

Material Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



67300 Plexisol® P 550-40

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Revised edition: 24.02.2016

Version: 10.1

Printed: 01.03.2016

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Plexisol® P 550-40

Article No.: 67300

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Binding agent

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet Producer/Importer

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency contact

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to EC Regulation 1272/2008

*Flammable liquids, category 2
Specific Target Organ Toxicity (single exposure), category 3
Hazardous to the aquatic environment, hazard category 2*

H225 Highly flammable liquid and vapour.

Cat.: 2

H336 May cause drowsiness or dizziness.

Cat.: 3

H411 Toxic to aquatic life with long lasting effects.

Cat.: 2

Classification according to EC Regulation No. 67/548 or No. 1999/45

Flammable (F) R11 Highly flammable

Irritating (Xi) R38 Irritating to skin.

Hazardous to the environment (N) R50 Very toxic to aquatic organisms.

R53 May cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

Possible Environmental Effects:

2.2. Label elements

Classification according to EC

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Regulation 1272/2008

Hazard designation:



GHS02-2



GHS07



GHS09

Signal word:

Danger

Hazard designation:

H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Safety designation:

P273	Avoid release to the environment.
P280	Wear protective gloves/ clothing/ eye/ face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P312	Call a poison center or physician if you feel unwell.
P403+P235	Store in a well ventilated place. Keep cool.
P501	Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

Naphtha, hydrotreated light.
Naphtha, hydrogen treated, low boiling point.
Cyclohexane

2. \$. *ther +a, ards

Contains n-Butylmethacrylate: can cause allergic reactions.

3. Composition/Information on Ingredients

\$. 1. Substance

\$. 2. Mixture

Chemical Characterization: *Solution of an acrylic polymer.*

Hazardous Ingredients:

Hydrocarbons, C7-C9 (F, Xn, N; R11-65-66-67-51/53; H225-304-336-411)	15-45 %	CAS-Nr: 68920-06-9 EINECS-Nr: 920-750-0 EC-Nr:
Hydrocarbons, C6-C7 (F, Xn, N; R11-65-66-67-51/53; H225-304-336-411)	15-45 %	CAS-Nr: 92128-66-0 EINECS-Nr: 926-605-8

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		EC-Nr:
Cyclohexane (Xn,F,N; R11-38-50/53-65-67; H225-304-315-336-400-410)	10-30 %	CAS-Nr: 110-82-7 EINECS-Nr: 203-806-2 EC-Nr: 601-017-00-1
n-Hexane (Xn,F,N; R11-38-48/20-51/53-62-65-67; H225-304-315-336-361f-373-411)	0.1-3 %	CAS-Nr: 110-54-3 EINECS-Nr: 203-777-6 EC-Nr: 601-037-00-0
n-Butyl methacrylate (Xi; R10-36/37/38-43; H226-315-317-335); REACH Reg.-Nr. 01-2119486394-28	0.1-1.0 %	CAS-Nr: 97-88-1 EINECS-Nr: 202-615-1 EC-Nr:
Methacrylic acid (C; R21/22-35; H302-311-322-314-335); REACH Reg.-Nr. 01-2119463884-26	0.1-1.0 %	CAS-Nr: 79-41-4 EINECS-Nr: 201-204-4 EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the first aid measures

General information:

*Remove contaminated clothes immediately.
Seek medical attention in case of complaints.*

After inhalation:

*Supply fresh air and keep patient calm.
Get medical help.*

After skin contact:

*Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.
In case of skin irritation consult physician.*

After eye contact:

*Rinse open eyes with plenty of water for at least 15 minutes.
Consult physician.
Remove contact lens.*

After ingestion:

Do not induce vomiting. Consult physician immediately.

4.2. Most important symptoms and effects: both acute and delayed

Symptoms:

Longterm or repeated exposition: headache, coughing, difficulty breathing, nausea, dizziness, unconsciousness.

Effects:

No further information available.

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

Treatment:

If vomiting occurs after ingestion, aspiration into the lungs can

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occur which can cause a chemical pneumonia or suffocation.

Treat symptomatically.

Risk of aspiration of stomach flushing and vomiting.

5. Fire-Fighting Measures

1. 1. Extinguishing Media

Suitable extinguishing media:

Foam, CO₂, dry extinguishing powder.

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

Water

1. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: formation of carbon oxides and organic decomposition products.

Flammable liquid.

Risk of bursting of closed containers due to strong heating.

The vapor is heavier than air, spreads along the ground and distant ignition is possible.

Risk of bursting of closed containers due to strong heating.

