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

Printing date 19.12.2016 Version number 8 Revision: 19.12.2016

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

· 1.1 Product identifier

· Trade name: **TM49 Terpentine / Terpentine**

· Article number: 301116
· EC number:
919-446-0
· Index number:
649-330-00-2
· Registration number 01-2119458049-33
· 1.2 Relevant identified uses of the substance or mixture and uses advised against
· Sector of Use
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· Application of the substance / the mixture Thinner, Diluent

· 1.3 Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
Inter-Che-M B.V.
Platinawerf 22-26, 6641TL Beuningen
Postbus 9, 6640AA Beuningen
Holland
T +31 (0)24 678 02 20
F +31(0)24 678 02 05
E verkoop@interchem.nl
W www.interchem.nl

· Further information obtainable from: Product safety department: p.i.@interchem.nl
· 1.4 Emergency telephone number:
National Poisoning Information Centre - Bilthoven - The Netherlands
T +31 (0)30 274 88 88
Restricted to physicians for information on ingredients.

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SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

GHS08 health hazard

STOT RE 1 H372 Causes damage to the central nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.

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.

GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

· 2.2 Label elements
· Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP regulation.

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· Hazard pictograms

GHS02 GHS07 GHS08 GHS09

· Signal word Danger

· Hazard-determining components of labelling:
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
· Hazard statements
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H372 Causes damage to the central nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
· Precautionary statements

P261	Avoid breathing mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:
EUH066 Repeated exposure may cause skin dryness or cracking.
Restricted to professional users.
· 2.3 Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances
· CAS No. Description
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
· Identification number(s)
· EC number: 919-446-0
· Index number: 649-330-00-2

SECTION 4: First aid measures

· 4.1 Description of first aid measures
· General information:
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.
Remove contactlenses.
· After swallowing:
Do not induce vomiting; call for medical help immediately.
Rinse mouth.
· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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· 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: CO2 or powder. Fight larger fights with alcohol resistant foam.
· For safety reasons unsuitable extinguishing agents: Water with full jet
· 5.2 Special hazards arising from the substance or mixture Carbon monoxide (CO)
· 5.3 Advice for firefighters
· Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
· 6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· 6.3 Methods and material for containment and cleaning up:
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 Open and handle receptacle with care.
· Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities
· Storage:
· Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
· Information about storage in one common storage facility: Store away from oxidising agents.
· Further information about storage conditions: Keep container tightly sealed.
· Storage class: 3
· 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters
· Ingredients with limit values that require monitoring at the workplace: Not required.
· DNELs

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Oral	Long-term exposure - systemic effects	26 mg/kg bw/day (con)
Dermal	Long-term exposure - systemic effects	26 mg/kg bw/day (con)
		44 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	71 mg/m3 (con)
		330 mg/m3 (worker)

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

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· 8.2 Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
· Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A.
· Protection of hands:
The glove material has to be impermeable and resistant to the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· Material of gloves
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· Penetration time of glove material
Thickness of the gloves ≥ 0.38 mm (hydrocarbons, C9-C12, n-alkanes, iso-alkanes, cyclic, aromates (2-25%))
Value for the permeation: Level ≥ 480 min (hydrocarbons, C9-C12, n-alkanes, iso-alkanes, cyclic, aromates (2-25%))
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 goggles

· Body protection: Solvent resistant protective clothing

SECTION 9: Physical and chemical properties

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

Form:	Fluid
Colour:	Colourless to yellow
· Odour:	Turpentine-like
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	140-200 °C
· Flash point:	>39 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	200 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	0,6 Vol %
Upper:	7 Vol %
· Vapour pressure:	Not determined.
· Density at 20 °C:	0,79 g/cm³

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· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Slightly soluble. Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	1-2,5 mm2/s
· Solvent content:	
Organic solvents:	100,0 %
VOC (EC)	100,00 %
· 9.2 Other information	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 Reacts with strong oxidizing agents.
· 10.4 Conditions to avoid High temperatures.
· 10.5 Incompatible materials: Oxidizing agents.
· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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 relevant for classification:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Oral	LD50	>15000 mg/kg (rat) OESO 401
Dermal	LD50	3400 mg/kg (rat) OESO 402
Inhalative	LC50/4h	13,1 mg/l (rat) OESO 403

· Primary irritant effect:
· Skin corrosion/irritation Based on available data, the classification criteria are not met.
· 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 (carcinogenity, 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
Causes damage to the central nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.
· Aspiration hazard
May be fatal if swallowed and enters airways.

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SECTION 12: Ecological information

· 12.1 Toxicity
· Aquatic toxicity:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
EL50/48h 10-22 mg/l (daphnia magna)
NOEC/21d 0,097 mg/l (daphnia magna)
LOEC/21d 0,203 mg/l (daphnia magna)
NOELR/72h 1 mg/l (pseudokirchneriella subcapitata)
EL50/72h 4,6-10 mg/l (pseudokirchneriella subcapitata)
LL50/96h 10-30 mg/l (oncorhynchus mykiss)

· 12.2 Persistence and degradability No further relevant information available.
· Degree of elimination:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
BOD/28d 74,7 % (/)

· 12.3 Bioaccumulative potential No further relevant information available.
· 12.4 Mobility in soil No further relevant information available.
· Ecotoxical effects:
· Remark: Toxic for fish
· Additional ecological information:
· General notes:
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· 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
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
· European waste catalogue
07 01 04* other organic solvents, washing liquids and mother liquors

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number
· ADR,ADN, IMDG, IATA UN1300
· 14.2 UN proper shipping name
· ADR/ADN 1300 TURPENTINE SUBSTITUTE, ENVIRONMENTALLY HAZARDOUS
· IMDG TURPENTINE SUBSTITUTE, MARINE POLLUTANT
· IATA TURPENTINE SUBSTITUTE

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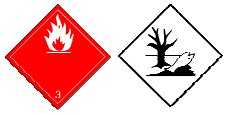
· 14.3 Transport hazard class(es)

· ADR,ADN, IMDG



· Class	3 Flammable liquids.
· Label	3

· IATA

· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR,ADN, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (ADR/ADN):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	30
· EMS Number:	F-E,S-E
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

· Transport/Additional information:

· ADR/ADN	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E

· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN1300, TURPENTINE SUBSTITUTE, ENVIRONMENTALLY HAZARDOUS, 3, III

SECTION 15: Regulatory information

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

· Directive 2012/18/EU
· Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
· Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· National regulations:

· Other regulations, limitations and prohibitive regulations
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

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

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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.

· Department issuing SDS: Product safety department.
· Contact: Ing. R. Derks
· 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
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. 3: Flammable liquids – Category 3
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
· * Data compared to the previous version altered.