

Safety Data Sheet

Methyl formate pure

Revision date : 2023/11/16

Version: 5.0

Page: 1/14

(30036686/SDS GEN US/EN)

1. Identification

Product identifier used on the label

Methyl formate pure

Recommended use of the chemical and restriction on use

Recommended use*: Chemical used in synthesis and/or formulation of industrial products

Recommended use*: Intermediate

Unsuitable for use: Not intended for sale to or use by the general public.

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION

100 Park Avenue

Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Molecular formula: $C(2)H(4)O(2)$

Chemical family: formates

Synonyms: methyl formate Use: Chemical used in synthesis and/or formulation of industrial products.

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Flam. Liq.

1

Flammable liquids

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16

Version: 5.0

Page: 2/14

(30036686/SDS_GEN_US/EN)

Acute Tox.	3 (Inhalation - vapour)	Acute toxicity
Acute Tox.	3 (oral)	Acute toxicity
Acute Tox.	3 (dermal)	Acute toxicity
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
STOT SE	1	Specific target organ toxicity — single exposure
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H224	Extremely flammable liquid and vapour.
H319	Causes serious eye irritation.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H335	May cause respiratory irritation.
H370	Causes damage to organs (Optic nerve, Central nervous system).

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapours.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P270	Do not eat, drink or smoke when using this product.
P264	Wash contaminated body parts thoroughly after handling.
P242	Use non-sparking tools.
P240	Ground and bond container and receiving equipment.
P260	Do not breathe mist or vapour or spray.

Precautionary Statements (Response):

P311	Call a POISON CENTER or physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.
P330	Rinse mouth.
P370 + P378	In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 3/14
(30036686/SDS_GEN_US/EN)

Precautionary Statements (Storage):

P233	Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
------	---

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

methyl formate

CAS Number: 107-31-3
Content (W/W): ≥ 97.0 - $\leq 100.0\%$
Synonym: Ameisensäuremethylester

Methanol

CAS Number: 67-56-1
Content (W/W): ≥ 0.0 - $< 3.0\%$
Synonym: Methanol; Methyl alcohol

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

If swallowed:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 4/14
(30036686/SDS_GEN_US/EN)

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Information on: methyl formate

Symptoms: Overexposure may cause:; excitation, respiratory disorders, tightness in the chest

Information on: Methanol

Symptoms: Overexposure may cause:; headache, dizziness, respiratory disorders, nausea, acidosis, coma, blindness

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon oxides, nitrous gases

The substances/groups of substances mentioned can be released in case of fire. Vapours may form explosive mixture with air.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Cool endangered containers with water-spray. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Impact Sensitivity:

Remarks:

Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 5/14
(30036686/SDS_GEN_US/EN)

Breathing protection required. Handle in accordance with good industrial hygiene and safety practice. Use personal protective clothing. Keep unprotected persons away. Avoid all sources of ignition: heat, sparks, open flame. Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Substance/product is RCRA hazardous due to its properties.

Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

Avoid sources of ignition. Wear suitable protective equipment.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Sealed containers should be protected against heat as this results in pressure build-up. Provide good room ventilation even at ground level (vapours are heavier than air).

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities

Segregate from alkalies and alkalizing substances.

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

Storage stability:

Storage temperature: $\leq 20^{\circ}\text{C}$

Storage duration: 24 Months

From the data on storage duration in this safety data sheet no agreed statement regarding the warrantee of application properties can be deduced.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Methanol	ACGIH, US:	TWA value 200 ppm ;
	ACGIH, US:	STEL value 250 ppm ;
	OSHA Z1:	PEL 200 ppm 260 mg/m ³ ;
	ACGIH, US:	Skin Designation ; Danger of cutaneous absorption
	ACGIH, US:	Skin Designation ; Danger of cutaneous absorption

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 6/14
(30036686/SDS_GEN_US/EN)

methyl formate	ACGIH, US:	TWA value 50 ppm ;
	ACGIH, US:	STEL value 100 ppm ;
	OSHA Z1:	PEL 100 ppm 250 mg/m3 ;
	ACGIH, US:	Skin Designation ; Danger of cutaneous absorption
	ACGIH, US:	Skin Designation ; Danger of cutaneous absorption

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) supplied-air respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, butyl rubber (butyl) - 0.7 mm coating thickness, fluoroelastomer (FKM) - 0.7 mm coating thickness, chloroprene rubber (CR) - 0.5 mm coating thickness, Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing., Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Avoid inhalation of vapour. Wearing of closed work clothing is required additionally to the stated personal protection equipment. The odour threshold might be higher than occupational exposure levels, therefore the perception of an odour has no sufficient warning effect of dangerous air concentrations. Avoid contact with the skin, eyes and clothing. Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Store work clothing separately.

