

SAFETY DATA SHEET ZOFF

According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 3.2

Print Date 29/01/2019

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Revision Date 21/01/2019

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name ZOFF
Product Code 11000731V2 (CLP)

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

Recommended use

Graffiti remover and cleaner.

1.3. Details of the supplier of the safety data sheet

NCH UK & Ireland, NCH House, Springvale Avenue, Bilston, WV14 0QL Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502
E-mail address technical_uk@nch.com
Website address www.ncheurope.com

1.4. Emergency telephone number

UK - 01902 510200 (available during Office Hours)
In Republic of Ireland (available from 8am to 10pm daily): 01 809 2166

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Aerosols: Category 1
Skin irritation: Category 2
Eye irritation: Category 2
H222 - Extremely flammable aerosol
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H229 - Pressurised container: May burst if heated

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Hazard pictograms



Signal word DANGER

Hazard Statements

H222 - Extremely flammable aerosol
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H229 - Pressurised container: May burst if heated

Precautionary Statements

P337 + P313 - If eye irritation persists: Get medical advice/attention
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Do not pierce or burn, even after use
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P260 - Do not breathe mist/spray.
Keep out of reach of children.
For industrial and institutional use only.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2 Mixture

Chemical Name	CAS-No.	EC No.	EU - REACH reg number	Weight-%	EU - GHS/CLP Classification	Notes
XYLENE	1330-20-7	215-535-7	01-2119539452-40	25 - < 50	Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226) Acute Tox. 4 (H332) Asp. Tox. 1 (H304) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 2 (H373) Aquatic Chronic 3 (H412)	
DIMETHYL ETHER	115-10-6	204-065-8	01-2119472128-37	25 - < 50	Flam. Gas 1 (H220) Press. Gas	
ETHYLBENZENE	100-41-4	202-849-4	01-2119539452-40	1 - < 3	Acute Tox. 4 (H332) Asp. Tox. 1 (H304) Flam. Liq. 2 (H225) STOT RE 2 (H373)	P
SODIUM PETROLEUM SULPHONATE	68608-26-4	271-781-5	01-2119527859-22	1 - < 3	Eye Irrit. 2 (H319)	
ALCOHOLS C9-11 ETHOXYLATED (12EO)	68439-46-3	614-482-0	-	1 - < 3	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	

For any H statements mentioned in this section, see the full text in section 16.

EU Notes

Note P - The classification as a carcinogen or mutagen does not apply as the substance contains less than 0.1% w/w benzene CAS 1330-20-7 (>95%) & CAS 100-41-4 (<5%) = EUVCB Reach Registration Number 01-2119486136-34 CAS 90989-38-1

SECTION 4. FIRST AID MEASURES**4.1. Description of first aid measures**General advice

Avoid breathing vapours or mists. Get medical attention immediately if symptoms occur.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician immediately.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth with water. If swallowed, do not induce vomiting - seek medical advice.

Inhalation

If symptoms persist, call a physician. If exposed to high concentrations of the aerosol vapours, move to fresh air.

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

No information available.

Eye contact

May cause irritation as itching and redness.

Skin contact

Prolonged contact will dry and defat the skin and may cause irritation such as itching and redness.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

4.3. Indication of any immediate medical attention and special treatment neededNotes to physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing mediaSuitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Dry powder. Alcohol-resistant foam. Water spray. Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons

Water jet.

5.2. Special hazards arising from the substance or mixture

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

Pressurized container. Extremely flammable. Keep product and empty container away from heat and sources of ignition.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent bursting.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes, and clothing. Prevent further leakage or spillage if safe to do so. See section 8. Remove all sources of ignition. Ventilate the area. Evacuate personnel to safe areas. Due to the nature of the aerosol packaging, a large spill is unlikely. For a small spill, wear appropriate protective clothing, ventilate the area, absorb with an inert material and transfer all material into a properly labeled container for disposal. Use care as spills may be slippery.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Insoluble in water and hence will float on the surface.

6.3. Methods and material for containment and cleaning upMethods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Remove all sources of ignition.

Methods for Cleaning up

For the non volatile residues: Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

Chemical Name	European Union	The United Kingdom	France	Germany	Austria
XYLENE		STEL: 100 ppm STEL: 441 mg/m ³ TWA: 50 ppm TWA: 220 mg/m ³ Skin	TWA: 50 ppm TWA: 221 mg/m ³ TWA: 1000 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ STEL: 1500 mg/m ³ Skin	AGW: 100ppm AGW: 440mg/m ³ Peak: 200ppm Peak: 880mg/m ³ TWA: 100ppm TWA: 440mg/m ³ Skin BGW: 1.5mg/L BGW: 2000mg/L	Skin STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221 mg/m ³
DIMETHYL ETHER		STEL: 500 ppm	TWA: 1000 ppm	AGW: 1000ppm	STEL: 2000 ppm

		STEL: 958 mg/m ³ TWA: 400 ppm TWA: 766 mg/m ³	TWA: 1920 mg/m ³	AGW: 1900mg/m ³ Peak: 8000ppm Peak: 15200mg/m ³ TWA: 1000ppm TWA: 1900mg/m ³	STEL: 3820 mg/m ³ TWA: 1000 ppm TWA: 1910 mg/m ³
ETHYLBENZENE		STEL: 125 ppm STEL: 552 mg/m ³ TWA: 100 ppm TWA: 441 mg/m ³ Skin	TWA: 20 ppm TWA: 88.4 mg/m ³ TWA: 1000 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ STEL: 1500 mg/m ³ Skin	AGW: 20ppm AGW: 88mg/m ³ Peak: 40ppm Peak: 176mg/m ³ TWA: 20ppm TWA: 88mg/m ³ Skin BGW: 300mg/g	Skin STEL: 200 ppm STEL: 880 mg/m ³ TWA: 100 ppm TWA: 440 mg/m ³

Chemical Name	Spain	Portugal	Italy	The Netherlands	Switzerland
XYLENE	Skin STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221 mg/m ³	STEL: 100 ppm STEL: 442 mg/m ³ TWA: 50 ppm TWA: 221 mg/m ³ Skin	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Skin	Skin STEL: 442 mg/m ³ TWA: 210 mg/m ³	Skin STEL: 200 ppm STEL: 870 mg/m ³ TWA: 100 ppm TWA: 435 mg/m ³
DIMETHYL ETHER	TWA: 1000 ppm TWA: 1920 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m ³	STEL: 1500 mg/m ³ TWA: 950 mg/m ³	TWA: 1000 ppm TWA: 1910 mg/m ³
ETHYLBENZENE	Skin STEL: 200 ppm STEL: 884 mg/m ³ TWA: 100 ppm TWA: 441 mg/m ³	STEL: 200 ppm STEL: 884 mg/m ³ TWA: 100 ppm TWA: 442 mg/m ³ Skin	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Skin	Skin STEL: 430 mg/m ³ TWA: 215 mg/m ³	Skin STEL: 50 ppm STEL: 220 mg/m ³ TWA: 50 ppm TWA: 220 mg/m ³

Chemical Name	Denmark	Finland	Norway	Sweden	Czech
XYLENE	TWA: 25 ppm TWA: 109 mg/m ³ Skin	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 100 ppm STEL: 440 mg/m ³ Skin	TWA: 25 ppm TWA: 108 mg/m ³ Skin	50 ppm 221 mg/m ³ 100 ppm 442 mg/m ³	PEL: 200mg/m ³ NPK-P: 400mg/m ³
DIMETHYL ETHER	TWA: 1000 ppm TWA: 1920 mg/m ³	TWA: 1000 ppm TWA: 2000 mg/m ³	TWA: 200 ppm TWA: 384 mg/m ³	500 ppm 950 mg/m ³ 800 ppm 1500 mg/m ³	PEL: 1000mg/m ³ NPK-P: 2000mg/m ³
ETHYLBENZENE	TWA: 50 ppm TWA: 217 mg/m ³ Skin	TWA: 50 ppm TWA: 220 mg/m ³ STEL: 200 ppm STEL: 880 mg/m ³ Skin	TWA: 5 ppm TWA: 20 mg/m ³ Skin	50 ppm 200 mg/m ³ 100 ppm 450 mg/m ³	PEL: 200mg/m ³ NPK-P: 500mg/m ³

Chemical Name	Poland	Ireland
XYLENE	NDS: 100 mg/m ³	TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ Skin
DIMETHYL ETHER	NDS: 1000 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m ³ STEL: 3000 ppm STEL: 5760 mg/m ³
ETHYLBENZENE	NDSCh: 400 mg/m ³ NDS: 200 mg/m ³	TWA: 100 ppm TWA: 442 mg/m ³ STEL: 200 ppm STEL: 884 mg/m ³ Skin

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators. Conforming to EN 14387 (organic vapours).

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested :. Solvent-resistant gloves (butyl-rubber). Fluorinated rubber. Polyvinyl alcohol. For break through times, refer to glove manufacturers recommendations.

Eye Protection

Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

Appearance	White Foam	Specific Gravity	0.84
Physical State	Liquid	Solubility	Soluble in water
Odour	Solvent	Autoignition Temperature	No information available.
pH	9	Viscosity	Non viscous
Melting Point/Range	No information available.	Explosive properties	No information available
Flash Point	< 0 °C	Oxidizing Properties	No information available.
Evaporation Rate	No information available.	VOC Content (%)	68.2 %
Flammability Limits in Air %	No information available.		
Vapor Pressure	No information available.		
Vapor Density	No information available.		

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

Heat, flames, and sparks. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from open flames, hot surfaces, and sources of ignition.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

The product itself has not been tested.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
XYLENE	= 3500 mg/kg (Rat)	< 2000 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
DIMETHYL ETHER			= 308.5 mg/L (Rat) 4 h
ETHYLBENZENE	= 4820 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h
ALCOHOLS C9-11 ETHOXYLATED (12EO)	= 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	

Sensitisation

No information available.

Skin contact

Prolonged contact will dry and defat the skin and may cause irritation such as itching and redness.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

Eye contact

May cause irritation as itching and redness.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Product Information

The product itself has not been tested.

Ecotoxicity effects

Contains substance(s) known to be hazardous to the aquatic environment.

Chemical Name	Toxicity to Fish	Water Flea	Toxicity to Algae
XYLENE	LC50 30.26-40.75 mg/L <i>Poecilia reticulata</i> 96 h LC50 = 13.4 mg/L <i>Pimephales promelas</i> 96 h LC50 = 19 mg/L <i>Lepomis macrochirus</i> 96 h LC50 = 780 mg/L <i>Cyprinus carpio</i> 96 h	3.82: 48 h water flea mg/L EC50 0.6: 48 h <i>Gammarus lacustris</i> mg/L LC50	EC50 = 11 mg/L <i>Pseudokirchneriella subcapitata</i> 72 h
ETHYLBENZENE	LC50 11.0-18.0 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 7.55-11 mg/L <i>Pimephales promelas</i> 96 h LC50 9.1-15.6 mg/L <i>Pimephales promelas</i> 96 h LC50 = 32 mg/L <i>Lepomis macrochirus</i> 96 h LC50 = 4.2 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 = 9.6 mg/L <i>Poecilia reticulata</i> 96 h	1.8 - 2.4: 48 h <i>Daphnia magna</i> mg/L EC50	EC50 = 11 mg/L <i>Pseudokirchneriella subcapitata</i> 72 h EC50 = 4.6 mg/L <i>Pseudokirchneriella subcapitata</i> 72 h EC50 > 438 mg/L <i>Pseudokirchneriella subcapitata</i> 96 h EC50 2.6 - 11.3 mg/L <i>Pseudokirchneriella subcapitata</i> 72 h EC50 1.7 - 7.6 mg/L <i>Pseudokirchneriella subcapitata</i> 96 h

12.2. Persistence and degradability

Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

12.3. Bioaccumulative potential

Bioaccumulation unlikely due to the high volatility of the product. Component information below.

Chemical Name	log Pow
XYLENE	3.15
DIMETHYL ETHER	-0.18
ETHYLBENZENE	3.118

12.4. Mobility in soil

The product is insoluble and floats on water. This preparation is volatile and will readily evaporate to the air if released into the environment.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty remaining contents. Empty containers should be taken for local recycling, recovery or waste disposal. Recycle according to official regulations. For empty containers - Do not weld, solder, braze, grind etc.. Do not expose to heat, flames, sparks or other sources of ignition. Do not pierce or burn, even after use.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

16 05 04* gases in pressure containers (including halons) containing dangerous substances

Other Information

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

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDG/IMO

UN Number	UN1950
UN proper shipping name	Aerosols, Flammable
Hazard Class	2.1
EmS	F-D, S-U

ADR / RID

UN-No	UN1950
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Hazard Class	2.1
Classification Code	5F
Limited Quantity	1 L
Transport Cat. (Tunnel Restriction Code)	2 (D)
IATA/ICAO	
UN-No	UN1950
Hazard Class	2.1
ERG Code	10P

14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

14.6. Special precautions for user

No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Packaged product, not typically transported in IBC's.

Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION

Text of H statements mentioned in Section 3

H220 - Extremely flammable gas. H225 - Highly flammable liquid and vapour. H226 - Flammable liquid and vapour. H302 - Harmful if swallowed. H304 - May be fatal if swallowed and enters airways. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H318 - Causes serious eye damage. H319 - Causes serious eye irritation. H332 - Harmful if inhaled.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

On the basis of test data. H222 - Extremely flammable aerosol. H226 - Flammable liquid and vapour. Calculation method. H315 - Causes skin irritation. H319 - Causes serious eye irritation.

Prepared By Austen Pimm

Creation Date 02/02/2015

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Revision summary

CLP update. SDS sections updated 2 15 3 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefährdungskategorie (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

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