

SAFETY DATA SHEET

Issuing Date: 28-Feb-2012 Revision Date: 30-Jun-2014 **Revision Number: 1**

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: 02308KML-HF Product Name: 37030 BLACK HEAT RESISTANT COATING

MIL-P-14105E

Hentzen Coatings, Inc. 6937 West Mill Road, Milwaukee, WI 53218-1225 Company Phone Number: 1-414-353-4200

Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use

Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements

Harmful if swallowed

harmful if inhaled

Causes serious eye irritation

May cause cancer

Suspected of damaging fertility or the unborn child

May cause damage to organs through prolonged or repeated exposure

Highly flammable liquid and vapor



Appearance Opaque Physical state Liquid **Odor** Solvent

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Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/Bond container and receiving equipment

Use explosion-proof electrical/ ventilating/ lighting/ equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: 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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed
- · Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
METHYL ACETATE	79-20-9	10% - 20%	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 610 mg/m ³
PROPRIETARY INERT	7779-90-0	10% - 20%	N/A	N/A

	,			
FRIT COMPOUND	65997-18-4	10% - 20%	STEL: 10 mg/m³ Zr	TWA: 10 µg/m³ As TWA:
			TWA: 0.01 mg/m³ As	50 μg/m³ Pb TWA: 0.5
			TWA: 0.05 mg/m ³ Pb	mg/m ³ Sb TWA: 5 mg/m ³
			TWA: 0.01 mg/m ³ Cd	Zr
			TWA: 0.002 mg/m ³ Cd	Ceiling: 5 mg/m ³ Mn
			respirable fraction TWA:	
			0.5 mg/m ³ Sb TWA: 1	
			mg/m ³ Cu dust and mist	
			TWA: 5 mg/m ³ Zr TWA:	
			0.02 mg/m ³ Mn	
			TWA: 0.1 mg/m ³ Mn	
METHYL AMYL KETONE	110-43-0	1% - 5%	TWA: 50 ppm	TWA: 100 ppm
]	TWA: 465 mg/m ³

4. FIRST AID MEASURES

First Aid Measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to

do, remove contact lenses. Keep eye wide open while rinsing. Call a physician immediately.

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Skin Contact Wash off immediately with plenty of water.

Inhalation Immediate medical attention is required. If not breathing, give artificial respiration. Avoid

direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person.

Self-protection of the first aider Remove all sources of ignition.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

No information available.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate

ventilation. Use personal protective equipment as required. Avoid breathing vapors or mists.

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Ventilate the area.

Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread

along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later

disposal.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert

absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of

ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding

strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away

from heat, sparks and flame.

Incompatible ProductsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

 Chemical Name
 ACGIH
 OSHA
 NIOSH IDLH

 METHYL ACETATE 79-20-9
 STEL: 250 ppm TWA: 200 ppm
 TWA: 200 ppm TWA: 610 mg/m³
 IDLH: 3100 ppm TWA: 200 ppm TWA: 610 mg/m³ STEL: 250 ppm STEL: 760 mg/m³

	T		
FRIT COMPOUND 65997-18-4	STEL: 10 mg/m³ Zr TWA: 0.01 mg/m³ As TWA: 0.05 mg/m³ Pb TWA: 0.01 mg/m³ Cd TWA: 0.002 mg/m³ Cd respirable fraction TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 5 mg/m³ Zr TWA: 0.02 mg/m³ Mn TWA: 0.1 mg/m³ Mn		IDLH: 5 mg/m³ As IDLH: 9 mg/m³ Cd dust and fume IDLH: 50 mg/m³ Sb IDLH: 100 mg/m³ Cu dust and mist IDLH: 500 mg/m³ Mn IDLH: 25 mg/m³ Zr IDLH: 100 mg/m³ Ni Ceiling: 0.002 mg/m³ As 15 min Ceiling: 0.05 mg/m³ As 15 min Ceiling: 0.05 mg/m³ V dust and fume 15 min TWA: 0.5 mg/m³ Sb TWA: 1 mg/m³ Cu dust and mist TWA: 1 mg/m³ Mn TWA: 5 mg/m³ except Zirconium tetrachloride Zr TWA: 0.050 mg/m³ Pb TWA: 0.015 mg/m³ except Nickel carbonyl Ni STEL: 3 mg/m³ Mn STEL: 10 mg/m³ Zr
MICA 12001-26-2	TWA: 3 mg/m³ respirable fraction	TWA: 20 mppcf <1% Crystalline silica	IDLH: 1500 mg/m³ TWA: 3 mg/m³ containing <1% Quartz respirable dust
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m³
MANGANESE FERRITE BLACK SPINEL 68186-94-7	TWA: 0.02 mg/m³ Mn TWA: 0.1 mg/m³ Mn	Ceiling: 5 mg/m³ Mn	IDLH: 500 mg/m³ Mn TWA: 1 mg/m³ Mn STEL: 3 mg/m³ Mn
QUARTZ CRYSTALLINE SILICA 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	 : (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction 	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use personal protective equipment as required.

