

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.08.2012

Version: 2

Revision: 20.07.2012

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** STIHL Multispray**Article number:**

0730 411 7000 / 0730 411 7002

[20.07.2012]

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)

Product category PC24 Lubricants, greases, release products**Application of the substance / the preparation**

Penetrating oil

Lubricant

Anticorrosion additive

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

ANDREAS STIHL AG & Co. KG

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D-71336 Waiblingen

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Further information obtainable from:

Produktmanagement Forsttechnik

Tel: +49 (0) 7151-26-3237

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1.4 Emergency telephone number:

Tel: +49-621-60-43333

Fax: +49-621-60-92664

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

F+; Extremely flammable

R12: Extremely flammable.

Information concerning particular hazards for human and environment:

Contact with skin and inhalation of aerosols/ vapours of the preparation should be avoided.

Warning! Pressurized container.

2.2 Label elements**Labelling according to EU guidelines:****Code letter and hazard designation of product:**

F+ Extremely flammable

Risk phrases:

12 Extremely flammable.

Safety phrases:

2 Keep out of the reach of children.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe spray.

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.

Classification in accordance with Directive 75/324/EEC: Extremely flammable

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2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Formulation consisting of pressurised gas and mineral oil with additives in petroleum distillate

Dangerous components:

CAS: 64742-55-8 EINECS: 265-158-7 Reg.nr.: 01-2119487077-29-XXXX	Distillates (petroleum), hydrotreated light paraffinic ☒ Xn R65 ☒ Asp. Tox. 1, H304	25-50%
EC number: 926-141-6 Reg.nr.: 01-2119456620-43-XXXX	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics ☒ Xn R65 R66 ☒ Asp. Tox. 1, H304	15-25%
CAS: 106-97-8 EINECS: 203-448-7	butane ☒ F+ R12 ☒ Flam. Gas 1, H220; Press. Gas, H280	5-10%
CAS: 74-98-6 EINECS: 200-827-9	propane ☒ F+ R12 ☒ Flam. Gas 1, H220; Press. Gas, H280	5-10%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60-XXXX	(2-methoxymethylethoxy)propanol substance with a Community workplace exposure limit	< 5%
CAS: 75-28-5 EINECS: 200-857-2	isobutane ☒ F+ R12 ☒ Flam. Gas 1, H220; Press. Gas, H280	< 5%
CAS: 68425-15-0 EINECS: 270-335-7	Triteriododecyl pentasulfide R53 Aquatic Chronic 4, H413	< 5%
CAS: 4259-15-8 EINECS: 224-235-5 Reg.nr.: 01-2119493635-27-XXXX	2-ethylhexyl zinc dithiophosphate ☒ Xi R41; ☒ N R51/53 ☒ Eye Dam. 1, H318; ☒ Aquatic Chronic 2, H411	≤ 1.0%
CAS: 128-37-0 EINECS: 204-881-4 Reg.nr.: 01-2119555270-46-XXXX	2,6-di-tert-butyl-p-cresol ☒ N R50/53 ☒ Aquatic Acute 1; Aquatic Chronic 1, H410	≤ 1.0%
CAS: 78-78-4 EINECS: 201-142-8	isopentane ☒ Xn R65; ☒ F+ R12; ☒ N R51/53 R66-67 ☒ Flam. Liq. 1, H224; ☒ Asp. Tox. 1, H304; ☒ Aquatic Chronic 2, H411; ☒ STOT SE 3, H336	≤ 1.0%

Additional information:

Note: Any entry in the EC column that begins with the number "9" is a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance. See Section 15 for additional CAS number information for the substance.

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:

Take affected persons out of danger area and lay down.

Remove soiled clothing

After inhalation:

Supply fresh air.

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In the event of irritation of the respiratory tract, dizziness, nausea or unconsciousness, call medical assistance immediately.

After skin contact:

Generally the product does not irritate the skin.

Wash the areas of skin affected with water and a mild detergent.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache

Dizziness

Nausea

Drowsiness

4.3 Indication of any immediate medical attention and special treatment needed

Treatment in accordance with the doctor's assessment of the patient's condition. Symptomatic treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**

Foam

Carbon dioxide

Fire-extinguishing powder

Water haze

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Sulphur dioxide (SO₂)

5.3 Advice for firefighters**Protective equipment:**

Do not inhale explosion gases or combustion gases.

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

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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 onto a naked flame or any incandescent material.

Highly volatile, flammable constituents are released during processing.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Provide solvent resistant, sealed floor.

Observe official regulations on storing packagings with pressurized containers.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Recommended storage temperature: 20 °C.

Storage class: 2 B

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane

WEL (Great Britain)	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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34590-94-8 (2-methoxymethylethoxy)propanol

WEL (Great Britain)	Long-term value: 308 mg/m ³ , 50 ppm Sk
IOELV (EU)	Long-term value: 308 mg/m ³ , 50 ppm Skin

128-37-0 2,6-di-tert-butyl-p-cresol

WEL (Great Britain)	Long-term value: 10 mg/m ³
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78-78-4 isopentane

WEL (Great Britain)	Long-term value: 1800 mg/m ³ , 600 ppm
IOELV (EU)	Long-term value: 3000 mg/m ³ , 1000 ppm

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

8.2 Exposure controls

Suitable technical control devices

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Respiratory protection:

Not required in normal cases

If the occupational exposure limit is exceeded:

The following breathing protection is recommended:

Respiratory filter for organic gases and vapours (Type A)

Identification colour: Brown

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Protection of hands: Not required in normal cases

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Trade name: STIHL Multispray
Eye protection: Not required in normal cases

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:

Form:	Aerosol
Colour:	Brown
Odour:	Characteristic
Odour threshold:	Not determined.

Important information on protection of health and environment, and on safety.
data of the content without propellant
pH-value: Not applicable.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	180 - 240°C

Flash point: 78°C (DIN 51758)

Flammability (solid, gaseous): Not applicable.

Ignition temperature:
Decomposition temperature: Not determined.

Self-igniting: Not determined.

Danger of explosion: Not determined.
In use, may form flammable/explosive vapour-air mixture.
Explosion limits:

Lower:	Explosion limits components: Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics: 0,6Vol%
Upper:	Explosion limits components: Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics: 7,0Vol%

Vapour pressure: Not determined.

Density at 20°C:	0.84 - 0.85 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with water: Not miscible or difficult to mix.

Segregation coefficient (n-octanol/water): Not determined.

Viscosity:

Flow time at 20°C	10 - 14 s (DIN EN ISO 2431/4mm)
Dynamic:	Not determined.
Kinematic:	Not determined.

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No dangerous reactions known.

10.2 Chemical stability Stable under normal conditions.

10.3 Possibility of hazardous reactions Forms explosive gas mixture with air.

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10.4 Conditions to avoid

An increase in pressure may lead to bursting.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Keep ignition sources away - Do not smoke.

See Section 7 for information on safe handling.

10.5 Incompatible materials: strong oxidizing agents

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects There are no toxicological findings on this mixture.

Acute toxicity:
LD/LC50 values relevant for classification:
64742-55-8 Distillates (petroleum), hydrotreated light paraffinic

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4h	>5 mg/l (rat)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Oral	LD50	>5000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/8h	>5000 mg/m ³ (rat) (OECD 403)

4259-15-8 2-ethylhexyl zinc dithiophosphate

Oral	LD50	>2000 mg/kg (rat)
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128-37-0 2,6-di-tert-butyl-p-cresol

Oral	LD50	>2930 mg/kg (rat) (OECD-Prüfrichtlinie 401)
Dermal	LD50	>2000 mg/kg (rat) (OECD-Prüfrichtlinie 402)

78-78-4 isopentane

Inhalative	LC50/4h	1280 mg/l (rat)
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Primary irritant effect:
on the skin:

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

on the eye:

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

Sensitization:

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

Repeated dose toxicity

On the basis of the available data, the classification criteria are not complied with (Conventional Method).

