

**NDS Energy (Dometic Mobile Power Italy srl)
Safety Data Sheet
Regulation (EU) 2020/878 (REACH ANNEX II)**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Product form : Lead-acid Battery
- Trade name : GREEN POWER
- Model No. : GP60, GP80, GP80S, GP90, GP90B, GP100, GP100B, GP120, GP140, GP150, GP200, GP210, GP250, GP6-235

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 : Lead-Acid Battery

1.2.2 Uses advised against

- Restrictions on use: : N / A

1.3 Details of the supplier of the safety data sheet

Supplier:

NDS Energy (Dometic Mobile Power Italy) srl
Via Giovanni Pascoli 96/98, 65010 Cappelle Sul Tavo (PE), Italy.
TEL +390854470396
FAX +390859112263
mattia@ndsenergy.it

1.4 Emergency telephone number

- Emergency number : +390854470396

SECTION 2: Hazard 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 (Inhaled: dust, fog) H332
- Skin Corr. 1A H314
- Eye Dam. 1 H318
- Repr. 1A H360
- Lact. H362
- STOT RE 1 H372
- Aquatic Acute 1 H400
- Aquatic Chronic 1 H410

Adverse physicochemical, human health and environmental effects

To our knowledge, this product is a battery and it does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. In case of rupture the below hazards exist.

2.2 Label Elements

- Labelling according to Regulation

Hazard pictograms (CLP)



Signal word (CLP)

DANGER

Hazard statements (CLP)

- H302 Harmful if swallowed.
- H332 Harmful if inhaled.
- H314 Causes severe skin burns and eye damage
- H360 May damage fertility or the unborn child.
- H362 May cause harm to breast-fed children.
- H372 Causes damage to organs <or state all organs affected, if known> through prolonged

<p>Precautionary statements (CLP)</p>	<p>or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p> <p>P201 : Obtain special instructions before use.</p> <p>P273 : Avoid release to the environment.</p> <p>P280 : Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301+P330+P331 IF SWALLOWED :Rinse mouth and Do NOT induce vomiting.</p> <p>P303+P361+P353 : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>
<p>EUH-statements</p>	<p>: None.</p>

2.3 Other hazards

- Other hazards which do not result in classification: Lead can be toxic to blood, kidneys and central nervous system

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
 This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
 Contains no PBT/vPvB substances 0.1% assessed in accordance with REACH Annex XII

This mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2010 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not Applicable

3.2 Mixture

3.2.1 and 3.2.2 Ingredients

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific limits
Lead	CAS-No.: 7439-92-1 EC-No.: 231-100-4	70	Repr.1A, H360FD Lact, H362 STOT RE 1, H372 Aquatic Acute 1, H400 (M1=1) Aquatic chronic, H410 (M=10)	0,03 ≤ C ≤ 100) Repr. 1A H360D
Sulfuric Acid	CAS-No.: 7664-93-9 EC-No.: 231-639-5	20,50	Skin corr. 1A, H314	5 ≤ C < 15 Eye Irrit. 2, H319 5 ≤ C < 15 skin Irrit. 2, H315 15 ≤ C ≤ 15 Skin corr. 1A, H314
Glass, oxide, chemicals	CAS-No.: 65997-17-3 EC-No.: 266-046-0	1,97	Not classified	
ABS	-----	6,54	Not classified	
Terminal	-----	0,11	Not classified	
Epoxy	-----	0,66	Not classified	
Safety Valve	-----	0,03	Not classified	
Lifting rope	-----	0,13	Not classified	
Stud	-----	0,06	Not classified	

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	: Consult a doctor.
First-aid measures after inhalation	: In case the battery is damaged: remove victim to fresh area. Administer artificial respiration if breathing is difficult. Seek medical attention.
First-aid measures after skin contact	: Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get medical attention.
First-aid measures after eye contact	: Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persist.
First-aid measures after ingestion	: Do not induce vomiting. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/Effects	: It causes damage to organs through prolonged or repeated exposure.
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4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: No information available

5.2 Special hazards arising from the substance or mixture

Fire hazard	: In case of fires involving the product, lead compounds and sulfuric acid fumes may be released. The battery can be physically damaged by pressure build-up when exposed to excessive heat and may result in the release of corrosive materials.
Hazardous decompositions products in case of fire	: Fire hazard/explosion. Reacts violently with water. Reacts violently with oxidising substances. Contact with metals can develop flammable hydrogen gas.

