

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

Printing date 20.10.2016

Version number 5

Revision: 20.10.2016

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**· **Trade name:** MotoMix· **Article number:** 0781 999 6..., 7007 871 0006**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** PC13 Fuels· **Application of the substance / the mixture** Hydrocarbon mixture for use as alkylate petrol.**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

ANDREAS STIHL AG &amp; Co.KG

Badstr. 115

D-71336 Waiblingen

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

Fax: +49(0)7151-26-8-3237

Email: info@stihl.com

**Informing department:**

Produktmanagement Forsttechnik

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

Fax: +49(0)7151-26-83237

**1.4 Emergency telephone number:**

Emergency control center for poisoning cases Berlin +49 (0) 30 30 686 790 (German and English)

Information for transport 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 Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Liq. 1

H224 Extremely flammable liquid and vapour.



GHS08 health hazard

Asp. Tox. 1

H304 May be fatal if swallowed and enters airways.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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GHS07

Skin Irrit. 2            H315 Causes skin irritation.  
 STOT SE 3            H336 May cause drowsiness or dizziness.

#### · 2.2 Label elements

##### · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

##### · Hazard pictograms



GHS02   GHS07   GHS08   GHS09

##### · Signal word Danger

##### · Hazard-determining components of labelling:

Naphtha (petroleum), full-range alkylate, butane-contg.  
 isopentane

2,2,4,6,6-pentamethylheptane

##### · Hazard statements

H224 Extremely flammable liquid and vapour.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

##### · Precautionary statements

P101            If medical advice is needed, have product container or label at hand.

P102            Keep out of reach of children.

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

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

P331            Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

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

P501            Dispose of contents/container in accordance with local/regional/national/international regulations.

##### · 2.3 Other hazards

##### · Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

#### · 3.2 Chemical characterisation: Mixtures

· **Description:** Special fuel for two-stroke engines and 4-MIX-engines.

· **Dangerous components:**

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CAS: 68527-27-5 EINECS: 271-267-0 Reg.nr.: 01-2119471477-29	Naphtha (petroleum), full-range alkylate, butane-contg. ⚠ Flam. Liq. 1, H224; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	50-100%
CAS: 78-78-4 EINECS: 201-142-8 Reg.nr.: 01-2119475602-38-0001	isopentane ⚠ Flam. Liq. 1, H224; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	10-<25%
CAS: 13475-82-6 EINECS: 236-757-0 Reg.nr.: 01-2119490725-29	2,2,4,6,6-pentamethylheptane ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; Aquatic Chronic 4, H413	10-<25%

**Additional information**

The product fulfils the Swedish standard SS 155461D (CH: SN 181163):

Benzene < 0.05 percentage by volume, n-hexane < 0.5 percentage by volume, aromatics < 0.5% percentage by volume, olefins < 0.5 percentage by volume.

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

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

• **General information** Instantly remove any clothing soiled by the product.

#### • After inhalation

Supply fresh air; consult doctor in case of symptoms.

In case of unconsciousness place patient stably in side position for transportation.

#### • After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

#### • After eye contact

Keep eye lids open and rinse them amply with clean running water for at least 15 minutes.

In case of persistent symptoms consult doctor.

#### • After swallowing

Do not induce vomiting in order to prevent an invasion into the lungs.

Call a doctor 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.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

#### • Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fire with alcohol-resistant foam.

• **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

• **5.2 Special hazards arising from the substance or mixture** Can form explosive gas-air mixtures.

#### 5.3 Advice for firefighters

#### • Protective equipment:

Disposal work has to be carried out with breathing protection and explosion-proof equipment.

• **Additional information** Use water to keep fire exposed containers cool.

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#### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Keep away from ignition sources  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or water bodies.  
Prevent material from reaching sewage system, holes and cellars.  
Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).  
Dispose of contaminated material as waste according to item 13.  
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 information on disposal.

#### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Store in cool, dry place in tightly closed containers.  
Keep away from heat and direct sunlight.  
Carry out filling operations only at sites with extractors available.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle container with care.
- **Information about protection against explosions and fires:**  
Flammable mixtures may be formed in empty containers.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store in cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed containers.  
Protect from heat and direct sunlight.
- **Storage class 3**
- **7.3 Specific end use(s)** No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**

- **Components with limit values that require monitoring at the workplace:**

##### 78-78-4 isopentane

WEL Long-term value: 1800 mg/m<sup>3</sup>, 600 ppm

- **DNELs**

##### 68527-27-5 Naphtha (petroleum), full-range alkylate, butane-contg.

Inhalative	Worker - Long term - Local effects	840 mg/m <sup>3</sup>
	Consumer - Long term - Local effects	180 mg/m <sup>3</sup>

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	Worker - Acute - Local effects	1100 mg/m <sup>3</sup>
	Worker - Acute - Systemic effects	1300 mg/m <sup>3</sup>
	Consumer - Acute - Local effects	640 mg/m <sup>3</sup>
	Consumer - Acute - Systemic effects	1200 mg/m <sup>3</sup>
<b>78-78-4 isopentane</b>		
Oral	Consumer - Long term - Systemic effects	214 mg/kg bw
Dermal	Worker - Long term - Systemic effects	432 mg/kg bw/day
	General population - long term - systemic effects	214 mg/kg bw/day
Inhalative	Worker - Long term - Systemic effects	3000 mg/m <sup>3</sup>
	Consumer - Long term - Systemic effects	643 mg/m <sup>3</sup>
	Worker - Acute - Local effects	214 mg/m <sup>3</sup>

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

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Filter AX

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

· **Protection of hands:**

Protective gloves and protective skin cream.

After use of gloves apply skin-cleaning agents and skin cosmetics.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed safety glasses.

· **Body protection:** Protective work clothing.

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Fluid

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<b>Colour:</b>	Green
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	<35 °C
· <b>Flash point:</b>	-56 °C
· <b>Ignition temperature:</b>	420 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-inflammability:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
· <b>Critical values for explosion:</b>	
<b>Lower:</b>	1.3 Vol %
<b>Upper:</b>	7.6 Vol %
· <b>Vapour pressure at 20 °C:</b>	573 hPa
· <b>Density at 20 °C</b>	0.7 g/cm <sup>3</sup>
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>dynamic:</b>	Not determined.
<b>kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	
<b>VOC EU</b>	100 %
· <b>VOC (EC)</b>	100 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **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:**  
None in case of intended use and storage in compliance with instructions.

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#### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

##### 78-78-4 isopentane

Oral	LD50	>2000 mg/kg (Rat) (OECD TG 401)
Inhalative	LC50/4 h	>25.3 mg/l (Rat) (OECD TG 403)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**  
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**  
May be fatal if swallowed and enters airways.

#### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

##### 78-78-4 isopentane

EC50 (48 h)	2.3 mg/l (Daphnia magna)
LC50 (96 h)	3.1 mg/l (Reg)

- **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.
- **Additional ecological information:**
- **General notes:**  
Allocation to ID No. 820 petrol, not identified as carcinogenic (R45).  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.  
Do not allow product to reach ground water, water bodies or sewage system.  
Danger to drinking water if even small quantities leak into soil.
- **12.5 Results of PBT and vPvB assessment**
- **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**

- **Recommendation**

The product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility.

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Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

The waste code numbers mentioned are recommendations based on the probable use of the product.

<b>· European waste catalogue</b>	
13 07 02*	petrol
15 01 10*	packaging containing residues of or contaminated by hazardous substances

**· Uncleaned packagings:****· Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.

### SECTION 14: Transport information

**· 14.1 UN-Number****· ADR,RID,ADN, IMDG, IATA** UN1203**· 14.2 UN proper shipping name**

**· ADR/RID/ADN** 1203 MOTOR SPIRIT, ENVIRONMENTALLY HAZARDOUS

**· IMDG, IATA** MOTOR SPIRIT

**· 14.3 Transport hazard class(es)****· ADR/RID/ADN**

**· Class** 3 Flammable liquids.

**· Label** 3

**· IMDG, IATA**

**· Class** 3 Flammable liquids.

**· Label** 3

**· 14.4 Packing group****· ADR,RID,ADN, IMDG, IATA** II**· 14.5 Environmental hazards:****· Special marking (ADR/RID/ADN):** Symbol (fish and tree)**· 14.6 Special precautions for user**

Warning: Flammable liquids.

**· Kemler Number:**

33

**· EMS Number:**

F-E,S-E

**· Stowage Category**

E

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

Not applicable.

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#### · Transport/Additional information:

##### · ADR/RID/ADN

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· Transport category

2

· Tunnel restriction code

D/E

· Remarks:

The Packing Group II does not derive from the physical data of preparation, but on the basis of the allocation to UN 1203 in conjunction with the special provisions 243 and 534.

##### · IMDG

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1203 MOTOR SPIRIT, 3, II,  
ENVIRONMENTALLY HAZARDOUS

### SECTION 15: Regulatory information

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Seveso category

P5a FLAMMABLE LIQUIDS

E2 Hazardous to the Aquatic Environment

· Qualifying quantity (tonnes) for the application of lower-tier requirements 10 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 50 t

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H224 Extremely flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

· Department issuing data specification sheet:

The safety data sheets were drawn up in cooperation with the Umweltkanzlei Dr.Rhein Beratungs- und Prüfgesellschaft mbH, Phone: +49 5066 900990.

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**· Abbreviations and acronyms:**

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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 1: Flammable liquids – Category 1

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

**· \* Data compared to the previous version altered.**

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