Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

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

· **1.1 Product identifier**

· **Trade name: Multi 500**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Sector of Use**
SU21 Consumer uses: Private households / general public / consumers
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· **Process category** PROC11 Non industrial spraying
· **Environmental release category**
ERC8a Wide dispersive indoor use of processing aids in open systems
ERC8d Wide dispersive outdoor use of processing aids in open systems
· **Application of the substance / the preparation** Metal surface treatment

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
A.M.P.E.R.E. SYSTEM
3 Rue Antoine Balard - Z.A.I. du Vert Galant
95310 Saint-Ouen-l'Aumône - France
Tel: +33 1 34 64 72 72
Fax: +33 1 30 37 55 17
E-mail: fds@amperesystem.com

· **Further information obtainable from:** Service QSE/E-mail: fds@amperesystem.com
· **1.4 Emergency telephone number:** Tel: +33 1 45 42 59 59 (N° ORFILA)

*

2 Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Extremely flammable

R12: Extremely flammable.

R52/53-67: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Vapours may cause drowsiness and dizziness.

· **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Warning! Pressurized container.
Has a narcotizing effect.
· **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **2.2 Label elements**

· **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 2)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 1)

· **Code letter and hazard designation of product:**



F+ Extremely flammable

· **Risk phrases:**
12 Extremely flammable.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**
2 Keep out of the reach of children.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe vapour/spray.
24 Avoid contact with skin.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.

· **Special labelling of certain preparations:**
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
Buildup of explosive mixtures possible without sufficient ventilation.
· **Classification in accordance with Directive 75/324/EEC:** Extremely flammable
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **3.1 Substances**

· **Additional information:**

CAS: 64742-47-8 EC number: 926-141-6 Reg.nr.: 01-2119456620-43	Distillates (petroleum), hydrotreated light Xn R65 Asp. Tox. 1, H304	10-<25%
CAS: 64742-82-1 EC number: 919-446-0 Reg.nr.: 01-2119458049-33	Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%) Xn R65; N R51/53 R10-66-67 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	10-<25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane (containing < 0.1% butadiene (203-450-8)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-<25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-<25%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene Xn R20; Xi R36/37/38; N R51/53 R10 Flam. Liq. 3, H226; Aquatic Chronic 2, H411; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.1-<1.0%

(Contd. on page 3)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 2)

	Alkaryl polyether Xi R36/38; N R51/53 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	0.1-<1.0%
CAS: 108-67-8 EINECS: 203-604-4	mesitylene Xi R37; N R51/53 R10 Flam. Liq. 3, H226; Aquatic Chronic 2, H411; STOT SE 3, H335	0.1-<1.0%

· **3.2 Mixtures**
· **Description:** Active substance with propellant

· **Dangerous components:** -

4 First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** Do not induce vomiting; call for medical help immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Water haze
Fire-extinguishing powder
Carbon dioxide
Alcohol resistant foam
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** Mount respiratory protective device.

*
6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
· **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

(Contd. on page 4)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 3)

· **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
· **Information about storage in one common storage facility:**
Observe official regulations on storing packagings with pressurized containers.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
· **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
106-97-8 butane (containing < 0.1% butadiene (203-450-8))	
WEL	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
74-98-6 propane	
OEL	Short-term value: 3600 mg/m³, 2000 ppm Long-term value: 1800 mg/m³, 1000 ppm

· **DNELs**		
64742-82-1 Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)		
Oral	DNEL Long term-systemic	26 mg/kg bw/day (Consumer)
Dermal	DNEL Long term-systemic	26 mg/kg bw/day (Consumer)
		44 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	71 mg/m3 (Consumer)
		330 mg/m3 (Worker)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter AX/P2

(Contd. on page 5)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 4)

· **Protection of hands:**



Protective gloves

Solvent resistant gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves** Nitrile rubber, NBR
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Use protective suit.

*

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Aerosol
Colour:	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-44 °C
· **Flash point:**	-97 °C
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	200 °C
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Explosion limits:**	
Lower:	0.5 Vol %
Upper:	10.9 Vol %
· **Vapour pressure at 20 °C:**	4 Bar
· **Density at 20 °C:**	0.737 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.

(Contd. on page 6)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 5)

· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	67.2 %
Solids content:	2.6 %
· **9.2 Other information**	No further relevant information available.

10 Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**		
64742-47-8 Distillates (petroleum), hydrotreated light		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50(8h)	>5000 mg/m3 (rat)
64742-82-1 Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	> 3160 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.

12 Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
64742-47-8 Distillates (petroleum), hydrotreated light	
EL0 (48h)	1000 mg/l (Daphnia magna)
EL0(72h)	1000 mg/l (Pseudokirchneriella subcapitata)
LL0(96h)	1000 mg/l (Oncorhynchus mykiss (96h))
64742-82-1 Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)	
EL50 (72h)	4.6-10 mg/l (Pseudokirchneriella subcapitata)
EL50(48h)	10-22 mg/l (Daphnia magna)
LL50 (96h)	10-30 mg/l (Oncorhynchus mykiss (96h))
LOEC (21 days)	0.203 mg/l (Daphnia magna)

(Contd. on page 7)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 6)

NOEC (21 days)	0.097 mg/l (Daphnia magna)
NOELR (72h)	1 mg/l (Pseudokirchneriella subcapitata)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Generally not hazardous for water
Harmful to aquatic organisms
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN1950

· **14.2 UN proper shipping name**
· **ADR** 1950 AEROSOLS
· **IMDG** AEROSOLS, MARINE POLLUTANT
· **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 2 5F Gases.
· **Label** 2.1

· **IMDG**



· **Class** 2.1

(Contd. on page 8)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 7)

· **Label**	2.1
· **IATA**	
	
· **Class**	2.1
· **Label**	2.1
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Gases.
· **Danger code (Kemler):**	-
· **EMS Number:**	F-D,S-U
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1L
· **Transport category**	2
· **Tunnel restriction code**	D
· **UN "Model Regulation":**	UN1950, AEROSOLS, 2.1

15 Regulatory information

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

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	50-100

· **VOC-CH** 67.18 %
· **VOC-EU** 495.4 g/l
· **Danish MAL Code** 5-3
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H220 Extremely flammable gas.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

(Contd. on page 9)

Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 08.11.2012 Version: 1 Revision: 08.11.2012

Trade name: Multi 500

(Contd. of page 8)

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

R10 Flammable.
R12 Extremely flammable.
R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Service Qualité-Sécurité-Environnement
· **Contact:** fds@amperesystem.com
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent