

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Trade name : Tempilstik® 2000 °F (1093 °C)

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/mixture : Temperature indicator

1.2.2. Uses advised against**1.3. Details of the supplier of the safety data sheet**

LA-CO Industries Europe S.A.S.
Parc Industriel de la Plaine de
l'Ain - Allée des Combes.
01150.BLYES.France.
Phone: +33 (0)4 74 46 23 23
Fax: +33 (0)4 74 46 23 29
E-mail: info@eu.laco.com
Web: http://www.markal.com

1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

EU Member State	Officieel adviesorgaan	Adres	Noodnummer
AUSTRIA	Vergiftungsinformationszentrale (Poisons Information Centre)	Allgemeines Krankenhaus Waehringer Geurtel 18-20 1090 Wien	+43 1 406 43 43
BELARUS	The Belarus Republican Poisons Centre	Kizhevatova str. 58 220115 Minsk	+375 (0)17 201 9158
BELGIUM	Centre Anti-Poisons/Antigifocentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 B -1120 Bruxelles/Brussel	+32 70 245 245
BULGARIA	Национален токсикологичен информационен център National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov"	21 Toteben Boulevard 1606 SOFIA	+359 2 9154 409
CROATIA	Poisons Control Centre Institute of Medical Research & Occupational Health	Ksaverska Cesta 2 P.O. Box 291 HR-10000 Zagreb	+385 1 234 8342
CZECH REPUBLIC	Toxikologické informační středisko Clinic For Occupational Medicine, 1st Medical Faculty, Charles University	Na Bojišti 1 120 00 Praha 2	+42 2 2491 9293 +42 2 2491 5402
DENMARK	Gifflinjen Bispebjerg Hospital	Bispebjerg Bakke 23, 60, 1 DK-2400 København NV	+45 82 12 12 12 +45 35 31 55 55
ESTONIA	Mürgistusteabekeskus	Gonsiori 29 15027 Tallinn	+372 626 93 90
FINLAND	Myrkytystietokeskus	P.O.B 340 (Haartmaninkatu 4) HUS SF - 00029 Helsinki	+358 9 471 977
FRANCE	ORFILA		+33 1 45 42 59 59
GERMANY	Berliner Betrieb für Zentrale Gesundheitliche Aufgaben	Oranienburger Strasse 285 13437 Berlin	+49 30 19240
GERMANY	Informations und Beratungszentrum für Vergiftungsfälle	Kirrberger Straße, Gebäude 9 D-66421 Homburg/Saar	+49 6841 19240
GERMANY	Beratungstelle bei Vergiftungen, Klinische Toxikologie und Beratungsstelle bei Vergiftungen	Langenbeckstrasse 1 55131 Mainz	+49 6131 19240
GREECE	Poisons Information Centre	11527 Athens	+30 10 779 3777
HUNGARY	Országos Kémiai Biztonsági Intézet (National Institute of Chemical Safety) Egészségügyi Toxikológiai Tájékoztató Szolgálat (Health Toxicological Information Service)	1437 Budapest PO Box 839 1097 Budapest, Nagyvárad tér 2	+36 80 20 11 99
ICELAND	Eitrunarmiðstöðin	Eitrunarmiðstöðin 108 Reykjavik	+354 543 22 22
IRELAND	National Poisons Information Centre	Beaumont Hospital PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2166
LATVIA	Valsts Toksikoloģijas centra Saindēšanās un zāļu informācijas centrs	2 Hipocrate Street LV 1038 Riga	+371 67 04 24 73
LITHUANIA	Apsinuodijimų kontrolės ir informacijos biuras	Siltnamiu 29 2043 Vilnius	+370 5 236 20 52/+370 687 53 378

