

**Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006  
(REACH)

**TOYOTOMI**  
Premium heating liquids

**Trade name :** Power  
**Revision date :** 01.08.2022  
**Print date :** 01-08-2022

**Version (Revision) :** 1.0.2 (1.0.0)

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

**1.1 Product identifier**

Power (Power)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2 % Aromatics ; INDEX No. : 649-422-00-2 ; REACH No. : 01-2119456620-43

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

Fuel for mobile space heaters. Consumer uses: Private households (= general public = consumers)

**Uses advised against**

This product should not be used for purposes other than the applications referred to above.

**1.3 Details of the supplier of the safety data sheet**

**Supplier (manufacturer/importer/only representative/downstream user/distributor)**

Toyotomi Europe Sales B.V.

**Street :** Huygensweg 1

**Postal code/city :** 5466 AN Veghel

**Telephone :** +31 (0)413-820295

**Telefax :**

**Information contact :** Email: info@toyotomi.eu

**1.4 Emergency telephone number**

+32 (0)14 58 45 45 (BIG)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.

**2.2 Label elements**

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms**



Health hazard (GHS08)

**Signal word**

Danger

**Hazard components for labelling**

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2 % Aromatics INDEX No. : 649-422-00-2

**Hazard statements**

H304 May be fatal if swallowed and enters airways.

**Precautionary statements**

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

P102 Keep out of reach of children.

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

P331 Do NOT induce vomiting.

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P405 Store locked up.  
P501 Dispose of contents/container in accordance with local / national regulations.  
**Supplemental Hazard information (EU)**  
EUH066 Repeated exposure may cause skin dryness or cracking.

### 2.3 Other hazards

This material can accumulate static charge by flow or agitation and can be ignited by static discharge. Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. Inhalation of dust may cause irritation of the respiratory system. Repeated exposure may cause skin dryness or cracking.

### 2.4 Additional information

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

**Substance name :** Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2 % Aromatics  
**INDEX No. :** 649-422-00-2  
**REACH No. :** 01-2119456620-43  
**Purity :** 100 % [mass]

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice.

#### Following inhalation

Remove casualty to fresh air and keep warm and at rest. First aider: Pay attention to self-protection! Use suitable breathing apparatus. If breathing is irregular or stopped, administer artificial respiration. Call a physician in any case!

#### In case of skin contact

Wash immediately with: Water and soap Change contaminated, saturated clothing. Wash contaminated clothing prior to re-use.

#### After eye contact

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

#### After ingestion

Call a physician in any case! Do NOT induce vomiting.

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

Repeated exposure may cause skin dryness or cracking.

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

Harmful: may cause lung damage if swallowed. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water mist Foam Extinguishing powder Carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

Full water jet

### 5.2 Special hazards arising from the substance or mixture

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**Hazardous combustion products**

Do not breathe gas/fumes/vapour/spray. Carbon monoxide Carbon dioxide (CO<sub>2</sub>)

**5.3 Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Protective clothing.

**5.4 Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

**Protective equipment**

Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**Emergency procedures**

If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

**6.2 Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

**6.3 Methods and material for containment and cleaning up**

**For containment**

Collect in closed and suitable containers for disposal.

**For cleaning up**

Suitable material for taking up: Sand Absorbing material, organic

**6.4 Reference to other sections**

See protective measures under point 7 and 8. Disposal: see section 13

**SECTION 7: Handling and storage**



**7.1 Precautions for safe handling**

Avoid contact with skin, eyes and clothes. Special danger of slipping by leaking/spilling product. This material can accumulate static charge by flow or agitation and can be ignited by static discharge.

**Protective measures**

**Measures to prevent fire**

Vapours are heavier than air, spread along floors and form explosive mixtures with air. Provide earthing of containers, equipment, pumps and ventilation facilities.

