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

1.1. Product identifier

Asplit® CN Solution

Art.-No.

592 0020, 592 0021, 592 0022, 592 0023

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

Use of the substance/mixture

Mortar

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	TIP TOP Oberflaechenschutz Elbe GmbH
Street:	Heuweg 4
Place:	D-06886 Wittenberg
Telephone:	+49(0)3491/635-50 Telefax: +49(0)3491/635-552
Responsible Department:	Responsible for the safety data sheet: sds@gbk-ingelheim.de

Supplier

Company name:	REMA TIP TOP INDUSTRY UK LTD
Street:	Plumtree Industrial Estate, Harworth
Place:	Doncaster, DN11 8EW, South Yorkshire
Telephone:	+44 (0)1302 711233
Internet:	www.rema-tiptop.co.uk

1.4. Emergency telephone number: INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Carc. 1B; H350
Muta. 2; H341
Acute Tox. 3; H331
Acute Tox. 4; H312
Acute Tox. 4; H302
Skin Corr. 1B; H314
Skin Sens. 1A; H317
STOT SE 3; H335
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

2-Furaldehyde
Phenol
formaldehyde
N-(3-(trimethoxysilyl)propyl)ethylenediamine

Signal word: Danger

Pictograms:

Hazard statements

H302+H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe vapour.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P273	Avoid release to the environment.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture containing following substances with additives

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
98-01-1	2-Furaldehyde			< 30 %
	202-627-7	605-010-00-4	01-2119486861-27	
	Flam. Liq. 3, Carc. 2, Acute Tox. 2, Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Aquatic Chronic 3; H226 H351 H330 H301 H312 H315 H319 H335 H412			
108-95-2	Phenol			< 10 %
	203-632-7	604-001-00-2	01-2119471329-32	
	Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, STOT RE 2, Aquatic Chronic 2; H341 H331 H311 H301 H314 H318 H373 H411			
50-00-0	formaldehyde			< 1 %
	200-001-8	605-001-00-5	01-2119488953-20	
	Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A; H350 H341 H331 H311 H301 H314 H318 H317			
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			< 1 %
	217-164-6		01-2119970215-39	
	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1B, STOT RE 2; H332 H318 H317 H373			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
98-01-1	202-627-7	2-Furaldehyde	< 30 %
	inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg; oral: LD50 = 65 mg/kg		
108-95-2	203-632-7	Phenol	< 10 %
	inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: ATE = 100 mg/kg Skin Corr. 1B; H314: >= 3 - 100 Skin Irrit. 2; H315: >= 1 - < 3 Eye Irrit. 2; H319: >= 1 - < 3		
50-00-0	200-001-8	formaldehyde	< 1 %
	inhalation: ATE = 3 mg/l (vapours); inhalation: LC50 = 0,578 mg/l (dusts or mists); dermal: LD50 = 270 mg/kg; oral: LD50 = 600 - 800 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 5 - < 25 Eye Irrit. 2; H319: >= 5 - < 25 Skin Sens. 1; H317: >= 0,2 - 100 STOT SE 3; H335: >= 5 - 100		
1760-24-3	217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists)		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.
Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
Seek medical treatment immediately.

After contact with skin

Wash off immediately with soap and plenty of water.

Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult (eye) doctor immediately.

After ingestion

Do not induce vomiting.
Summon a doctor immediately.
Rinse out mouth and give plenty of water to drink.
Never give anything by mouth to an unconscious person.
Induce vomiting only upon the advice of a physician.

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

May cause cancer.
Suspected of causing genetic defects.
Toxic if inhaled.
Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.
Attention. Phenols in high amounts cause local anesthetic effects so that pain due to burns may be delayed .

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO2), water-spray.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire may produce:
carbon monoxide and carbon dioxide
Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Vapours are heavier than air and spread along ground .
The vapour/air mixture is explosive, even in empty, uncleaned receptacles.
Cool containers at risk with water spray jet.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation.
Remove persons to safety.
Keep away sources of ignition.

For emergency responders

In case of vapour formation use respirator.
Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.
Vapours are heavier than air and spread along ground.
Use only in thoroughly ventilated areas.
Provide suitable extraction at the processing machines.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.
Take measures against electrostatically charging.

Advice on general occupational hygiene

Do not inhale vapours.
Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke.
Treat subsequently with skin cream.
Remove and wash contaminated clothes before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

Hints on joint storage

Incompatible with acids.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Mortar

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
98-01-1	2-Furaldehyde (furfural)	2	8		TWA (8 h)	WEL
		5	20		STEL (15 min)	WEL
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		STEL (15 min)	WEL
108-95-2	Phenol	2	7.8		TWA (8 h)	WEL
		4	16		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.
Pay attention to explosion protection guidelines.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting goggles (EN 166).
Eye wash bottle with pure water (EN 15154).

