AMBRO-SOL S.R.L. Revision nr. 15 Dated 12/07/2017 Printed on 14/07/2017 Page n. 1/18

Safety data sheet

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

1.1. Product identifier

Code: A462

Product name Brakes cleaner Chemical name and synonym Cleaner

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Special cleaner particularly effective for brakes, clutches and all mechanical components.

Identified Uses	Industrial	Professional	Consumer
Industrial Use	✓	-	-
Professional Use	-	4	-

1.3. Details of the supplier of the safety data sheet

Name AMBRO-SOL S.R.L.

Full address Via per Pavone del Mella n.21

District and Country 25020 Cigole (BS)

Italia

Tel. +39 030 9959674 Fax +39 030 959265

e-mail address of the competent person

responsible for the Safety Data Sheet quality@ambro-sol.com

1.4. Emergency telephone number

For urgent inquiries refer to Centro Antiveleni di Pavia: 0382 24444 (IRCCS Fondazione Maugeri - Pavia)

Centro Antiveleni di Bergamo: 800 883300 (Ospedali Riuniti - Bergamo) Centro Antiveleni di Firenze: 055 7947819 (Ospedale Careggi - Firenze) Centro Antiveleni di Roma: 06 3054343 (Policlinico Gemelli - Roma) Centro Antiveleni di Napoli: 081 7472870 (Ospedale Cardarelli - Napoli)

Centro Antiveleni in Spagna: 91 5620420 (Inst. Nacional de Toxicología y Ciencias Forenses) Centro Antiveleni in Francia: 01 40054848 (Centre Antipoison et de Toxicovigilance de Paris)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1	H222	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

A462 - Brakes cleaner

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 2/18

Hazard pictograms:







Signal words:

Danger

Hazard statements:

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H315 Causes skin irritation.

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

Precautionary statements:

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P301+P310 IF SWALLOWED: immediately call a POISON CENTER / doctor / . . .

P331 Do NOT induce vomiting.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C / 122°F.

Contains: NAPHTHA (PETROLEUM), HYDROTREATED LIGHT

ETHYL ACETATE

Statements on the aspiration toxicity classification were not included in the label elements, based on section 1.3.3. of Annex I to CLP.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Identification

Classification 1272/2008

A462 - Brakes cleaner

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 3/18

NAPHTHA (PETROLEUM), HYDROTREATED

CAS 64742-49-0

 $63 \le x < 67$

Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315,

STOT SE 3 H336, Aquatic Chronic 2 H411, Note P

(CLP)

EC 265-151-9

INDEX 649-328-00-1

Reg. no. 012119484651-34-XXXX **XYLENE (MIXTURE OF ISOMERS)**

CAS 1330-20-7

 $7 \le x < 9$

Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Note C

EC 215-535-7

INDEX 601-022-00-9

Reg. no. 01-2119488216-32-XXXX

CARBON DIOXIDE

CAS 124-38-9

5≤x< 7

Substance with a community workplace

exposure limit.

EC 204-696-9

INDEX -

ETHYL ACETATE CAS 141-78-6

 $0.5 \le x < 1$

Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336,

EUH066

EC 205-500-4

INDEX 607-022-00-5

Reg. no. 01-2119475103-46-XXXX

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 5,79 %

* A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C4 through C11 and boiling in the range of approximately minus 20°C to 190°C (-4°F to 374°F).

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

AMBRO-SOL S.R.L. Revision nr. 15 Dated 12/07/2017 Printed on 14/07/2017 Page n. 4/18

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

AMBRO-SOL S.R.L. Revision nr. 15 Dated 12/07/2017 Printed on 14/07/2017 Page n. 5/18

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR България МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА

МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30

декември 2003 г

CZE Česká Republika Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany

zdraví při práci

DEU Deutschland MAK-und BAT-Werte-Liste 2012

AMBRO-SOL S.R.L.	Revision nr. 15
	Dated 12/07/2017
A462 - Brakes cleaner	Printed on 14/07/2017
	Page n. 6/18
	•

Danmark España	Graensevaerdier per stoffer og materialer INSHT - Límites de exposición profesional para agentes químicos en
Eesti	España 2015 Töökeskkonna keemiliste ohutegurite piirnormid 1. Vastu võetud 18.09.2001 nr 293 RT I 2001, 77, 460 - Redaktsiooni jõustumise kp: 01.01.2008
Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveysministeriön julkaisuja 2012:5
France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
United Kingdom	EH40/2005 Workplace exposure limits
Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
Italia	Decreto Legislativo 9 Aprile 2008, n.81
Lietuva	DĖL LIETUVOS HIGIENOS NORMOS HN 23:2007 CHEMINIŲ MEDŽIAGŲ 2007 m. spalio 15 d. Nr. V-827/A1-287
Latvija	Ķīmisko vielu aroda ekspozīcijas robežvērtības (AER) darba vides gaisā 2012
Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
	Uradni list Republike Slovenije 15. 6. 2007
•	Occupational Exposure Limit Values, AF 2011:18
•	2000/39/EC sayılı Direktifin ekidir
TLV-ÁCGIH	ACGIH 2016
RCP TLV	ACGIH TLVs and BEIs – Appendix H
	España Eesti Suomi France United Kingdom Ελλάδα Hrvatska Magyarország Italia Lietuva Latvija Nederland Norge Polska Portugal Slovensko Slovenija Sverige Türkiye TLV-ACGIH

NAPHTHA	(PETROLEUM).	HYDROTREATED LIGHT	

NAFITHA (FETROLLOW)	, HIDROINE	TED LIGHT				
Threshold Limit Value						
Type	Country	TWA/8h	TWA/8h			
		mg/m3	ppm	mg/m3	ppm	
OEL	EU			72		
RCP TI V		1200				

Health - Derived no-effect l	evel - DNEL / D Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1301 mg/kg bw/d				
Inhalation				1137 mg/m3				5306 mg/m3
Skin				1377 mg/kg bw/d				13964 mg/kg bw/d

XYLENE (MIXTURE OF IS	SOMERS)			
Threshold Limit Value				
Туре	Country	TWA/8h	STEL/15min	

A462 - Brakes cleaner

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 7/18

		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	221	PP	442	FF	SKIN		
TLV	CZE	200		400		SKIN		
AGW	DEU	440	100	880	200	SKIN		
MAK	DEU	440	100	880	200	SKIN		
VLA	ESP	221	50	442	100	SKIN		
TLV	EST	221	50	442	100	SKIN		
HTP	FIN	220	50	440	100	SKIN		
VLEP	FRA	221	50	442	100	SKIN		
WEL	GBR	220	50	441	100	OKIN		
TLV	GRC	435	100	650	150			
GVI	HRV	221	50	442	100	SKIN		
AK	HUN	221	30	442	100	SKIN		
VLEP	ITA	221	50	442	100	SKIN		
OEL	NLD	210	30	442	100	SKIN		
TLV	NOR	108	25	442		SKIN		
NDS	POL	100	23			SKIN		
VLE	PRT	221	50	442	100	SKIN		
NPHV	SVK	221	50	442	100	SKIN		
MV	SVN	221	50	772		SKIN		
MAK	SWE	221	50	442	100	SKIN		
ESD	TUR	221	50	442	100	SKIN		
OEL	EU	221	50	442	100	SKIN		
TLV-ACGIH		434	100	651	150	J		
Predicted no-effect concentration	- PNEC							
Normal value in fresh water Normal value in marine water Normal value for fresh water sediment Normal value for marine water sediment Normal value of STP microorganisms				327 327 12,46 12,46 6,58		μg/l μg/l mg/kg mg/kg mg/l	/d	
Normal value for the terrestrial cor Health - Derived no-effect le		MEL		2,31		mg/kg	/a	
Route of exposure	Effects on consumers Acute local	Acute systemic	Chronic local	Chronic	Effects on workers Acute local	Acute	Chronic local	Chronic
Oral				systemic 1,6 mg/kg bw/d		systemic		systemic
Inhalation				14,8 mg/m3			289 mg/m3	77 mg/m3
Skin				108 mg/kg bw/d				180 mg/kg bw/d
CARBON DIOXIDE								
Threshold Limit Value Type	Country	TWA/8h		STEL/15min				
.,,,,,	,	mg/m3	ppm	mg/m3	ppm			
TLV	BGR	9000	.,	J				
TLV	CZE	9000		45000				
AGW	DEU	9100	5000	18200	10000			
MAK	DEU	9100	5000	18200	10000			
TLV	DNK	9000	5000					
VLA	ESP	9150	5000					

