



## SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

### Avastel

Revision date 31-Oct-2024

Version 2 Supersedes Date: 21-Oct-2024

Product Code(s)

FNG56983-44

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

### 1.1. Product identifier

**Avastel**

#### Other means of identification

Pure substance/mixture Mixture

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

Recommended use Fungicide, Professional use  
Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

ADAMA Agricultural Solutions UK Ltd  
Third Floor East  
1410 Arlington Business Park  
Theale  
READING  
RG7 4SA  
Tel: 01635 860555  
Fax: 01635 861555

#### For further information, please contact

E-mail address ukenquiries@adama.com

### 1.4. Emergency telephone number

Emergency Telephone UK: National Chemical Emergency Centre:  
Tel: 01856 407333 (24 hours, 7 days a week)  
Republic of Ireland: National Poisons Information Centre, Beaumont Hospital:  
Tel: 01 809 2166 or 01 837 9964 (8am - 10pm 7 days a week) or  
the UK National Chemical Emergency Centre on  
Tel: +44 (0)1865 407333 (24 hours, 7 days a week)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)

Effects on or via lactation	Lact - (H362)
Chronic aquatic toxicity	Category 2 - (H411)

## 2.2. Label elements

### Labelling according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Contains Fluxapyroxad , 1-Octyl-2-pyrrolidinone, Alcohols, C11-14-iso-, C13-rich, ethoxylated (7-15 EO)

### Hazard pictograms



### Signal word

Danger

### Hazard statements

H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H362 - May cause harm to breast-fed children  
 H411 - Toxic to aquatic life with long lasting effects

### Precautionary Statements

P102 - Keep out of reach of children  
 P201 - Obtain special instructions before use  
 P263 - Avoid contact during pregnancy and while nursing  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P302 + P352 - IF ON SKIN: Wash with plenty of water and soap  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P391 - Collect spillage  
 P410 - Protect from sunlight  
 P501 - Dispose of contents/ container to an approved waste disposal plant

### EU Specific Hazard Statements

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

### Additional phrases for PPP

SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

## 2.3. Other hazards

### PBT & vPvB

The product does not contain any substance(s) classified as PBT or vPvB.

### Endocrine Disruptor Information

None known.

### Persistent Organic Pollutants

Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	CAS No	EC No	Index No	Weight-%	Classification according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567	Specific concentration limit (SCL)	M-Factor	REACH Registration Number
Acetophenone	98-86-2	202-708-7	606-042-00-1	35 - 39	Acute Tox. 4 (H302) Eye Irrit. 2 (H319)			01-211953316 9-37-0002
1-Octyl-2-pyrrolidinone	2687-94-7	403-700-8	613-098-00-0	15 - 19	Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)			01-000001533 5-74-0000
Prothioconazole	178928-70-6	605-841-2	613-337-00-9	13 - 16	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		M = 10 M = 1	No data available
Alcohols, C11-14-iso-, C13-rich, ethoxylated (7-15 EO)	78330-21-9	-		10 - 13	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)			No data available
Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy-	99734-09-5	-		8 - 11	Aquatic Chronic 3 (H412)			No data available
Fluxapyroxad	907204-31-3	-	616-228-00-4	6 - 9	Lact. (H362) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		M=1 M=1	No data available
Tristyrylphenol ethoxylate phosphate ester	114535-82-9	-		1 - 4	Eye Irrit. 2 (H319)			No data available
orthophosphoric acid	7664-38-2	231-633-2	015-011-00-6	< 1	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Met. Corr. 1 (H290)	Eye Irrit. 2 :: 10%<=C<25% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 10%<=C<25%		No data available

Acute toxicity estimates (ATEs) according to Part 3 of Annex VI to Regulation (EC) No 1272/2008 are indicated in this table, if available

Full text of H- and EUH-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General advice

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection.

<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a doctor.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention immediately if symptoms occur.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a doctor if necessary.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a doctor.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

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

**Symptoms** None known.

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

**Note to doctors** Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

#### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** No information available.

#### **5.3. Advice for firefighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

#### **6.3. Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Take up mechanically, placing in appropriate containers for disposal.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.
<b>6.4. Reference to other sections</b>	
<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
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### 7.3. Specific end use(s)

<b>Risk Management Methods (RMM)</b>	The information required is contained in this Safety Data Sheet.
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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical name	United Kingdom
orthophosphoric acid 7664-38-2	TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>

<b>Derived No Effect Level (DNEL)</b>	No information available.
<b>Predicted No Effect Concentration (PNEC)</b>	No information available.