**Measures to prevent aerosol and dust generation**

During filling, metering and sampling should be used if possible: Closed devices

**7.2 Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions**

Keep container tightly closed in a cool, well-ventilated place. Suitable container/equipment material: Stainless steel Polyethylene (PE) Unsuitable container/equipment material: Butyl caoutchouc (butyl rubber)

**Hints on joint storage**

Keep away from

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Strong oxidizers

**7.3 Specific end use(s)**

Fuel for mobile space heaters.

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

**8.1 Control parameters**

**Occupational exposure limit values**

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

Limit value type (country of origin) : RCP - TWA ( GLOB )

Parameter : Vapour. Total Hydrocarbons

Limit value : 1200 mg/m<sup>3</sup> / 165 ppm

Remark : Source: Supplier

Version : 08-10-2018

**8.2 Exposure controls**

**Appropriate engineering controls**

Use only in well-ventilated areas. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

**Personal protection equipment**

**Eye/face protection**



**Suitable eye protection**

Eye glasses with side protection

**Skin protection**

**Hand protection**



**Suitable gloves type :** The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

**Suitable material :** NBR (Nitrile rubber)

**Required properties :** liquid-tight.

**Breakthrough time (maximum wearing time) :** >480min

**Thickness of the glove material :** 0,38mm

**Remark :** DIN-/EN-Norms DIN EN 420 EN ISO 374

**Body protection**

Protective clothing is not necessary for normal use.

**Remark :** Immediately remove any contaminated clothing, shoes or stockings. Wash contaminated clothing prior to re-use.

**Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**Suitable respiratory protection apparatus**

Full-/half-/quarter-face masks (DIN EN 136/140) Particle filter device (DIN EN 143). Filtering Half-face mask (DIN EN 149) Filter type: A

**General information**

Wash hands before breaks and after work.

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### Environmental exposure controls

See section 7. No additional measures necessary.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** Liquid  
**Colour** Nach nationalem Steuerrecht  
**Odour** characteristic

#### Safety characteristics

<b>Melting point/freezing point :</b>		<i>Not technically feasible</i>
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	175 - 280 °C
<b>Decomposition temperature :</b>		<i>No data available</i>
<b>Freezing point :</b>		<-20 °C
<b>Flash point :</b>		>65 °C
<b>Auto-ignition temperature :</b>		>200 °C
<b>Lower explosion limit :</b>		0,6 Vol-%
<b>Upper explosion limit :</b>		7 Vol-%
<b>Vapour pressure :</b>	( 20 °C )	0,2 hPa
<b>Density :</b>	( 15 °C )	0,79-0,83 g/cm <sup>3</sup>
<b>Water solubility :</b>	( 20 °C )	<i>Negligible</i>
<b>pH :</b>		<i>Not technically feasible</i>
<b>log P O/W :</b>		> 3
<b>Viscosity :</b>	( 40 °C )	<2 cSt
<b>Odour threshold :</b>		<i>No data available</i>
<b>Relative vapour density :</b>	( 20 °C )	>3 (air = 1)
<b>Flammable solids :</b>		Not technically feasible
<b>Flammable gases :</b>		Not technically feasible
<b>Oxidising liquids :</b>		Not oxidising.
<b>Explosive properties :</b>		Not applicable.

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

### 10.2 Chemical stability

Stable under normal conditions of use

### 10.3 Possibility of hazardous reactions

Stable under normal conditions of use

### 10.4 Conditions to avoid

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment). Keep away from sources of ignition - No smoking.

### 10.5 Incompatible materials

Strong oxidizers

### 10.6 Hazardous decomposition products

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Does not decompose when used for intended uses. at room temperature

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Parameter : LD50  
Exposure route : Oral  
Species : Rat  
Effective dose : > 5000 mg/kg  
Method : OECD 401

##### Acute dermal toxicity

Parameter : LD50  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : > 3160 mg/kg  
Method : OECD 402

##### Acute inhalation toxicity

Parameter : LC50  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 5000 mg/m<sup>3</sup>  
Exposure time : 8 h  
Method : OECD 403

#### Corrosion

##### Skin corrosion/irritation

slightly irritant but not relevant for classification.