1. 3. Protective Equipment for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Avoid contamination of sewage system, open water ways and ground water.

Cool exposed containers with water spray.

6. Accidental Release Measures

3. 1. Personal Precautions/ Protective Equipment and Emergency Procedures

Personal precautions:

Provide adequate ventilation. Keep away from sources of ignition.

Keep away from sources of heat and ignition.

Wear protective clothing.

Keep unprotected persons out of danger zone.

Respiratory protection in case of formation of vapors/dust/aerosol.

3. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

3. 3. Methods and Material for Containment and Clean-up

Methods and material:

Large spills:

Larger amounts should be pumped into adequate containers.

Vapors in combination with air can form an explosive compound.

Small spills:

Contain with absorbent material (sand, diatomaceous earth,

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universal absorbent, Oil Dri) and dispose accordingly.

3. ' . Reference to other Sections

Protective clothing, see Section 8.

7. Handling and Storage

4. 1. Precautions for Safe Handling

Instructions on safe handling:

Provide adequate ventilation.

Provide adequate ventilation, also in floor area (vapors are heavier than air).

Open and handle container with care.

Hygienic measures:

Do not eat or drink during work. Do not smoke.

Wash thoroughly after handling.

4. 2. (Conditions for Safe Storage/ including any Inco "patibilities

Storage conditions:

Store in tightly sealed containers in a cool and well ventilated location.

Protect product from direct sunlight.

Requirements for storage areas and containers:

Store product in closed containers.

Information on fire and explosion protection:

Keep away from sources of ignition - do not smoke. Take measures to prevent electrostatic discharge.

Vapors may form an explosive mixture with air.

Cool exposed containers with water.

Even the empty containers may still be dangerous.

Storage class (VCI):

Further Information:

4. \$. Specific Use s#

Further information:

No information available.

8. Exposure Controls/Personal Protection

5. 1. Parameters to be controlled

Parameters to be controlled (DE):

n-Hexane, CAS 110-54-3: ELV (TRGS 900)) 180 mg/m³; 50 ml/m³; 8(II); Y

Y: No teratogenic risk when the exposure limit values (ELV) and biological limit values (BLV) are adhered to.

Cyclohexane, CAS 110-82-7: ELV (TRGS 900): 700 mg/m³; 200 ppm (4)

Top limit: 4 (II)

Parameters to be controlled:

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n-Hexane, CAS 110-54-3: TLV (EC ELV): 72 mg/m³; 20 ppm
Cyclohexane, CAS 110-82-7: TWA (EC ELV) 700 mg/m³; 200 ppm

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

Biological limit value:

n-Hexane: 5 mg/l (urine; end of exposure or shift)

5.2. %xposure (ontrols

Technical protective measures:

Adequate ventilation.

Personal Protection

General protective measures:

Do not inhale vapor/dust.

Avoid contact with eyes and skin.

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

Respiratory equipment required in case of insufficient ventilation, filter type A.

Hand protection:

Protective gloves (EN 374)

Protective gloves should be changed regularly, especially after intensive contact with the product.

Each work area must have adequate protective gloves.

Protective glove material:

Nitrile rubber (480 min, 0.4 mm)

Viton(R) (480 min; 0.7 mm)

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing, chemical resistant safety shoes.

Environmental precautions:

9. Physical and Chemical Properties

7.1. Information on basic Physical and Chemical Properties

Form: liquid

Color: colorless

Odor: gasoline-like

Odor threshold:

No information available.

pH-Value:

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	<i>not applicable</i>
Melting temperature:	< 0°C
Boiling temperature:	85-125°C (1013 hPa) (Naphtha)
Flash point:	-5°C (DIN 51755) (Naphtha)
Evaporation rate:	<i>not applicable</i>
Flammability (solid, gas):	> 200°C (DIN 51794) (Naphtha) <i>not available</i>
Upper explosion limit:	8.3 Vol.-% (Naphtha)
Lower explosion limit:	0.7 Vol.-% (Naphtha)
Vapor pressure:	100 hPa (20°C) (Naphtha)
Vapor density:	<i>No information available.</i>
Density:	0.84 g/cm ³ (20°C)
Solubility in water:	<i>practically insoluble</i>
Coefficient of variation (n-Octanol/Water):	<i>not determined</i>
Auto-ignition temperature:	<i>No information available.</i>
Decomposition temperature:	<i>No data available.</i>
Viscosity, dynamic:	2800-5400 mPa.s (20°C)
Explosive properties:	<i>not available</i>
Oxidizing properties:	<i>no information available</i>
Bulk density:	<i>not determined</i>
7.2. -urther Infor " ation	
Solubility in solvents:	<i>Esters, ketones and chlorinated hydrocarbons.</i>
Viscosity, kinematic	808 mm ² /s (40°C)
Burning class:	
Solvent content:	
Solid content:	
Particle size:	
Other information:	

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10. Stability and Reactivity

- 18.1. Reactivity
No decomposition if used according to specifications.
- 18.2. Thermal Stability
Stable if used according to specifications.
- 18.3. Possibility of Hazardous Reactions
Reacts with strong oxidants.
- 18.4. Conditions to Avoid
Conditions to avoid:
Avoid high temperature.
Avoid ignition sources.
Thermal decomposition:
No decomposition if used according to specifications.
- 18.5. Incompatible Materials
Oxidizing agents.
- 18.6. Hazardous Decomposition Products
Thermal decomposition may yield toxic and irritating fumes, predominantly consisting of n-butyl methacrylate.
- 18.7. Further Information
-

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral: > 2000 mg/kg (rat; Naphtha)

LD50, dermal: > 2000 mg/kg (rabbit; Naphtha)

LC50, inhalation: > 5 mg/l (rat; Naphtha)

Primary effects

Irritant effect on skin:

Longterm contact may cause dry skin.

Prolonged and/or repeated skin contact can cause irritations.

Irritant effect on eyes:

Irritating (OECD 405)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No information available.

Mutagenicity:

No data available.

Reproductive toxicity:

No data available.

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Carcinogenicity:

No data available.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: may cause drowsiness or dizziness.

Repeated exposure: no information available.

Additional toxicological information:

Vapors have narcotic effects and can cause headache, tiredness, dizziness, vomiting, unconsciousness and cramps.

Inhalation of fumes/vapors can cause irritation of the respiratory tract.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

No data available.

Daphnia toxicity:

EC50: 3 mg/l (48h, Daphnia magna)

Bacteria toxicity:

no information available

Algae toxicity:

No information available.

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulation

Bioaccumulation is not to be expected.

12.4. Mobility

No information available.

12.5. Results of P609 und vPvP Assessment

Not applicable.

12.6. Other adverse effects

Water hazard class:

1, slightly hazardous

Behaviour in sewage systems:

Further ecological effects:

Do not let product enter waterways or sewage system.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

The waste is hazardous.

Dispose of according to official national and local regulations.

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European Waste Code (EWC):

080111 - Waste paint and varnish containing organic solvents or other dangerous substances

Uncleaned packaging:

Uncontaminated packaging may be recycled.

Packaging may be disposed of in the same manner as the product.

Waste Code No.:

14. Transport Information

1'. 1. U & u " ber

ADR, IMDG, IATA 1866

1'. 2. U & Proper Shipping & a " e

ADR/RID: HARZLÖSUNG, ENTZÜNDBAR

IMDG/IATA: RESIN SOLUTION, FLAMMABLE

1'. \$. Oransport +a, ard (lasses

ADR Class: 3

Hazard no.: 3

Classification code: F1

Tunnel no.: D/E

IMDG Class (sea): 3

Hazard no.: 3

EmS No.: F-E, S-E

IATA Class: 3

Hazard no.: 3

1'. '. Pac; aging <roup

ADR/RID: II

IMDG: II

IATA: II

1'. 1. %nviron " ental +a, ards

Labelling according 5.2.1.8 ADR/RID: fish and tree

Labelling according 5.2.1.6.3 IMDG: fish and tree

Classification as environmentally hazardous according 2.9.3

IMDG: yes

Labelled with "P" according 2.10 IMDG: yes

1'. 3. Special Precautions for User

Warning: Inflammable liquids.

1'. 4. Oransportation in 6ul; according to . nnex II of M . RP *) 4\$!45 and I6 (9 (ode

not evaluated

1'. 5. -urther Infor " ation

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15. Regulatory Information

11. 1. Safety/Health and Environmental Regulations)egislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water

Local regulations on chemical accidents:

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law (94/33/EC) are to be observed.

The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline (94/85/EEC) are to be observed.

Restriction and prohibition of application:

Technical instructions on air quality: 5.2.5

11. 2. (he "ical Safety .ssess " ent

A Chemical Safety Assessment has not been carried out for this product.

11. \$. -urther Infor " ation

Listed in:

EINECS (EU), TSCA (US), AICS (AUS), DSL (CA), PICCS (PH), ECL (KR), METI (JP), IECSC (CN), ECS (TW)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.