9. Physical and Chemical Properties

Form:	liquid
Odour:	ether-like
Odour threshold:	Not determined since toxic by inhalation.
Colour:	colourless

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16

Version: 5.0

Page: 7/14

(30036686/SDS_GEN_US/EN)

pH value:	4 - 5 (200 g/l, 20 °C)	
Freezing point:	-100 °C (1 ATM)	
Boiling point:	32 °C (1 ATM)	
Flash point:	-28 °C	(DIN 51755, closed cup)
Flammability:	Extremely flammable liquid and vapour.	(derived from flash - and boiling point)
Lower explosion limit:	5.0 %(V) For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	23.0 %(V) For liquids not relevant for classification and labelling.	
Autoignition:	440 °C	(DIN 51794)
SADT:	Not a substance/mixture liable to self-decomposition according to GHS.	
Vapour pressure:	644 hPa (20 °C) 1,400 hPa (40 °C)	
Density:	0.968 g/cm ³ (20 °C) 0.9890 g/cm ³ (15 °C) 0.9370 g/cm ³ (50 °C)	
Relative density:	0.97 (20 °C) Literature data.	
Bulk density:	0.97 g/cm ³	
Vapour density:	> 1 (20 °C) Heavier than air.	(estimated)
Partitioning coefficient n-octanol/water (log Pow):	-0.21 (25 °C)	(OECD Guideline 107)
Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.	
Thermal decomposition:	80 °C, 90 kJ/kg (DSC (DIN 51007))	
Viscosity, dynamic:	0.351 mPa.s (20 °C) Literature data. 0.328 mPa.s (25 °C) Literature data.	
Viscosity, kinematic:	0.361 mm ² /s (20 °C) Literature data.	
Particle size:	The substance / product is marketed or used in a non solid or granular form.	

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 8/14
(30036686/SDS_GEN_US/EN)

Solubility in water: (20 °C)
Molar mass: 60.05 g/mol
Evaporation rate: Value can be approximated from Henry's Law Constant or vapor pressure.

10. Stability and Reactivity

Reactivity

Vapours may form explosive mixture with air.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
-------------------------------	----------	--

Chemical stability

The product is chemically stable.

Possibility of hazardous reactions

Exothermic reaction.

Conditions to avoid

No conditions to avoid anticipated.

Incompatible materials

bases, acids, oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: carbon monoxide, carbon dioxide

Thermal decomposition:

80 °C (DSC (DIN 51007))

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: The European Union (EU) has classified this substance as 'harmful' after oral exposure. The European Union (EU) has classified this substance as 'harmful' after

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16

Version: 5.0

Page: 9/14

(30036686/SDS_GEN_US/EN)

inhalation. The European Union (EU) has classified this substance as 'harmful' after dermal exposure. Toxic by inhalation, in contact with skin and if swallowed.

Oral

Type of value: LD50

Species: rat (male/female)

Value: approx. 1500 mg/kg bw (similar to OECD guideline 401)

Inhalation

Type of value: LC50

Species: rat (male/female)

Value: >5,2 mg/l (OECD Guideline 403)

Exposure time: 4 h

The vapour was tested.

No mortality was observed.

Dermal

Type of value: LD50

Species: rat (male/female)

Value: > 4000 ml/kg bw (similar to OECD guideline 402)

No mortality was observed.

Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract. A single exposure may have relevant toxic effects on organs.

Target organ: Central nervous system; Optic nerve

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Irritating to eyes.

Skin

Species: rabbit

Result: non-irritant

Method: similar to OECD guideline 404

Eye

Species: rabbit

Result: Irritant.

Method: similar to OECD guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Buehler test

Species: guinea pig

Result: Non-sensitizing.

Method: OECD Guideline 406

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Guinea pig maximization test

Species: guinea pig

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 10/14
(30036686/SDS_GEN_US/EN)

Result: Non-sensitizing.

Method: similar to OECD guideline 406

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may cause damage to the upper respiratory tract after repeated inhalation, as shown in animal studies. After repeated exposure the prominent effect is local irritation.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Genetic toxicity in vitro: Modified OECD Guideline 471 Ames-test Salmonella typhimurium: with and without metabolic activation negative

Carcinogenicity

Assessment of carcinogenicity: No data available concerning carcinogenic effects.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other Information

The product/substance will be cleaved in the body after uptake, thereby methanol will be formed. The toxicity of methanol has to be considered.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) approx. 115 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

The details of the toxic effect relate to the nominal concentration.

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 11/14
(30036686/SDS_GEN_US/EN)

Aquatic invertebrates

EC50 (48 h) > 500 mg/l, Daphnia magna (Directive 79/831/EEC, static)
The details of the toxic effect relate to the nominal concentration.

Aquatic plants

EC50 (72 h) 1,079 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)
The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) $\geq$ 100 mg/l, Daphnia magna (OECD Guideline 211, semistatic)
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.
Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN 38412 Part 8 aquatic
bacterium/EC50 (17 h): > 10,000 mg/l
The details of the toxic effect relate to the nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Readily biodegradable (according to OECD criteria).

Elimination information

90 - 100 % CO₂ formation relative to the theoretical value (28 d) (ISO 14593) (aerobic, activated sludge, domestic, non-adapted)

Assessment of stability in water

In contact with water the substance will hydrolyse slowly.

Information on Stability in Water (Hydrolysis)

t_{1/2} 28.6 h, (OECD Guideline 111, pH 7)

t_{1/2} 259 h, (OECD Guideline 111, pH 4)

t_{1/2} 0.7 h, (OECD Guideline 111, pH 9)

Bioaccumulative potential

Assessment bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 12/14
(30036686/SDS_GEN_US/EN)

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

The substance will slowly evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen(AOX):
This product contains no organically-bound halogen.

13. Disposal considerations

Waste disposal of substance:

Incinerate or dispose of in a RCRA-licensed facility. Do not discharge into waterways or sewer systems without proper authorization.

Container disposal:

Empty containers with less than 1 inch of residue may be landfilled at a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. If containers are not empty, they must be disposed of in a RCRA-licensed facility.

RCRA: D001

14. Transport Information

Land transport

USDOT

Hazard class:	3
Packing group:	I
ID number:	UN 1243
Hazard label:	3
Proper shipping name:	METHYL FORMATE

Sea transport

IMDG

Hazard class:	3
Packing group:	I
ID number:	UN 1243
Hazard label:	3
Marine pollutant:	NO
Proper shipping name:	METHYL FORMATE

Air transport

IATA/ICAO

Hazard class:	3
Packing group:	I
ID number:	UN 1243
Hazard label:	3
Proper shipping name:	METHYL FORMATE

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16
Version: 5.0

Page: 13/14
(30036686/SDS_GEN_US/EN)

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

EPCRA 313:

<u>CAS Number</u>	<u>Chemical name</u>
67-56-1	Methanol

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	67-56-1	Methanol

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
PA	67-56-1	Methanol
NJ	67-56-1	Methanol
	107-31-3	methyl formate

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including METHANOL, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 2 Fire: 4 Reactivity: 0 Special:

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Flam. Liq.	1	Flammable liquids
Acute Tox.	3 (oral)	Acute toxicity
Acute Tox.	3 (dermal)	Acute toxicity
Acute Tox.	3 (Inhalation - vapour)	Acute toxicity
STOT SE	1	Specific target organ toxicity — single exposure

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2023/11/16

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our

Safety Data Sheet

Methyl formate pure

Revision date: 2023/11/16

Version: 5.0

Page: 14/14

(30036686/SDS_GEN_US/EN)

commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET