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

1.1 Product identifier

Trade name/designation Pantasol light Citro im Gebinde
Unique Formula Identifier VTJM-W6T1-E100-7W1C

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

Relevant identified uses

Product categories [PC]
PC35 Washing and cleaning products (including solvent based products)

1.3 Details of the supplier of the safety data sheet

Supplier
Pantera Product GmbH
Simon-Bolivar-Straße 29
DE-28197 Bremen
Telephone: +49 (0)421 - 520 80 780
Telefax: +49 (0)421 - 520 80 789
E-mail: info@pnateraproduct.de
www.panteraproduct.de

1.4 Emergency telephone number

Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein, Universität Göttingen (GIZ-Nord), Telefon 0551 / 19 240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

health hazards
Asp. Tox. 1

hazard statements for health hazards
H304 May be fatal if swallowed and enters airways.

health hazards
Skin Irrit. 2

hazard statements for health hazards
H315 Causes skin irritation.

health hazards
STOT SE 3

hazard statements for health hazards
H336 May cause drowsiness or dizziness.

Physical hazards
Flam. Liq. 2

hazard statements for physical hazards
H225 Highly flammable liquid and vapour.

Environmental hazards
Aquatic Chronic 2

hazard statements for environmental hazards
H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

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

Hazard components for labelling

Enthält: Kohlenwasserstoffe, C7, n-Alkane, iso-Alkane, zyklisch
Contains: Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Hazard pictograms

GHS02 GHS07 GHS08 GHS09

Signal word

Danger

Hazard statements

Hazard statements for physical hazards

H225 Highly flammable liquid and vapour.

hazard statements for health hazards

H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243 Take precautionary measures against static discharge.
P273 Avoid release to the environment.
P280 Wear eye/face protection.

Response:

P301+ P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/.
P331 Do not induce vomiting.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

2.3 Other hazards

Adverse physicochemical effects

This material can accumulate static charge by flow or agitation and can be ignited by static discharge. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition / information on ingredients

Additional information

Full text of H- and EUH-phrases: see section 16.

3.1/3.2 Substances/Mixtures

Hazardous ingredients

n-hexane <2,5 %

CAS 110-54-3
EC 203-777-6
INDEX 601-037-00-0
Flam. Liq. 2, H225 / Repr. 2, H361f / Asp. Tox. 1, H304 / STOT RE 2, H373 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Chronic 2, H411

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 50 - 100 %

CAS 64742-49-0
EC 927-510-4
Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Chronic 2, H411 / Flam. Liq. 2, H225

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Change contaminated, saturated clothing. When in doubt or if symptoms are observed, get medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash immediately with:
Water and soap
In case of skin irritation, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion

Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

If decomposition products are inhaled the following symptoms can occur:

Dizziness
Respiratory complaints
Dyspnoea
Cough

Symptoms

Headache
Gastrointestinal complaints
Nausea

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor

Treat symptomatically.

SECTION 5: Firefighting measures

Additional information

Burning produces heavy smoke. Do not inhale explosion and combustion gases. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.1 Extinguishing media

Suitable extinguishing media

Foam
Carbon dioxide (CO2)
Extinguishing powder
Water spray jet

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon dioxide (CO2)
Carbon monoxide

5.3 Advice for firefighters

Special protective equipment for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety.

Personal precautions

Use personal protection equipment.

Protective equipment

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

For emergency responders

Personal protection equipment

Use appropriate respiratory protection.

6.2 Environmental precautions

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

Suitable material for taking up:

Sand
Kieselguhr
Earth
Universal binder

6.4 Reference to other sections
Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Advices on safe handling
Wear personal protection equipment (refer to section 8). Do not spray on naked flames or any incandescent material.
Avoid:
Inhalation of vapours or spray/mists
Skin contact
Eye contact

Measures to prevent fire
Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Use only antistatically equipped (spark-free) tools. Vapours can form explosive mixtures with air. Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Environmental precautions
See section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep/Store only in original container. Keep container tightly closed. Ensure adequate ventilation of the storage area.

Hints on joint storage

Materials to avoid
Keep away from:
Food and feedingstuffs
Do not store together with:
Combustible substance

Storage class
Flammable liquids

Further information on storage conditions
Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)
No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	Substance name	LTV	STV	remark
110-54-3	n-Hexane	72 mg/m³ 20 ppm		Bold-type: Indicative Occupational Exposure Limit Value (IOELV) ~
				European Union

LTV = long-term occupational exposure limit value
STV = short-term occupational exposure limit value
source: GESTIS International Limit Values (http://limitvalue.ifa.dguv.de/)
Monitoring and observation processes: GESTIS Analytical Methods (http://amcaw.ifa.dguv.de/)

Exposure limits at intended use

Occupational exposure limit values

Limit value type (country of origin):
AGW (DE)
Substance name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
EC No. 927-510-4
long-term occupational exposure limit value 700 mg/m³
Overflow factor 2

Limit value type (country of origin):
AGW (DE)
Substance name n-Hexan
CAS No. 110-54-3
long-term occupational exposure limit value 180 mg/m³
Overflow factor 8

DNEL-/PNEC-values

DNEL Consumer

Substance name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
type
Long-term – inhalation, systemic effects
Value 447 mg/m³
Substance name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
type
Long-term - dermal, systemic effects
Value 149 mg/kg
Substance name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
type
Long-term - oral, systemic effects
Value 149 mg/kg

DNEL worker

Substance name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
type
Long-term – inhalation, systemic effects
Value 2085 mg/m³
Substance name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
type
Long-term - dermal, systemic effects
Value 300 mg/kg

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Suitable eye protection:
Tightly sealed safety glasses.

Skin protection

Suitable material:
NBR (Nitrile rubber)
PVA (Polyvinyl alcohol)

Breakthrough time: >480 min

Thickness of the glove material >0,55 mm

remark
Breakthrough times and swelling properties of the material must be taken into consideration. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection:

Required properties:
antistatic
flame-resistant

Respiratory protection

Respiratory protection necessary at:
exceeding exposure limit values

Suitable respiratory protection apparatus:
Combination filtering device
Full-/half-/quarter-face masks (DIN EN 136/140)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state
liquid

Colour
colourless

Odour
characteristic
like:
Gasoline

	parameter	Method - source - remark
Melting point/freezing point		not determined
Boiling point or initial boiling point and boiling range	83 - 108 °C	ISO 3405
flammability		not determined
Upper explosion limit	8 Vol-%	
lower explosion limit	0,8 Vol-%	
Flash point (°C)	-16 °C	EN ISO 13736
Auto-ignition temperature		not determined
Decomposition temperature		not determined

		parameter	Method - source - remark
pH			not determined
Kinematic viscosity			not determined
Water solubility			not determined
Soluble (g/L) in			not determined
Fat solubility			not determined
Partition coefficient: n-octanol/water			not determined
Vapour pressure	<70 hPa	Temperature 20 °C	
Density and/or relative density	695 kg/m³	Temperature 15 °C	Density
Auto-ignition temperature	>230 °C		
Relative vapour density			not determined
particle characteristics			not determined

9.2 Other information

Solvent content

Value 100 %

remark
695 g/l

Evaporation rate 3 kg/s*m2

Method
DIN 53170

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid
In case of exceeding the storage temperature:
Ignition hazard

10.5 Incompatible materials
No information available.

10.6 Hazardous decomposition products
Thermal decomposition can lead to the escape of irritating gases and vapours.
aldehydes
Carbon dioxide
Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Aspiration hazard

Assessment/classification
May be fatal if swallowed and enters airways.

Acute toxicity

Acute dermal toxicity

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Acute dermal toxicity >2920 mg/kg

Effective dose
LD50:

Species:
Rat

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

Acute inhalation toxicity (vapour)

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Acute inhalation toxicity (vapour) >23300 mg/m³

Effective dose
LC50:

Exposure time 4 h

Species:
Rat

Method
OECD 403

Acute oral toxicity

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Acute oral toxicity >5840 mg/kg

Effective dose
LD50:

Species:
Rat

Serious eye damage/irritation

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

skin corrosion/irritation

Assessment/classification
Irritating to skin.

Respiratory or skin sensitisation

Sensitisation to the respiratory tract

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

Germ cell mutagenicity

Assessment/classification
No classification is proposed, based on conclusive negative data.

Carcinogenicity

Result / evaluation
negative

Reproductive toxicity

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

STOT-single exposure

STOT SE 3

Narcotic effects

Assessment/classification
May cause drowsiness or dizziness.

STOT-repeated exposure

STOT RE 1 and 2

Other information
not determined

11.2 Information on other hazards
No information available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
Acute (short-term) fish toxicity >13,4 mg/L

Effective dose
LL50:
Test duration 96 h

species
Oncorhynchus mykiss (Rainbow trout)

Method
OECD 203

Acute (short-term) toxicity to crustacea

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
Acute (short-term) toxicity to crustacea 3 mg/L

Effective dose
EL50:
Test duration 48 h

species
Daphnia magna (Big water flea)

Method
OECD 202

Chronic (long-term) toxicity to aquatic invertebrate

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Chronic (long-term) toxicity to aquatic invertebrate 1 mg/L

Effective dose
NOELR:

Test duration 21 d

species
Daphnia magna (Big water flea)

Method
OECD 211

Chronic (long-term) fish toxicity

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Chronic (long-term) fish toxicity 1,53 mg/L

Effective dose
NOELR:

Test duration 28 d

species
Oncorhynchus mykiss (Rainbow trout)

Acute (short-term) toxicity to algae and cyanobacteria

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Acute (short-term) toxicity to algae and cyanobacteria 10 - 30 mg/L

Effective dose
ErC50:

Test duration 72 h

species
Pseudokirchneriella subcapitata

Method
OECD 201

12.2 Persistence and degradability

Abiotic degradation

remark
not determined

Biodegradation

ingredient Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Degradation rate 98 %

Method
OECD 301F

remark
The solvent is biodegradable.

12.3 Bioaccumulative potential

Assessment/classification
not determined

12.4 Mobility in soil

Assessment/classification
not determined

12.5 Results of PBT and vPvB assessment

not determined

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste code product 070104
hazardous waste Yes.

Waste name
other organic solvents, washing liquids and mother liquors

After intended use

Appropriate disposal / Product
Waste disposal according to official state regulations.

Waste code packaging 150110
hazardous waste Yes.

Waste name
packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	3295	3295	3295
14.2 Proper Shipping Name	HYDROCARBONS, LIQUID, N.O.S. (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)	HYDROCARBONS, LIQUID, N.O.S. (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)	Hydrocarbons, liquid, n.o.s. (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
14.3 Class(es)	3	3	3
14.4 Packing group	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.
14.6 Special precautions for user	not applicable	not applicable	not applicable
14.7 Maritime transport in bulk according to IMO instruments	not applicable	not applicable	not applicable

Additional information - Land transport (ADR/RID)

Hazard label(s)	3
Classification code	F1
Special Provisions	640D
Limited quantity (LQ)	1 L
Hazard identification number (Kemler No.)	33
tunnel restriction code	D/E
transport category	2
remark	F-E, S-D

Additional information - Sea transport (IMDG)

Marine pollutant	Yes.

Additional information - Air transport (ICAO-TI / IATA-DGR)

Limited quantity (LQ)	1

SECTION 15: Regulatory information

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

EU legislation

Other regulations (EU)

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

Volatile organic compounds (VOC) content in percent by weight: 100 weight-%

VOC-value 695 g/L

To follow:

Regulation (EC) No. 648/2004 (Detergents regulation)

>= 30% aliphatic hydrocarbons

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Relevant R-, H- and EUH-phrases (Number and full text)

H225 Highly 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.

H361f Suspected of damaging fertility.

H373 May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Key literature references and sources for data

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.