##### Serious eye damage/eye irritation

slightly irritant

##### Irritation to respiratory tract

Not irritating to respiratory system.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

##### Carcinogenicity

This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.

##### Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

##### Reproductive toxicity

This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

### 11.3 Symptoms related to the physical, chemical and toxicological characteristics

#### In case of ingestion

May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1 Toxicity

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### **Aquatic toxicity**

Not expected to be harmful to aquatic organisms Not expected to demonstrate chronic toxicity to aquatic organisms.

#### **Acute (short-term) fish toxicity**

Parameter : LLO  
Species : Oncorhynchus mykiss (Rainbow trout)  
Evaluation parameter : Acute (short-term) fish toxicity  
Effective dose : 1000 mg/l  
Exposure time : 96 h

#### **Acute (short-term) toxicity to crustacea**

Parameter : ELO  
Species : Daphnia magna (Big water flea)  
Evaluation parameter : Acute (short-term) daphnia toxicity  
Effective dose : 1000 mg/l  
Exposure time : 48 h

#### **Acute (short-term) toxicity to aquatic algae and cyanobacteria**

Parameter : ELO  
Species : Pseudokirchneriella subcapitata  
Evaluation parameter : Acute (short-term) algae toxicity  
Effective dose : 1000 mg/l  
Exposure time : 72 h

### **12.2 Persistence and degradability**

Biodegradable.

#### **Abiotic degradation**

##### **Abiotic degradation (Air)**

Expected to degrade rapidly in air.

##### **Abiotic degradation (Water)**

###### **Hydrolysis**

Transformation due to hydrolysis not expected to be significant.

###### **Photo-chemical elimination**

Transformation due to photolysis not expected to be significant.

#### **Biodegradation**

Parameter : Biodegradation  
Inoculum : Biodegradation  
Effective dose : 69 %  
Exposure time : 28 day  
Evaluation : Biodegradable.

### **12.3 Bioaccumulative potential**

Parameter : Partition coefficient n-octanol /water (log P O/W)  
Concentration : > 4

No information available.

### **12.4 Mobility in soil**

No information available.

### **12.5 Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

### **12.6 Other adverse effects**

None

### **12.7 Additional ecotoxicological information**

None

## **SECTION 13: Disposal considerations**

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### 13.1 Waste treatment methods

Delivery to an approved waste disposal company. Handle contaminated packages in the same way as the substance itself.

#### Product/Packaging disposal

##### Waste codes/waste designations according to EWC/AVV

Waste code : 15 01 02\* plastic packaging

Waste code : 15 01 10\* packaging containing residues of or contaminated by dangerous substances

Waste code : 13 07 03\* other fuels (including mixtures)

## SECTION 14: Transport information

### 14.1 UN number

No dangerous good in sense of these transport regulations.

### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

### 14.6 Special precautions for user

None

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

not applicable

## SECTION 15: Regulatory information

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

#### EU legislation

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

#### Authorisations and/or restrictions on use

##### Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

#### Other regulations (EU)

##### Directive 2010/75/EU on industrial emissions

This chemical is a VOC according to 2010/75/EC.

##### Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

This chemical is a VOC according to 2004/42/EC.

#### National regulations

##### Water hazard class (WGK)

slightly hazardous to water (WGK 1)

### 15.2 Chemical safety assessment

For this substance a chemical safety assessment has been carried out

## SECTION 16: Other information

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**16.1 Indication of changes**

7.2 / 8.2 / 15.1 / 16.4

**16.2 Abbreviations and acronyms**

a.i. = Active ingredient  
ACGIH = American Conference of Governmental Industrial Hygienists (US)  
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road  
AFFF = Aqueous Film Forming Foam  
AISE = International Association for Soaps, Detergents and Maintenance Products (joint project of AISE and CEFIC)  
AOAC = AOAC International (formerly Association of Official Analytical Chemists)  
aq. = Aqueous  
ASTM = American Society of Testing and Materials (US)  
atm = Atmosphere(s)  
B.V. = Beperkt Vennootschap (Limited)  
BCF = Bioconcentration Factor  
bp = Boiling point at stated pressure  
bw = Body weight  
ca = (Circa) about  
CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)  
CEFIC = European Chemical Industry Council (established 1972)  
CIPAC = Collaborative International Pesticides Analytical Council  
CLP = REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
Conc = Concentration  
cP = CentiPoise  
cSt = Centistokes  
d = Day(s)  
DIN = Deutsches Institut für Normung e.V.  
DNEL = Derived No-Effect Level  
DT50 = Time for 50% loss; half-life  
EbC50 = Median effective concentration (biomass, e.g. of algae)  
EC = European Community; European Commission  
EC50 = Median effective concentration  
EINECS = European Inventory of Existing Commercial Chemical Substances (EU, outdated, now replaced by EC Number)  
ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)  
ErC50 = Median effective concentration (growth rate, e.g. of algae)  
EU = European Union  
EWC = European Waste Catalogue  
FAO = Food and Agriculture Organization (United Nations)  
GIFAP = Groupement International des Associations Nationales de Fabricants de Produits Agrochimiques (now CropLife International)  
h = Hour(s)  
hPa = HectoPascal (unit of pressure)  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IC50 = Concentration that produces 50% inhibition  
IMDG Code = International Maritime Dangerous Goods Code  
IMO = International Maritime Organization  
ISO = International Organization for Standardization  
IUCLID = International Uniform Chemical Information Database  
IUPAC = International Union of Pure and Applied Chemistry  
kg = Kilogram  
Kow = Distribution coefficient between n-octanol and water  
kPa = KiloPascal (unit of pressure)  
LC50 = Concentration required to kill 50% of test organisms  
LD50 = Dose required to kill 50% of test organisms  
LEL = Lower Explosive Limit/Lower Explosion Limit  
LOAEL = Lowest observed adverse effect level  
mg = Milligram

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min = Minute(s)  
ml = Milliliter  
mmHg = Pressure equivalent to 1 mm of mercury (133.3 Pa)  
mp = Melting point  
MRL = Maximum Residue Limit  
MSDS = Material Safety Data Sheet  
n.o.s. = Not Otherwise Specified  
NIOSH = National Institute for Occupational Safety and Health (US)  
NOAEL = No Observed Adverse Effect Level  
NOEC = No observed effect concentration  
NOEL = No Observable Effect Level  
NOx = Oxides of Nitrogen  
OECD = Organization for Economic Cooperation and Development  
OEL = Occupational Exposure Limits  
Pa = Pascal (unit of pressure)  
PBT = Persistent, Bioaccumulative or Toxic  
pH = -log<sub>10</sub> hydrogen ion concentration  
pKa = -log<sub>10</sub> acid dissociation constant  
PNEC = Previsible Non Effect Concentration  
POPs = Persistent Organic Pollutants  
ppb = Parts per billion  
PPE = Personal Protection Equipment  
ppm = Parts per million  
ppt = Parts per trillion  
PVC = Polyvinyl Chloride  
QSAR = Quantitative Structure-Activity Relationship  
REACH = Registration, Evaluation and Authorization of Chemicals (EU, see NCP)  
SI = International System of Units  
STEL = Short-Term Exposure Limit  
tech. = Technical grade  
TSCA = Toxic Substances Control Act (US)  
TWA = Time-Weighted Average  
vPvB = Very Persistent and Very Bioaccumulative  
WHO = World Health Organization = OMS  
y = Year(s)

**16.3 Key literature references and sources for data**

None

**16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

Based on test data .

**16.4 Relevant H- and EUH-phrases (Number and full text)**

None

**16.5 Training advice**

None

**16.6 Additional information**

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.