5.3 Advise for firefighters

Firefighting Instructions	: Caution in case of chemical fire. Use splashing water or water mist to cool exposed containers. Avoid the introduction into the environment of water used in extinguishing the fire.
Hazardous decompositions products in case of fire	: Do not enter the fire area without adequate protective equipment, including self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- 6.1.1. For non-emergency personnel

Emergency Procedures	: Ventilate spillage area
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- 6.1.2 For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to Section 8: "Exposure control/personal protection".
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6.2 Environmental precautions

Avoid release to the environment

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: Limited spills: collect all released material in a plastic-lined metal container. Absorb the spilled liquid on absorbent material or Neutralize with baking soda. Important spills: Absorb the spilled liquid with absorbent material such as: sand, earth.
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Other information : Dispose of safely according to applicable local/national regulations.
 : Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections
 For further information refer to section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not open, destroy, or incenerate batteries because the battery may explode, break or vent during these processes. Do not short-circuit the battery, overcharge, forced discharge or thrown into the fire. Do not squeeze the battery or immerse the battery in the solution.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures :Keep away from open flames, hot surface and source of ignition.

Storage conditions : Store in well-ventilated place. Keep cool.

Incompatible : Strong acids. Strong bases.

7.3 Specific end use(s)
 SDS section 1.2.1 – Additional text

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 National occupational exposure and biological limit values

Lead (7439-92-1)	
UE - Occupational Exposure Limits (BOEL) – Inorganic LEAD and Its compounds	
BOEL TWA	0,15mg/m ³
Normative reference	DIRECTIVE (EU) 2022/431 (amending Directive 2004/37/EC)
UE - Biological Exposure Limits (BLV) - Lead and Its organic compounds	
BLV	30 µg/100ml Parameter: Pb

Normative reference	SCOEL list recommended health-based BLVs and BGVs

Sulphuric Acid (7664-93-9)	
UE - Occupational Exposure Limits (IOEL) – Sulphuric Acid (mist)	
Normative reference	Commission directive 2009/161/EU
Italy - Professional Exposure Limits – Acido Solforico (nebulizzazione)	
OEL TWA mg/m ³	0,05 mg/m ³
Normative reference	Allegato XXXVIII del D.Lgs.9 Aprile 2008, n.81 e s.m.i.

8.1.2 Recommended monitoring procedures

No additional information available

8.1.3 Air contaminants formed

No additional information available

8.1.4 DNEL e PNEC

No additional information available

8.1.5 Control banding

No additional information available

8.2 Exposure Controls

8.2.1 Appropriate engineering controls

Safety showers must be installed in the immediate vicinity of where there is no risk of exposure. Ensure good ventilation of the work station

8.2.2 Personal protection equipment

8.2.2.1 Eye and face protection

Eye protection : Safety glasses (EN 166)

8.2.2.2 Skin protection

Skin and body protection : Wear suitable protective clothing (EN13034)
 Corrosion resistant clothing (EN14605)
 Hand : Protective gloves (EN374-1)

8.2.2.3 Respiratory protection

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment (EN140)

8.2.2.4 Thermal hazards

No additional information available

8.2.3 Environmental exposure controls

Environmental exposure controls : Avoid release to the environment. Avoid entering sewers or streams.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Black solid
Colour	: Black
Odour	: Odourless
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: 95-95,555°C
Flammability	: Not available
Explosive properties	: Not explosive
Oxidising properties	: Not oxidizing
Explosive limits	: Not available
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water 100%
Partition coefficient octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: 1
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available