Hand protection

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance approx. 480 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de.
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (DIN EN ISO 6530)
Solvent-resistant apron (EN 467).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Dark brown
Odour: Like phenoles

		Test method
Changes in the physical state		
Melting point/freezing point:	n.d.	
Boiling point or initial boiling point and boiling range:	100 - 200 °C	
Sublimation point:	n.a.	
Softening point:	n.d.	
Flash point:	78 °C	DIN EN ISO 2719
Flammability		
Solid/liquid:	n.a.	

Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits:	2,1 vol. %	(*)
Upper explosion limits:	19,3 vol. %	(*)
Auto-ignition temperature:	315 °C	(*)
Self-ignition temperature		
Solid:	n.a.	
Gas:	n.a.	
Decomposition temperature:	> 110 °C	
pH-Value:	7 - 8	
Viscosity / dynamic: (at 23 °C)	125 - 165 mPa·s	ISO 3219
Viscosity / kinematic:	n.d.	
Flow time:	n.d.	
Water solubility: (at 20 °C)	Partially soluble	
Solubility in other solvents		
n.d.		
Partition coefficient n-octanol/water:	n.d.	
Vapour pressure:	~ 1,4 hPa	OECD 104
Vapour pressure:		ASTM D 2879
Density:	1,221 g/cm³	
Bulk density:	n.a.	
Relative vapour density:	n.d.	

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties

Not oxidising.

Other safety characteristics

Solvent separation test:	n.d.
Solvent content:	n.d.
Evaporation rate:	n.d.

Further Information

(*) Solvent

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with strong acids.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.
Vapour/air mixtures are explosive at intensive warming.
Heating can release vapours which can be ignited.
Avoid temperatures above 25°C .

10.5. Incompatible materials

Strong acids

10.6. Hazardous decomposition products

No hazardous decomposition products known.
Fire may produce:
Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Toxic if inhaled.
Harmful in contact with skin.
Harmful if swallowed.
No toxicological data available.

Irritation and corrosivity

Skin corrosion/irritation / Serious eye damage/eye irritation: Causes severe skin burns and eye damage.

Sensitising effects

May cause an allergic skin reaction. (formaldehyde; N-(3-(trimethoxysilyl)propyl)ethylenediamine)

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (formaldehyde)
Suspected of causing genetic defects. (Phenol; formaldehyde)
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (2-Furaldehyde)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

11.2. Information on other hazards

Endocrine disrupting properties

No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.
Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Can be incinerated, when in compliance with local regulations.
Where possible recycling is preferred to disposal.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 2927
14.2. UN proper shipping name:	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Furaldehyde, Phenol)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1+8

Classification code:	TC1
Special Provisions:	274
Limited quantity:	100 mL / 30 kg
Excepted quantity:	E4
Transport category:	2
Hazard No:	68
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 2927
14.2. UN proper shipping name:	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Furaldehyde, Phenol)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1+8

Classification code:	TC1
Special Provisions:	274 802
Limited quantity:	100 mL / 30 kg
Excepted quantity:	E4

Marine transport (IMDG)

14.1. UN number or ID number:	UN 2927
14.2. UN proper shipping name:	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Furaldehyde, phenol)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1+8

Marine pollutant:	Yes
Special Provisions:	274
Limited quantity:	100 mL / 30 kg
Excepted quantity:	E4
EmS:	F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 2927
14.2. UN proper shipping name:	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-Furaldehyde, phenol, solution)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1+8

Special Provisions:	A4 A137
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y640
Excepted quantity:	E4
IATA-packing instructions - Passenger:	653
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	660
IATA-max. quantity - Cargo:	30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Maritime transport in bulk according to IMO instruments

The transport takes place only in approved and appropriate packaging.

Other applicable information

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes:	29 %
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	2 - obviously hazardous to water

Additional information

Consider Chemical prohibition regulation.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,4,6,7,9,10,11,12,14.

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Carc. 1B; H350	Calculation method
Muta. 2; H341	Calculation method
Acute Tox. 3; H331	Calculation method
Acute Tox. 4; H312	Calculation method
Acute Tox. 4; H302	Calculation method
Skin Corr. 1B; H314	Calculation method
Skin Sens. 1A; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H312	Harmful if swallowed or in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.
The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.
The delivery specifications are contained in the corresponding product sheet.
This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.
(n.a. = not applicable; n.d. = not determined)

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)