	Revision nr. 15 Dated 12/07/2017						
	A	462 - Brake	es cleane	r		Printed on 14/07/2017 Page n. 8/18	
						Tage II. 0/10	
НТР	FIN	9100	5000				
WEL	GBR	9150	5000	27400	15000		
TLV	GRC	9000	5000	54000	5000		
GVI	HRV	9000	5000				
AK	HUN	9000		18000			
VLEP	ITA	9000	5000				
RD	LTU	9000	5000				
RV	LVA	9000	5000				
OEL	NLD	9000	5000				
TLV	NOR	9000	5000				
NDS	POL	9000		27000			
VLE	PRT	9000	5000				
NPHV	SVK	9000	5000				
MV	SVN	9000	5000				
MAK	SWE	9000	5000	18000	10000		
OEL	EU	9000	5000				
TLV-ACGIH		9000	5000	54000	30000		
ETHYL ACETATE							
Threshold Limit Value	0	T\A/A (OL		OTEL // Farin			
Туре	Country	TWA/8h		STEL/15min			
T1.\/	200	mg/m3	ppm	mg/m3	ppm		
TLV	BGR	800		000			
TLV	CZE	700	400	900	000		
AGW	DEU	1500	400	3000	800		
MAK	DEU	1500	400	3000	800		
TLV	DNK	540	150				
VLA 	ESP	1460	400				
TLV	EST	500	150	1100	300		
HTP	FIN	1100	300	1800	500		
VLEP	FRA	1400	400				
WEL	GBR		200		400		
TLV	GRC	1400	400				
GVI	HRV		200		400		
AK	HUN	1400		1400			
RD	LTU	500	150	1100 (C)	300 (C)		
RV	LVA	200					
OEL	NLD	550		1100			
TLV	NOR	550	150				
NDS	POL	200		600			
NPHV	SVK	1500	400	3000			
MAK	SWE	500	150	1100	300		
OEL	EU	734	200	1468	400		
TLV-ACGIH		1441	400				
Predicted no-effect concentration	n - PNEC						
Normal value in fresh water Normal value in marine water				240 24		μg/l μg/l	

AMBRO-SOL	Revision nr. 15 Dated 12/07/2017	
A462 - Brakes	Printed on 14/07/2017	
		Page n. 9/18
Normal value for fresh water sediment	1,15	μg/kg
Normal value for marine water sediment	115	μg/kg
Normal value for water, intermittent release	1,65	mg/l
Normal value of STP microorganisms	650	mg/l
Normal value for the food chain (secondary poisoning)	200	mg/kg
Normal value for the terrestrial compartment	148	μg/kg/d
Normal value for the atmosphere	NPI	

Health - Derived no-effect	t level - DNEL / D Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	4,5 mg/kg		·		·
Inhalation Skin	734 mg/kg	734 mg/kg	367 mg/m3 VND	367 mg/m3 37 mg/kg	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3 63 mg/kg

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

None required.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance aerosol Colour transparent

Odour characteristic of solvent

A462 - Brakes cleaner

Not available

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 10/18

Odour threshold Not available Not available Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Flash point Evaporation Rate < 0 °C Not available Flammability of solids and gases Flammable liquid Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure Not available

Relative density a 20°C 0,67 ÷ 0,71 g/ml Solubility insoluble in water Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Decomposition temperature Not available Not available Viscosity Explosive properties not applicable not applicable Oxidising properties

9.2. Other information

Vapour density

VOC (Directive 2010/75/EC): 78,85 % - 544,06 g/litre VOC (volatile carbon): 63,19 % - 436,00

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum. May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide. Forms explosive mixtures with: air.

AMBRO-SOL S.R.L. Revision nr. 15 Dated 12/07/2017 Printed on 14/07/2017 Page n. 11/18

10.4. Conditions to avoid

Avoid overheating.

ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

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

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

A462 - Brakes cleaner

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 12/18

ACUTE TOXICITY

LC50 (Inhalation - vapours) of the mixture:> 20 mg/l

LC50 (Inhalation - mists / powders) of the mixture: Not classified (no significant component)

LD50 (Oral) of the mixture:Not classified (no significant component)

LD50 (Dermal) of the mixture:>2000 mg/kg

XYLENE (MIXTURE OF ISOMERS)

> 3000 mg/kg rat

LD50 (Oral)

> 1700 mg/kg rabbit

LD50 (Dermal)

5000 ppm/4h rat

LC50 (Inhalation)

ETHYL ACETATE

11,3 mg/kg bw rat

LD50 (Oral)

20000 mg/kg bw rabbit

LD50 (Dermal)

NAPHTHA (PETROLEUM), HYDROTREATED LIGHT

3790 mg/kg bw rat

LD50 (Oral)

3500 mg/kg bw rabbit

LD50 (Dermal)

34,73 mg/l/4h air (rat)

LC50 (Inhalation)

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

AMBRO-SOL S.R.L. Revision nr. 15 Dated 12/07/2017 Printed on 14/07/2017 Page n. 13/18

Toxic for aspiration

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment. 12.1. Toxicity

ETHYL ACETATE

LC50 - for Fish 230 mg/l/96h EC50 - for Algae / Aquatic 100 mg/l/72h

Plants

Chronic NOEC for Fish 9,65 mg/l 32 days
Chronic NOEC for Crustacea 2,4 mg/l 21 days

NAPHTHA (PETROLEUM),

HYDROTREATED LIGHT

 LC50 - for Fish
 8,41 mg/l/96h

 EC50 - for Crustacea
 4,7 mg/l/48h

 EC50 - for Algae / Aquatic
 15,65 mg/l/72h

Plants

Chronic NOEC for Algae / 6,47 mg/l

Aquatic Plants

12.2. Persistence and degradability

XYLENE (MIXTURE OF

ISOMERS)

Solubility in water 100 - 1000 mg/l

Rapidly biodegradable

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly biodegradable

NAPHTHA (PETROLEUM), HYDROTREATED LIGHT Rapidly biodegradable

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF

ISOMERS)

Partition coefficient: n- 3,12

octanol/water BCF

25,9

ETHYL ACETATE

Revision nr. 15 AMBRO-SOL S.R.L. Dated 12/07/2017 Printed on 14/07/2017 A462 - Brakes cleaner Page n. 14/18

Partition coefficient: n-0,68 octanol/water BCF 30

12.4. Mobility in soil

XYLENE (MIXTURE OF

ISOMERS)

Partition coefficient: 2,73

soil/water

NAPHTHA (PETROLEUM), HYDROTREATED LIGHT

Partition coefficient: 1,78

soil/water

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, 1950

IATA:

IATA:

14.2. UN proper shipping name

ADR / RID: **AEROSOLS** IMDG: **AEROSOLS** (NAPHTHA (PETROLEUM), **HYDROTREATE** D LIGHT)

AEROSOLS.

FLAMMABLE

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 15/18

A462 - Brakes cleaner

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1

IMDG: Class: 2 Label: 2.1

Label: 2.1 IATA: Class: 2



14.4. Packing group

ADR / RID, IMDG,

IATA:

14.5. Environmental hazards

ADR / RID: Environmentally

Hazardous

IMDG: Marine Pollutant

IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

Pass.:

14.6. Special precautions for user

ADR / RID: HIN - Kemler: --Limited Tunnel Quantities: 1 restriction code: (D)

Special Provision: -

EMS: F-D, S-U IMDG: Limited

Quantities: 1

Packaging

Packaging

instructions:

130

130

instructions:

IATA: Cargo: Maximum

quantity: 100

Кg Maximum

quantity: 25

Κg

Special Instructions: A802

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P3b-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

A462 - Brakes cleaner

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 16/18

Product

Point 40

Substances in Candidate List (Art. 59 REACH)

Substances subject to authorisarion (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Aerosol 1 Aerosol, category 1
Aerosol, category 3

Flam. Liq. 2 Flammable liquid, category 2
Flam. Liq. 3 Flammable liquid, category 3
Acute Tox. 4 Acute toxicity, category 4
Asp. Tox. 1 Aspiration hazard, category 1
Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

A462 - Brakes cleaner

Revision nr. 15

Dated 12/07/2017

Printed on 14/07/2017

Page n. 17/18

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EÚ) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- The Merck Index. 10th Edition Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety

AMBRO-SOL S.R.L.	Revision nr. 15 Dated 12/07/2017
A462 - Brakes cleaner	Printed on 14/07/2017
A402 - Brakes Clearier	Page n. 18/18
laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.	
Changes to previous review: The following sections were modified: 01 / 02 / 03 / 04 / 08 / 09 / 10 / 11 / 12 / 15 / 16.	