Particle aggregation state : Not available
 Particle agglomeration state : Not available
 Particle specific surface area : Not available
 Particle dustiness : Not available

9.2 Other information

9.2.1 Information with regard to physical hazard class

No additional information available

9.2.2 Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is non-reactive under normal condition of use, storage and transport (section 7)

10.2 Chemical stability

Stable under normal conditions (section 7)

10.3 Possibility of hazard reactions

No dangerous reactions know under normal conditions of use

10.4 Condition to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No deformation, destruction, crushed, disassemble, overcharge, short circuit. Prolonged exposure to damp conditions.

10.5 Incompatibles materials

Strong acids. Strong bases.

10.6 Hazardous decompositions products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In case of fires involving the product, lead compounds and sulfuric acid fumes may be released.

SECTION 11: Toxicological information

11.1 Informations on hazard classes as defined in Regulation (EC) No. 1272/2008

Acute toxicity (oral) : Dangerous if swallowed
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Dangerous if inhaled

Valve Regulated AGM NON-SPILLABLE BATTERY	
STA CLP (oral)	> 500 mg/kg body weight
STA CLP (dust, spray)	> 1,667 mg/l/4h

Lead (7439-92-1)	
LC50 Inhalation - Rat	> 5,05 mg/l/4h
LD50 dermal rat	> 2000 mg/kg body weight
LD50 oral rat	> 2000 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns
Serious eye damage/irritation	: Causes serious eye damage
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenity	: Not classified
Reproductive toxicity	: It can harm fertility or the fetus. May be harmful to breastfed infants
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure
Aspiration hazard	Not classified

LEAD DIOXIDE (1309-60-0)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure

LEAD Sulphate (7446-14-2)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure

11.2 Informations on hazard

11.2.2 Other information

Other information : No information available

SECTION 12: Ecological information

12.1 Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Very harmful to aquatic organisms
Hazardous to the aquatic environment, long-term (chronic)	: Very harmful to aquatic organisms with long-term effects

Lead (7439-92-1)

LC50 - Fish [1]	107 ug/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50- Other aquatic organism [1]	NOEC: 3,4 ug/l (Exposure time: 48 h - Species: Mytilus Trossolus)
NOEC Chronic - Crustacea	153,8 ug/l (Exposure time: 25 days- Species: Alona rectangula)
NOEC Chronic - fish	29,3 ug/l (Exposure time: 30 days- Species: Pimephales promelas)
LEAD DIOXIDE (1309-60-0)	
EC50 – Daphnia Magna	2100 ug/l (Exposure time: 96 h - Species: Daphnia Magna)
Sulphuric Acid (7664-93-9)	
LC50 - Fish [1]	16-28 ug/l (Exposure time: 96 h - Species: Lepomis macrochirus)
EC50 – Daphnia [1]	> 100 mg/l (Exposure time: 48 h - Species: Daphnia Magna)
NOEC chronic fish	0,31 mg/l Test organisms (species: Salvelinus fontinalis Duration: '213 d')
NOEC Chronic - Crustacea	0,15 mg/l (Tanytarsus dissimilis)

12.2 Persistence and degradability

Persistence and degradability : No information available

12.3 Bioaccumulative potential

Bioaccumulative potential : No information available

12.4 Mobility in soil

Ecology-soil : No information available

12.5 Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
 This substance/mixture does not meet the VPvB criteria of REACH regulation, annex XIII

12.6 Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or

is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

12.7 Other adverse effects

Other adverse effects

No information available

SECTION 13: Disposal consideration

13.1 Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Contaminated packaging




: Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

European waste code

: Lead battery - 16 06 01*

SECTION 14: Transporting information

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

ADR	IMDG	IATA		
14.1. UN number or ID number				
UN 2800	UN 2800	UN 2800		
14.2. UN proper shipping name				
Battery wet non spillable	Battery wet non spillable	Battery wet non spillable		
Transport document description				
UN 2800 Battery wet non spillable 8 (E) environmentally hazardous	UN 2800 Batteries, wet, non spillable 8 Marine pollutant/environmentally hazardous	UN 2800 Batteries, wet, non spillable 8 environmentally hazardous		
14.3. Transport hazard class(es)				
8	8	8		
				

14.4. Packing group				
Not applicable.	Not applicable.	Not applicable.		
14.5. Environmental hazards				
Dangerous for the environment: yes Marine pollutant: yes	Dangerous for the environment: yes Marine pollutant: yes	Dangerous for the environment: yes Marine pollutant: yes		
No supplementary information available				

14.6 Special precautions for user

Overland transport

Classification code (ADR)	: C11
Special provisions (ADR)	: 238, 295, 598
Limited quantities (ADR)	: II
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P003, P801
Special packing instructions (ADR)	: PP16
Transport category (ADR)	: 3
Tunnel restriction code (ADR)	: E
N° KEMLER	: 80

Transport by sea

Special provisions (IMDG)	: 29, 238
Limited quantities (ADR)	: II
Excepted quantities (ADR)	: E0
Packing instructions (IMDG)	: P003
Special packing instructions (ADR)	: PP16
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Metal plates immersed in gelled alkaline or acid electrolyte in a glass, hard rubber or plastics receptacle of a non-spillable type. When electrically charged, may cause fire through short-circuiting of terminals. Cause burns to skin, eyes and mucous membranes.
GSMU Number	: 154

Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden

PCA packing instructions (IATA)	: 872
PCA max net quantity (IATA)	: No Limit
CAO Packing instructions (IATA)	: See 872
CAO max net quantity (IATA)	: No Limit
Special provisions (IATA)	: A48, A67, A164, A183
ERG code (IATA)	8L

14.7 Maritime transport in bulk according to IMO instruction

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 substance on the REACH candidate list annex XVII and XIV
- Contains a substance on the REACH: LEAD (EC 231-100-4, CAS 7439-92-1)
- Contains a substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals: lead dioxide (1309-60-0), LEAD (II) sulfate (7446-14-2)
- Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants
- Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer
- Contains a substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Sulphuric Acid (7664-93-9)	
Limit value	: 15% w/w
Upper limit value for licensing purposes in accordance with Article 5(3)	: 40% w/w
CN Code	: ex 2807 00 00
CN code mixture	: ex 3824 99 96

Contains a substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

Sulphuric Acid (7664-93-9)	
CN Code	: ex 2807 00 00

Category	: 3
Annex	: 1

15.1.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Regulatory information

Indication of changes:

No information available

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:	
	None
Acute Tox. 4 (Inhaled)	Acute Tox. (Inhaled), Category 4
Acute Tox (Inhaled: dust, spray) Chronic 4	Acute Tox. (Inhaled: dust, spray) Chronic 4
Acute Tox (Inhaled: steam) Chronic 4	Aquatic Tox (Inhaled: steam) Chronic 4
Acute Tox (Oral) Chronic 4	Acute Tox (Oral) Chronic 4
Aquatic acute 1	Aquatic acute 1 – Aquatic environmental
Aquatic chronic 1	Aquatic chronic 1 – Aquatic environmental
Eye dam. 1	Eye damage 1
Eye Irrit. 2	Eye Irrit. 2
H302	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360	May damage fertility or the unborn child <i><state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard></i> .
H360D	May damage fertility or the unborn child
H360FD	May damage fertility or the unborn child
H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs <i><or state all organs affected, if known > through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard></i> .
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Lact.	Tossico per la riproduzione
Repr. 1A	Tossico per la riproduzione

Skin corr. 1A	Skin corrosion Category 1
Skin Irrit.2	Skin corrosion Category 2
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2

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 constructed as guaranteeing any specific property of the product.

Date

19-06-2023

Signature for approval

DOMETIC MOBILE POWER ITALY SRL

