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# 1. Identification

# Product identifier used on the label

# PROVISIA HERBICIDE

# Recommended use of the chemical and restriction on use

Recommended use\*: herbicide

# 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**

CHEMTREC: 1-800-424-9300

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

# Other means of identification

Substance number: 728309

EPA Registration number: 33906-9-7969

# 2. Hazards Identification

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

# Classification of the product

Asp. Tox. 1 Aspiration hazard Acute Tox. 4 (Inhalation - mist) Acute toxicity

Eye Dam./Irrit. 1 Serious eye damage/eye irritation

Carc. 2 Carcinogenicity
Repr. 1B (unborn child) Reproductive toxicity

STOT SE 3 (Vapours may cause Specific target organ toxicity — single exposure

drowsiness and dizziness.)

<sup>\*</sup> 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.

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Aquatic Acute 2 Hazardous to the aquatic environment - acute Aquatic Chronic 2 Hazardous to the aquatic environment - chronic

#### Label elements

Pictogram:



# Signal Word:

Danger

Hazard Statement:

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.
 H360 May damage the unborn child.

EUH066 Repeated exposure may cause skin dryness or cracking.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use. P273 Avoid release to the environment.

P261 Avoid breathing mist.

P260 Do not breathe mist or vapour.

P202 Do not handle until all safety precautions have been read and

understood.

Precautionary Statements (Response):

P310 Immediately call a POISON CENTER or doctor/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.

P391 Collect spillage.

P331 Do NOT induce vomiting.

Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

# 3. Composition / Information on Ingredients

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

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CAS Number	Weight %	Chemical name
100646-51-3	10.3 %	Propanoic acid, 2-[4-[(6-chloro-2-
		quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-
91-20-3	< 11.0%	naphthalene
872-50-4	< 8.0%	N-Methylpyrrolidone

#### 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. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

#### If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

#### If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

#### If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting due to aspiration hazard.

#### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

# 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

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Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

# Advice for fire-fighters

Protective equipment for fire-fighting:

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

#### Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

# 6. Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

# **Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

# Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

# 7. Handling and Storage

# Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. 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 foods and animal feeds.

Suitable materials for containers: High density polyethylene (HDPE)

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

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# 8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

#### Components with occupational exposure limits

naphthalene OSHA PEL PEL 10 ppm 50 mg/m3 ; STEL value 15 ppm

75 mg/m3; TWA value 10 ppm 50 mg/m3;

ACGIH TLV TWA value 10 ppm; STEL value 15 ppm;

Skin Designation;

The substance can be absorbed through the skin.

OSHA PEL PEL 100 ppm 400 mg/m3; TWA value 100

ppm 400 mg/m3;

#### Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

#### Personal protective equipment

# RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

# Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use 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, Protective glove selection must be based on the user's assessment of the workplace hazards.

# Eye protection:

Safety glasses with side-shields. 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:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

# 9. Physical and Chemical Properties

Form: liquid Odour: aromatic

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Odour threshold: Not determined due to potential health hazard by inhalation.

Colour: dark amber approx. 5 - 7 pH value:

(20°C)

Melting temperature: not determined

boiling temperature: The product has not been tested.

Flash point: 98 °C

Flammability: not applicable

Lower explosion limit: As a result of our experience with this

> product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

As a result of our experience with this Upper explosion limit:

> product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

Autoignition: 270 °C

Vapour pressure: approx. 0.32 hPa (measured)

(20°C)

Information applies to the solvent.

Density: approx. 1.02 g/cm3

(20°C)

Vapour density: not applicable

Information on: Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-

Partitioning coefficient n-

octanol/water (log Pow):

No decomposition if stored and handled as Thermal decomposition:

prescribed/indicated.

Viscosity, kinematic: 2.19 mm2/s

(40°C)

Information based on the main

components.

Solubility in water: dispersible Evaporation rate: not applicable

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

# 10. Stability and Reactivity

# Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties: not fire-propagating

#### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

# Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

# Conditions to avoid

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See MSDS section 7 - Handling and storage.

#### Incompatible materials

strong acids, strong bases, strong oxidizing agents

# Hazardous decomposition products

#### Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

#### Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

# 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: Of low toxicity after single ingestion. Of moderate toxicity after short-term inhalation. Of low toxicity after short-term skin contact.

#### Oral

Type of value: LD50 Species: rat (female) Value: 4,100 mg/kg

# Inhalation

Type of value: LC50 Species: rat (male) Value: 2.6 mg/l Exposure time: 4 h

#### Dermal

Type of value: LD50 Species: rabbit Value: > 2,000 mg/kg

# Assessment other acute effects

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

The product has not been tested. The statement has been derived from the properties of the individual components.

# Irritation / corrosion

Assessment of irritating effects: May cause severe damage to the eyes. Not irritating to the skin.

#### Skin

Species: rabbit

Result: moderately irritating

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Eye

Species: rabbit Result: Irritant.

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

Species: guinea pig Result: Non-sensitizing.

# **Chronic Toxicity/Effects**

#### Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

#### Information on: naphthalene

Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects. The substance may cause damage to the olfactory epithelium after repeated inhalation. Repeated dermal uptake of the substance did not cause substance-related effects.

# Information on: N-Methylpyrrolidone

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. The substance may cause damage to the testes after repeated inhalation of high doses.

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#### Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

# Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

# Information on: naphthalene

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was observed. EU-classification The substance was classified as a group 3 carcinogen by the German MAK-Commission (substances for which a suspicion of a carcinogenic potential exists). IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

# Information on: solvent naphtha

Assessment of carcinogenicity: Long-term exposure to highly irritating concentrations resulted in skin tumors in animals. A carcinogenic effect in humans can be excluded after brief skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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# Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

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Information on: N-Methylpyrrolidone

Assessment of reproduction toxicity: As shown in animal studies, the product may cause damage to

the testes after repeated high exposures that cause other toxic effects.

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#### Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: N-Methylpyrrolidone

Assessment of teratogenicity: The substance caused malformations/developmental toxicity in

laboratory animals.

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#### Other Information

Misuse can be harmful to health. Has a degreasing effect on skin.

# **Symptoms of Exposure**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

# 12. Ecological Information

# **Toxicity**

#### Toxicity to fish

Information on: Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-LC50 (96 h) 0.72 mg/l, Oncorhynchus mykiss

Information on: naphthalene

LC50 (48 h) 0.9 - 1.01 mg/l, Oncorhynchus gorbuscha (other, Flow through.)

The statement of the toxic effect relates to the analytically determined concentration. Literature data.

LC50 (48 h) 9 mg/l, Oryzias latipes (JIS K 0102-71, semistatic)

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# Aquatic invertebrates

Information on: Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-LC50 (48 h) > 1.5 mg/l, daphnia

Information on: naphthalene

EC50 (48 h) 2.16 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in

the test medium. A saturated solution has been tested. Literature data.

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#### Aquatic plants

Information on: Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-EC50 (72 h) > 1.9 mg/l (growth rate), Pseudokirchneriella subcapitata

Information on: naphthalene

EC50 (72 h) approx. 0.4 mg/l (growth rate), Skeletonema costatum (static)

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

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No observed effect concentration (8 d) >= 16 mg/l (growth rate), Lemna minor (OECD guideline 221, statio)

Literature data.

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# Persistence and degradability

# Assessment biodegradation and elimination (H2O)

The product has not been tested. The statement has been derived from the properties of the individual components.

# Assessment biodegradation and elimination (H2O)

Information on: Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-

Not readily biodegradable (by OECD criteria).

Information on: naphthalene

Product is expected to be readily biodegradable.

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# Bioaccumulative potential

#### Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Assessment bioaccumulation potential

Information on: Propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyl)oxy]phenoxy]-, ethyl ester, (2R)-

#### Bioaccumulation potential

Information on: naphthalene

Bioconcentration factor: 36.5 - 168 (56 d), Cyprinus sp. (OECD Guideline 305 C)

Literature data.

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# Mobility in soil

# Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: naphthalene

The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

#### Additional information

#### Other ecotoxicological advice:

Do not discharge product into the environment without control.

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# 13. Disposal considerations

# Waste disposal of substance:

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### Container disposal:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

# 14. Transport Information

# Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

**IMDG** 

Hazard class: 9 Packing group: III

ID number: UN 3082 Hazard label: 9, EHSM Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains QUIZALOFOP-P-ETHYL, NAPHTHALENE)

Air transport

IATA/ICAO

Hazard class: 9
Packing group: III

ID number: UN 3082 Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains QUIZALOFOP-P-ETHYL, NAPHTHALENE)

# 15. Regulatory Information

# Federal Regulations

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Acute; Chronic

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**EPCRA 313:** 

CAS NumberChemical name872-50-4N-Methylpyrrolidone91-20-3naphthalene

CERCLA RQ 100 LBS 201-20-3 Chemical name naphthalene

# State regulations

State RTK	<b>CAS Number</b>	<b>Chemical name</b>
NJ	91-20-3	naphthalene
	872-50-4	N-Methylpyrrolidone
PA	91-20-3	naphthalene
	872-50-4	N-Methylpyrrolidone

# **CA Prop. 65:**

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

# **NFPA Hazard codes:**

Health: 1 Fire: 1 Reactivity: 0 Special:

# Labeling requirements under FIFRA

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

#### DANGER:

CORROSIVE.

KEEP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

CAUSES IRREVERSIBLE EYE DAMAGE.

HARMFUL IF SWALLOWED.

HARMFUL IF INHALED.

HARMFUL IF ABSORBED THROUGH SKIN.

Do not get in eyes, on skin, or on clothing.

Avoid inhalation of mists/vapours.

Wash thoroughly after handling.

# 16. Other Information

# SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2016/01/21

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 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

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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**