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

MALTA	Medicines & Poisons Info Office	Mater Dei Hospital, Msida MSD 2090 Malta	25450000
NETHERLANDS	Nationaal Vergiftigingen Informatie Centrum National Institute for Public Health and the Environment, NB this service is only available to health professionals	Huispostnummer B.00.118, PO Box 85500 3508 GA Utrecht	+31 30 274 88 88
PORTUGAL	Centro de Informação Antivenenos Instituto Nacional de Emergência Médica (INEM)	Rua Almirante Barroso, 36 1000-013 Lisboa	808 250 143 (for use only in Portugal), +351 21 330 3284
ROMANIA	Biroul pentru Regulamentul Sanitar International si Informare Toxicologica	Str. Dr. Leonte Anastasievici Nr.1-3, Sector 5 50463 Bucuresti	+40 21 318 36 06
SLOVAKIA	Národné toxikologické informačné centrum University Hospital Bratislava	Limbová 5 833 05 Bratislava	+421 2 54 77 4 166
SPAIN	Servicio de Información Toxicológica Instituto Nacional de Toxicología, Departamento de Madrid	Calle Luis Cabrera 9 E-28002 Madrid	+34 91 562 04 20
SWEDEN	Giftinformationscentralen Swedish Poisons Information Centre, Karolinska Hospital	Box 60 500 SE-171 76 Stockholm	+46 8 33 12 31 (International) 112 (National)
SWITZERLAND	Centre Suisse d'Information Toxicologique	Freiestrasse 16 Postfach CH-8028 Zurich	+41 44 251 51 51 (International) 145 (National)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation:dust,mist)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Carc. 1B	H350
STOT SE 3	H335

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: Manganese pyrophosphate trihydrate; formaldehyde; 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated

Hazard statements (CLP)

: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H350 - May cause cancer

Precautionary statements (CLP)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing dust, fume
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves, protective clothing, eye protection
P301+P312 - If swallowed: Call a poison center or doctor
P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - IF exposed or concerned: Get medical advice/attention
P312 - Call a poison center or doctor if you feel unwell
P321 - Specific treatment (see First aid measures on this label)
P330 - Rinse mouth
P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Comments : Exact concentrations are withheld as trade secret

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Manganese pyrophosphate trihydrate	(CAS No) 53731-35-4 (EC no) 258-729-7	80 – 90	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated	(CAS No) 68002-25-5 (EC no) *614-205-3	10 – 15	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312
formaldehyde (Note B)(Note D)	(CAS No) 50-00-0 (EC no) 200-001-8 (EC index no) 605-001-00-5	0.1 - < 1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H335

Specific concentration limits:

Name	Product identifier	Specific concentration limits
formaldehyde	(CAS No) 50-00-0 (EC no) 200-001-8 (EC index no) 605-001-00-5	(C >= 0.2) Skin Sens. 1, H317 (C >= 5) STOT SE 3, H335 (5 =<C < 25) Eye Irrit. 2, H319 (5 =<C < 25) Skin Irrit. 2, H315 (C >= 25) Skin Corr. 1B, H314

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

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

Symptoms/injuries	: May cause cancer.
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

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

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Sand.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Burning produces irritating, toxic and noxious fumes.
Explosion hazard	: Product is not explosive.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin, eyes and clothing. Do not breathe dust.
------------------	--

6.1.1. For non-emergency personnel

Protective equipment	: Chemical goggles or safety glasses. Wear suitable protective clothing and gloves.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Chemical goggles or safety glasses. Wear suitable protective clothing and gloves.
Emergency procedures	: Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Avoid generating dust. Contain and collect as any solid.
Methods for cleaning up	: Minimize generation of dust. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Avoid creating or spreading dust.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container tightly closed.
Incompatible products	: Strong oxidizers. Strong bases.
Heat and ignition sources	: Keep away from heat, sparks and flame.
Prohibitions on mixed storage	: Keep away from incompatible materials.
Storage area	: Store in dry, cool, well-ventilated area.

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

7.3. Specific end use(s)

Temperature indicator.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

formaldehyde (50-00-0)		
Austria	MAK (mg/m ³)	0.6 mg/m ³
Austria	MAK (ppm)	0.5 ppm
Austria	MAK Short time value (mg/m ³)	0.6 mg/m ³
Austria	MAK Short time value (ppm)	0.5 ppm
Austria	Remark (AT)	(gemessen als Momentanwert), (H,Sh,III B)
Czech Republic	Expoziční limity (PEL) (mg/m ³)	0.5 mg/m ³
Czech Republic	Expoziční limity (PEL) (ppm)	0.407 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	1 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (ppm)	0.814 ppm
Czech Republic	Remark (CZ)	I,S
Finland	HTP-arvo (8h) (mg/m ³)	0.37 mg/m ³
Finland	HTP-arvo (8h) (ppm)	0.3 ppm
France	VME (ppm)	0.5 ppm
France	VLE (ppm)	1 ppm
Hungary	AK-érték	0.6 mg/m ³
Hungary	CK-érték	0.6 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	2.5 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	2 ppm
Ireland	OEL (15 min ref) (mg/m ³)	2.5 mg/m ³
Ireland	OEL (15 min ref) (ppm)	2 ppm
Lithuania	IPRV (mg/m ³)	0.6 mg/m ³
Lithuania	IPRV (ppm)	0.5 ppm
Lithuania	NRV (mg/m ³)	1 mg/m ³
Lithuania	NRV (ppm)	1.2 ppm
Lithuania	Remark (LT)	Ū J K
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0.15 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	0.5 mg/m ³
Poland	NDS (mg/m ³)	0.5 mg/m ³
Poland	NDSch (mg/m ³)	1 mg/m ³
Slovakia	NPHV (priemerná) (mg/m ³)	0.37 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	0.3 ppm
Slovakia	Upozornenie (SK)	(S)
Spain	VLA-EC (mg/m ³)	0.37 mg/m ³
Spain	VLA-EC (ppm)	0.3 ppm
Spain	Notes	vía dérmica,TR1B
Sweden	nivågränsvärde (NVG) (mg/m ³)	0.37 mg/m ³
Sweden	nivågränsvärde (NVG) (ppm)	0.3 ppm
Sweden	takgränsvärde (TGV) (mg/m ³)	0.74 mg/m ³
Sweden	takgränsvärde (TGV) (ppm)	0.6 ppm
Sweden	Anmärkning (SE)	(C,H,S,M)
United Kingdom	WEL TWA (mg/m ³)	2.5 mg/m ³
United Kingdom	WEL TWA (ppm)	2 ppm
United Kingdom	WEL STEL (mg/m ³)	2.5 mg/m ³
United Kingdom	WEL STEL (ppm)	2 ppm
Norway	Grenseverdier (AN) (mg/m ³)	0.6 mg/m ³
Norway	Grenseverdier (AN) (ppm)	0.5 ppm

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

formaldehyde (50-00-0)		
Norway	Grønseverdier (Takverdi) (mg/m ³)	1.2 mg/m ³
Norway	Grønseverdier (Takverdi) (ppm)	1 ppm
Norway	Merknader (NO)	A, K
Switzerland	VME (mg/m ³)	0.37 mg/m ³
Switzerland	VME (ppm)	0.3 ppm
Switzerland	VLE (mg/m ³)	0.74 mg/m ³
Switzerland	VLE (ppm)	0.6 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Eyewash stations.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection:

Wear dust impervious gloves. EN374

Eye protection:

Chemical goggles or safety glasses. EN166

Skin and body protection:

Wear suitable protective clothing. Impervious clothing

Respiratory protection:

Wear appropriate mask. Approved respirator. In case of inadequate ventilation wear respiratory protection. Use air-purifying respirator equipped with particulate filtering cartridges. EN 12083

Environmental exposure controls : Prevent leakage or spillage. Prevent contaminated water run-off.

Consumer exposure controls : Keep out of reach of children.

Other information : Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 0 %

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Keep away from incompatible materials. Avoid creating or spreading dust.

10.5. Incompatible materials

Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation:dust,mist: Harmful if inhaled.

Tempilstik® 2000 °F (1093 °C)	
ATE CLP (oral)	562.114 mg/kg bodyweight
ATE CLP (dermal)	1139.398 mg/kg bodyweight
ATE CLP (dust,mist)	1.715 mg/l/4h

formaldehyde (50-00-0)	
LC50 inhalation rat (ppm)	31.7 ppm
ATE CLP (oral)	100.000 mg/kg bodyweight
ATE CLP (dermal)	300.000 mg/kg bodyweight
ATE CLP (dust,mist)	0.500 mg/l/4h

1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde, butylated (68002-25-5)	
LD50 oral rat	> 1100 mg/kg
LD50 dermal rabbit	1800 mg/kg
LC50 inhalation rat (mg/l)	> 6 mg/l/4h
ATE CLP (dermal)	1800.000 mg/kg bodyweight

Manganese pyrophosphate trihydrate (53731-35-4)	
ATE CLP (oral)	500.000 mg/kg bodyweight
ATE CLP (dermal)	1100.000 mg/kg bodyweight
ATE CLP (gases)	4500.000 ppmv/4h
ATE CLP (vapours)	11.000 mg/l/4h
ATE CLP (dust,mist)	1.500 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Acute toxicity	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

formaldehyde (50-00-0)	
LC50 fish 1	31.8 (21.1 - 47.7) mg/l 96 h
EC50 Daphnia 1	1.9 mg/l 48 h

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

12.2. Persistence and degradability

Tempilstik® 2000 °F (1093 °C)	
Persistence and degradability	Not established.
formaldehyde (50-00-0)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Tempilstik® 2000 °F (1093 °C)	
Bioaccumulative potential	Not established.
formaldehyde (50-00-0)	
BCF fish 1	< 1
Log Pow	0.35

12.4. Mobility in soil

Tempilstik® 2000 °F (1093 °C)	
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

Tempilstik® 2000 °F (1093 °C)	
PBT: not yet assessed	
vPvB: not yet assessed	

12.6. Other adverse effects

Additional information : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not dispose in household garbage.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.
European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not regulated.
UN-No. (IMDG) : Not regulated.
UN-No. (IATA) : Not regulated.
UN-No. (ADN) : Not regulated.
UN-No. (RID) : Not regulated.

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated.
Proper Shipping Name (IMDG) : Not regulated.
Proper Shipping Name (IATA) : Not regulated.
Proper Shipping Name (ADN) : Not regulated.
Proper Shipping Name (RID) : Not regulated.

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not regulated.

IMDG

Transport hazard class(es) (IMDG) : Not regulated.

IATA

Transport hazard class(es) (IATA) : Not regulated.

ADN

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

Transport hazard class(es) (ADN) : Not regulated.

RID

Transport hazard class(es) (RID) : Not regulated.

14.4. Packing group

Packing group (ADR) : Not regulated.

Packing group (IMDG) : Not regulated.

Packing group (IATA) : Not regulated.

Packing group (ADN) : Not regulated.

Packing group (RID) : Not regulated.

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not regulated.

- Transport by sea

Not regulated.

- Air transport

Not regulated.

- Inland waterway transport

Not regulated.

- Rail transport

Not regulated.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : formaldehyde is listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Composition update. Classification.

Abbreviations and acronyms:

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	TWA: Time Weighted Average
	TSCA: Toxic Substances Control Act

Data sources : ESIS (European chemical Substances Information System; accessed at: <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>.
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation

Tempilstik® 2000 °F (1093 °C)

Safety Data Sheet

according to Regulation (EU) 2015/830

H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H350	May cause cancer

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

Acute Tox. 4 (Oral)	H302	Calculation method
Acute Tox. 4 (Dermal)	H312	Calculation method
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 1B	H350	Calculation method
STOT SE 3	H335	Calculation method

SDS Prepared by: The Redstone Group, LLC
6077 Frantz Rd.
Suite 206
Dublin, OH USA 43016
T 614-923-7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product