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

None of the ingredients are known to have effects which are carcinogenic, mutagenic or harmful to reproduction.

SECTION 12: Ecological information

12.1 Toxicity There are no ecotoxicological data available on this mixture.

Aquatic toxicity:
64742-55-8 Distillates (petroleum), hydrotreated light paraffinic

LL/EL/IL50	>100 mg/l (algae)
	>100 mg/l (daphnia)
	>100 mg/l (aquatic organisms)
NOEC/NOEL (dynamic)	>100 mg/l (fish)
	>1.0 - ≤10 mg/l (daphnia)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

ELO 48 h	1000 mg/l (Daphnia magna)
ELO 72 h	1000 mg/l (Pseudokirchneriella subcapitata)

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LLO 96 h	1000 mg/l (Oncorhynchus mykiss)
4259-15-8 2-ethylhexyl zinc dithiophosphate	
EC50	1 - 10 mg/l (daphnia) (OECD 202)
LC 50	1 - 10 mg/l (fish)
128-37-0 2,6-di-tert-butyl-p-cresol	
EC50 / 48h	>0.17 mg/l (Daphnia magna)
IC50 / 72h	>0.42 mg/l (Desmodesmus subspicatus)
LC 50 / 96 h	>0.57 mg/l (Danio rerio)
NOEC/NOEL	0.07 mg/l (Daphnia magna)
78-78-4 isopentane	
EC50 / 48h	2.3 mg/l (Daphnia magna)
LC 50 / 96 h	3.1 mg/l (Oncorhynchus mykiss)
12.2 Persistence and degradability	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	
Biodegradation	69 % (-) (28d)
128-37-0 2,6-di-tert-butyl-p-cresol	
Biodegradation	30 % (-) (MITI-Test II)
12.3 Bioaccumulative potential	
128-37-0 2,6-di-tert-butyl-p-cresol	
log POW	5.1 log POW (-)

12.4 Mobility in soil No further relevant information available.

Additional ecological information:
General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment Not applicable.

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dangerous waste in accordance with the Directive on the List of Waste Materials

Recommendation Waste must be disposed of while observing the local, official regulations.

European waste catalogue

Disposal / product + Disposal / contaminated packaging

15 01 10* packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA UN1950

14.2 UN proper shipping name

ADR	1950 AEROSOLS
IMDG	AEROSOLS
IATA	AEROSOLS, flammable

14.3 Transport hazard class(es)

ADR


Class 2 5F Gases.

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Label 2.1

IMDG, IATA

Class 2.1
Label 2.1

14.4 Packing group
ADR, IMDG, IATA Void

14.5 Environmental hazards:
Marine pollutant: No

14.6 Special precautions for user see Sections 6-8
 Warning: Gases.

Transport/Additional information:
ADR
Limited quantities (LQ) 1L
Transport category 2
Tunnel restriction code D

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 The following substance(s) in this product is (are) identified by CAS number either in countries not subject to the REACH regulation or in regulations not yet updated with the new naming convention for hydrocarbon solvents.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics: CAS 64742-47-8

European Directives:
SEVESO category (96/82/EC): 8

National regulations:
Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.
 H224 Extremely flammable liquid and vapour.
 H280 Contains gas under pressure; may explode if heated.
 H304 May be fatal if swallowed and enters airways.
 H318 Causes serious eye damage.
 H336 May cause drowsiness or dizziness.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H413 May cause long lasting harmful effects to aquatic life.

R12 Extremely flammable.

R41 Risk of serious damage to eyes.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R53 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.

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R67 Vapours may cause drowsiness and dizziness.**Abbreviations and acronyms:**

LC = Lethal Concentration

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

EC50 = half maximal effective concentration

vPvB: very persistent and very bioaccumulative

PBT: persistent, bioaccumulative, toxic

IOELV = indicative occupational exposure limit values

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

log POW = Octanol / water partition coefficient

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

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