Skin and Body Protection Chemical resistant apron.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene MeasuresDo not eat, drink or smoke when using this product. Regular cleaning of equipment, work

area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Liquid Appearance Opaque

Odor Threshold Odor Solvent. No data available No data available Flash Point 14 °F / -10 °C **Boiling Point** 133 °F / 56 °C **Decomposition temperature** No data available Melting Point / Melting Range No data available Freezing Point No data available Vapor Pressure @20°C (kPa) No data available Partition coefficient: No data available

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Vapor DensityNo data availableDensityNo data available

Bulk density No data available Specific Gravity 1.41

Evaporation Rate No data available Water solubility No data available

Dynamic viscosity No data available Weight per Gallon (lbs/gal): 11.75

Flammability Limits in Air

Upper 3.6 % **Lower** 0.6 %

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10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information The product has not been tested

Inhalation There is no data for this product.

Eye Contact There is no data for this product.

Skin Contact There is no data for this product.

Ingestion There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL ACETATE 79-20-9	5000 mg/kg (Rat)	5 g/kg(Rabbit)	16000 ppm (Rat) 4 h
FRIT COMPOUND 65997-18-4	2000 mg/kg (Rat)	N/A	N/A
METHYL AMYL KETONE 110-43-0	1600 mg/kg (Rat)	12.6 mL/kg(Rabbit)	2000 ppm (Rat) 4 h
QUARTZ CRYSTALLINE SILICA 14808-60-7	500 mg/kg (Rat)	N/A	N/A

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization MUTAGENIC EFFECTSNo information available.
No information available.

Carcinogenicity

This product contains one or more substances which are classified by IARC as

carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly

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carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
FRIT COMPOUND	A1	Group 1	Known	Χ
65997-18-4	A3	Group 2A	Reasonably Anticipated	
	A2	Group 2B		
QUARTZ CRYSTALLINE	A2	Group 1	Known	X
SILICA		-		
14808-60-7				

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A1 - Known Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity

Specific target organ systemic

toxicity (single exposure) Specific target organ systemic

toxicity (repeated exposure)

No information available.

No information available.

No information available.

Chronic Toxicity May cause adverse effects on the bone marrow and blood-forming system. May cause

adverse liver effects.

Target Organ Effects Blood, Central nervous system (CNS), Eyes, Kidney, Peripheral Nervous System (PNS),

Respiratory system, Skin, Central Vascular System (CVS), Liver, Lungs, Lymphatic

System, Nasal Cavities, Prostate.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 421 mg/kg
ATEmix (dermal) 2592 mg/kg
ATEmix (inhalation-dust/mist) 1.1 mg/l

Oral LD50 8871 mg/kg (rat) Estimated
Dermal LD50 17785 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT.

Ecotoxicity

	Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
Г	METHYL ACETATE	120: 72 h Desmodesmus	295 - 348: 96 h Pimephales	1026.7: 48 h Daphnia magna mg/L
	79-20-9	subspicatus mg/L EC50	promelas mg/L LC50 flow-through	EC50
			250 - 350: 96 h Brachydanio rerio	
			mg/L LC50 static	
Г	METHYL AMYL KETONE	N/A	126 - 137: 96 h Pimephales	N/A
	110-43-0		promelas mg/L LC50 flow-through	

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Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
METHYL ACETATE 79-20-9	0.18
METHYL AMYL KETONE 110-43-0	1.98

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

US EPA Waste Number D001

U140 U154 U031 U239

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
METHYL ACETATE	Toxic
79-20-9	Ignitable
FRIT COMPOUND	Toxic soluble
65997-18-4	

14. TRANSPORT INFORMATION

DOT

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to

DOT.