### 8.2. Exposure controls

<b>Engineering controls</b>	Ensure adequate ventilation, especially in confined areas.
<b>Personal protective equipment</b>	
<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Hand protection</b>	Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).
<b>Skin and body protection</b>	Use suitable protective clothing and equipment if required, such as safety goggles certified to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water repellent woven coverall with 65% polyester and 35 % cotton.

<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.
<b>Environmental exposure controls</b>	Local authorities should be advised if significant spillages cannot be contained.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
Physical state	: liquid		
Colour	: light yellow to light brown		
Odour	: No information available		
<b>Odour threshold</b>	: No data available		
<b>pH</b>	: 2 - 3	CIPAC MT 75.3	
<b>Melting point / freezing point °C</b>	: No data available		
<b>Boiling point / boiling range °C</b>	: No data available		
<b>Flash point °C</b>	: 92.5	EC A.9; ISO 2719:2002 E	
<b>Evaporation rate</b>	: No data available		
<b>Flammability (solid, gas)</b>	: Not applicable		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapour pressure kPa</b>	: No data available		
<b>Vapour density</b>	: No data available		
<b>Relative density</b>	: 1.03 - 1.13	OECD 109; EEC A.3	
<b>Solubility(ies) mg/l</b>	: No data available		
<b>Partition coefficient Log Pow</b>	:		See Section 12 for additional Ecological Information
<b>Autoignition temperature °C</b>	: 420	EC A.15	
<b>Decomposition temperature °C</b>	: No data available		
<b>Kinematic viscosity mm<sup>2</sup>/s 40 °C</b>	: 11.5	OPPTS 830.7100	
<b>Surface tension</b>	: 36.29	OECD 115; EC A.5	
<b>Particle Size</b>	: Not applicable		

### 9.2. Other information

**Bulk density g/ml** : Not applicable

#### 9.2.1. Information with regards to physical hazard classes

**Explosive properties** : Not an explosive  
**Oxidising properties** : Not oxidizing

#### 9.2.2. Other safety characteristics

No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** No information available.

### 10.2. Chemical stability

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**10.4. Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**10.5. Incompatible materials**

**Incompatible materials** None known based on information supplied.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Oral LD50 mg/kg</b>	: >2000	Rat	OECD 423	
<b>Dermal LD50 mg/kg</b>	: >2000	Rat	OECD 402	
<b>Inhalation LC50 mg/l</b>	: >5.28	Rat	OECD 436	
<b>Skin corrosion/irritation</b>	: Non-irritating to the skin	Rabbit	OECD 404	
<b>Serious eye damage/eye irritation</b>	: Severely irritating to eyes	Rabbit	OECD 405	
<b>Sensitisation</b>	: Not a skin sensitiser	Mouse	OECD 429	

**Chronic toxicity**

**Germ cell mutagenicity**

**Chemical name**

Prothioconazole : Not classified

Fluxapyroxad : Not classified

**Carcinogenicity**

**Chemical name**

Prothioconazole : Not Carcinogenic

Fluxapyroxad : Not Carcinogenic

**Reproductive toxicity**

**Chemical name**

Prothioconazole : Not toxic for the reproductive system

Fluxapyroxad : Effects on or via lactation

**STOT - Single Exposure**

**Chemical name**

Prothioconazole : Not classified

Fluxapyroxad : Not classified

**STOT - Repeated Exposure**

**Chemical name**

Prothioconazole : Not classified  
Fluxapyroxad : Not classified

**Aspiration hazard**

**Chemical name**  
Prothioconazole : Not classified  
Fluxapyroxad : No data available

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**11.2.2. Other information**

**Other adverse effects** No information available.

**SECTION 12: Ecological information****12.1. Toxicity**

<u>Acute toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: 3.72	Rainbow trout	OECD 203	semi-static
Crustacea 48-hour EC50 mg/l	: 6.58	Daphnia magna	OECD 202	Static
Algae 72-hour EC50 mg/l	: 8.70	P. subcapitata	OECD 201	Biomass
Other plants EC50 mg/l	: ----			

<u>Chronic aquatic toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish NOEC mg/l	: No data available			
Crustacea NOEC mg/l	: No data available			
Algae NOEC mg/l	: No data available			
Other plants NOEC mg/l	: No data available			

**Terrestrial Toxicity****Birds Oral LD50 mg/kg**

**Chemical name**  
Prothioconazole : > 2000 Bobwhite quail FIFRA 71-1

**Bees Oral LD50 µg/bee**

**Chemical name**  
Prothioconazole : > 71 Apis mellifera OECD 213

**12.2. Persistence and degradability****Abiotic Degradation****Water DT50 days**

**Chemical name**  
Prothioconazole : 0.8 - 1.0 OECD 308

**Soil DT50 days**

**Chemical name**  
Prothioconazole : 2.8 OECD 307

**Biodegradation**

**Chemical name**  
Fluxapyroxad : Not readily biodegradable OECD 301B

**12.3. Bioaccumulative potential**

<u>Partition Coefficient (n-octanol/water) Log Pow</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Chemical name</b>			

Prothioconazole	: 3.04	OECD 117	pH 7; 20 ° C
Fluxapyroxad	: 3.1	OECD 117	20 ° C; pH 7

**Bioconcentration factor (BCF)****Chemical name**

Prothioconazole	: 19.7	OECD 305
Fluxapyroxad	: 36 - 37	OECD 305

**12.4. Mobility in soil****Adsorption/Desorption****Chemical name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Prothioconazole	: 1765	OECD 312	No data available

**12.5. Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**12.6. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information****ADR**

<b>14.1 UN number</b>	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad)
<b>14.3 Transport hazard class(es)</b>	9
<b>14.4 Packing group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad), 9, III
<b>14.5 Environmental hazard</b>	Yes
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274, 335, 601, 375
<b>Classification code</b>	M6

**RID**

<b>14.1 UN number</b>	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad)
<b>14.3 Transport hazard class(es)</b>	9
<b>14.4 Packing group</b>	III
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad), 9, III
<b>Environmental hazard</b>	Yes

**Special Precautions for Users**

14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 375, 601
Classification code	M6

**IMDG**

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad), 9, III, Marine pollutant
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
14.5 Marine pollutant	P
Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
IMDG Stowage and segregation	Category A No information available
14.7 Maritime transport in bulk according to IMO instruments	No information available

**IATA**

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Prothioconazole, Fluxapyroxad), 9, III
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	A97, A158, A197
ERG Code	9L



\* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids

## SECTION 15: Regulatory information

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

#### National regulations

Trade name / designation	Registration Number(s)	Date
Not Applicable	Not Applicable	Not Applicable

**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

**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (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

**15.2. Chemical safety assessment****Chemical Safety Report**

A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009

**SECTION 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**

H302 - Harmful if swallowed  
 H314 - Causes severe skin burns and eye damage  
 H318 - Causes serious eye damage  
 H319 - Causes serious eye irritation  
 H362 - May cause harm to breast-fed children  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects  
 H411 - Toxic to aquatic life with long lasting effects  
 H412 - Harmful to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Revision date** 31-Oct-2024

**Reason for revision** Section 2

**Further information** This material safety data sheet complies with the provisions of Regulation (EC) No 1907/2006, as amended by Regulation (EU) 2020/878.

**Abbreviations and acronyms**

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 CAS Number - Chemical Abstracts Service number  
 EC Number - EINECS and ELINCS Number  
 EINECS - European Inventory of Existing Commercial Substances  
 ELINCS - European List of notified Chemical Substances  
 IATA - International Air Transport Association  
 ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

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IMDG - International Maritime Dangerous Goods  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
OECD - Organization for Economic Co-operation and Development  
PBT - Persistent, Bioaccumulative and Toxic substance  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
STOT - Specific Target Organ Toxicity  
vPvB - Very Persistent and Very Bioaccumulative

**Classification according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567****Classification of the mixture**

H318 - Causes serious eye damage  
H362 - May cause harm to breast-fed children  
H411 - Toxic to aquatic life with long lasting effects

**Classification procedure**

Classification based on test data  
Classification based on Calculation method  
Classification based on Calculation method

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

**Disclaimer**

**The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**