0.13 mg/L static	LC50: 96 h Oncorhynchus mykiss 1.6 mg/L semi-static	EC50: 48 h Daphnia magna 4.71 mg/L EC50: 48 h Daphnia magna 0.12 - 0.3 mg/L Flow through EC50: 48 h Daphnia magna 0.71 - 0.99 mg/L Static
Copper (as Cu Dust & Mists)	EC50: 72 h Pseudokirchneriella subcapitata 0.0426 - 0.0535 mg/L static EC50: 96 h Pseudokirchneriella subcapitata 0.031 - 0.054 mg/L static	LC50: 96 h Pimephales promelas 0.0068 - 0.0156 mg/L LC50: 96 h Pimephales promelas 0.3 mg/L static LC50: 96 h Pimephales promelas 0.2 mg/L flow-through 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	EC50: 48 h Daphnia magna 0.03 mg/L Static

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
Benzyl acetate	1.96

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	3077
14.2 Proper shipping name	UN 3077 - Environmentally hazardous substance, solid, n.o.s
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Environmental hazard	M7
14.6 Special Provisions	None

IMDG

14.1 UN	3077
14.2 Proper shipping name	UN3077 - Environmentally hazardous substance, solid, n.o.s
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Marine pollutant	Yes
Environmental hazard	M7
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	3077
14.2 Proper shipping name	Environmentally hazardous substance, solid, n.o.s , UN 3077
14.3 Hazard class	9
14.4 Packing Group	III
14.5 Environmental hazard	M7
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	-
EINECS/ELINCS	-
DSL	-
PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-
NZIoC	-

Legend

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European 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
NZIoC - New Zealand Inventory of Chemicals

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 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
H335 - May cause respiratory irritation
H317 - May cause an allergic skin reaction
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H318 - Causes serious eye damage
H302 - Harmful if swallowed
H319 - Causes serious eye irritation

H351 - Suspected of causing cancer if inhaled
H332 - Harmful if inhaled

Prepared By	Chemspec Regulatory Affairs/Product Safety
Revision Date	28-Aug-2018
Revision Note	Not Applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

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