Description UN1263, Paint, 3, II

Emergency Response Guide 128

Number

TDG

VIN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to

TDG.

Description UN1263, Paint, 3, II

MEX

UN-NoUN1263Proper shipping namePaintHazard class3Packing GroupII

Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72

Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II

Special Provisions A3, A72

Description UN1263, Paint, 3, II

IMDG/IMO

UN-NoUN1263Proper shipping namePaintHazard class3Packing GroupIIEmS-NoF-E, S-ESpecial Provisions163

Description UN1263, Paint, 3, II

RID

UN-NoUN1263Proper shipping namePaintHazard class3Packing GroupIIClassification CodeF1

Description UN1263, Paint, 3, II

ADR/RID

UN-NoUN1263Proper shipping namePaintHazard class3Packing GroupIIClassification CodeF1Tunnel restriction code(D/E)

Special Provisions 163, 640C, 650

Description UN1263, Paint, 3, II, (D/E)

ADR/RID-Labels

ADN

Proper shipping namePaintHazard class3Packing GroupIIClassification CodeF1

Special Provisions 163, 640C, 650 **Description** UN1263, Paint, 3, II

Limited Quantity (LQ) 5 L Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies Complies **DSL/NDSL EINECS/ELINCS** Complies Complies **ENCS** Complies **IECSC** Complies **KECL PICCS** Complies **AICS** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %
FRIT COMPOUND	65997-18-4	0.1 1.0
MANGANESE FERRITE BLACK SPINEL	68186-94-7	1.0

SARA 311/312 Hazard Categories

Acute Health HazardNoChronic Health HazardYesFire HazardYesSudden Release of Pressure HazardNoReactive HazardNo

CAA (Clean Air Act)

This product contains the following HAPs:

	Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
ı	FRIT COMPOUND	65997-18-4	Present

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
FRIT COMPOUND	N/A	X	N/A	N/A

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations

<u>California Proposition 65</u>
This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
FRIT COMPOUND	65997-18-4	Carcinogen Developmental
QUARTZ CRYSTALLINE SILICA	14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
METHYL ACETATE	Х	X	X	N/A	X
PROPRIETARY INERT	N/A	X	X	N/A	N/A
FRIT COMPOUND	N/A	Х	X	X	X
MICA	X	X	X	N/A	X
METHYL AMYL KETONE	X	Х	Х	N/A	X
MANGANESE FERRITE BLACK SPINEL	N/A	Х	Х	Х	N/A
AMORPHOUS PRECIPITATED SILICA	Х	Х	X	N/A	N/A
QUARTZ CRYSTALLINE SILICA	Х	Х	Х	Х	Х
MINERAL SPIRITS	N/A	Х	N/A	N/A	N/A
BUTYL ACETATE	Х	Х	Х	N/A	X

International Regulations

Mexico - Grade

Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
METHYL ACETATE	N/A	Mexico: TWA 200 ppm
		Mexico: TWA 610 mg/m ³
		Mexico: STEL 250 ppm
		Mexico: STEL 760 mg/m ³
FRIT COMPOUND	A3	Mexico: TWA 0.15 mg/m³ Mexico: TWA
	A2	0.01 mg/m ³
		Mexico: TWA 0.002 mg/m³ Mexico: TWA
		0.5 mg/m³ Mexico: TWA 5 mg/m³ Mexico:
		TWA 0.2 mg/m ³
		Mexico: STEL 10 mg/m ³
MICA	N/A	Mexico: TWA 3 mg/m ³
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm
		Mexico: TWA 235 mg/m ³
		Mexico: STEL 100 ppm
		Mexico: STEL 465 mg/m ³
MANGANESE FERRITE BLACK SPINEL	N/A	Mexico: TWA 0.2 mg/m ³
QUARTZ CRYSTALLINE SILICA	N/A	Mexico: TWA 0.1 mg/m ³

16. OTHER INFORMATION

Flammability 3 Instability 0 **Physical and Chemical** NFPA **Health Hazard** 2 Hazards -

NFPA Rating



HMIS Health Hazard 1 * Flammability 3 Physical Hazard 0 Personal protection X

* Chronic Health Hazard Chronic Hazard Star Legend

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Revision Note

No information available

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