

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: T25 SERIE/SERIES
Print date 18.08.2015
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifiers:

Article No. (manufacturer/supplier): T25
Identification of the substance or mixture: SERIE/SERIES

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

Relevant identified uses:

Printing ink/
-lacquer

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

A.M. Ramp & Co GmbH
RUco Druckfarben
Lorsbacher Str. 28
D-65817 Eppstein
Telephone: +49.61 98.30 40
Telefax: +49.61 98.3 22 88

Dept. responsible for information:

E-mail info@ruco-inks.com

1.4. Emergency telephone number

Emergency telephone number +49.61 98.30 40
Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or 1999/45/EC

This mixture is classified as hazardous according to 1999/45/EC.

R10		Flammable
Xi; R37	Irritant	Irritating to respiratory system.
R52-53		Harmful to aquatic life. May cause long-term adverse effects in the aquatic environment.
R66		Repeated exposure may cause skin dryness or cracking.
R67		Vapours may cause drowsiness and dizziness.

2.2. Label elements

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

Hazard pictograms



Warning

Hazard statements

H226	Flammable liquid and vapour.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

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H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P370 + P378 In case of fire, use sand, extinguishing powder or alcohol resistant foam.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

contains:

hydrocarbons, C9, aromatics

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

Labelling (67/548/EEC or 1999/45/EC)



Xi Irritant

Hazard statements

10 Flammable
 37 Irritating to respiratory system.
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 66 Repeated exposure may cause skin dryness or cracking.
 67 Vapours may cause drowsiness and dizziness.

Precautionary statements

24 Avoid contact with skin.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 51 Use only in well-ventilated areas.
 61 Avoid release to the environment. Refer to special instructions/safety data sheet.

contains:

hydrocarbons, C9, aromatics

Special provisions concerning the labelling of certain mixtures

n.a.

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description Solvent containing pigment dispersion
 on resin basis

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
918-668-5 64742-95-6	01-2119455851-35-XXXX hydrocarbons, C9, aromatics Flam. Liq. 3 H226 / STOT SE 3 H335 / Aquatic Chronic 2 H411 / Asp. Tox. 1 H304 / STOT SE 3 H336	20 - 25
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32-XXXX xylene Flam. Liq. 3 H226 / Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Asp. Tox. 1 H304 / STOT RE 2 H373 / STOT SE 3 H335	5 - 10
259-370-9 54839-24-6 603-177-00-8	01-2119475116-39-XXXX 2-ethoxy-1-methylethyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	5 - 10
202-849-4 100-41-4 601-023-00-4	01-2119489370-35-XXXX ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 / Asp. Tox. 1 H304 / STOT RE 2 H373	1 - 2,5
200-663-8 67-66-3	01-2119486657-20-XXXX trichloromethane	0,25 - 0,5

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602-006-00-4 Carc. 2 H351 / Repr. 2 H361 / Acute Tox. 3 H331 / Acute Tox. 4 H302 /
STOT RE 1 H372 / Eye Irrit. 2 H319 / Skin Irrit. 2 H315

Classification according to Directive 67/548/EEC or 1999/45/EC

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
918-668-5 64742-95-6	01-2119455851-35-XXXX hydrocarbons, C9, aromatics R10 / Xi; R37 / N; R51-53 / Xn; R65 / R66 / R67	20 - 25
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32-XXXX xylene R10 / Xn; R20/21-48/20-65 / Xi; R36/37/38	5 - 10
259-370-9 54839-24-6 603-177-00-8	01-2119475116-39-XXXX 2-ethoxy-1-methylethyl acetate R10 / R67	5 - 10
202-849-4 100-41-4 601-023-00-4	01-2119489370-35-XXXX ethylbenzene F; R11 / Xn; R20-48/20-65	1 - 2,5
203-628-5 108-90-7 602-033-00-1	01-2119432722-45-XXXX chlorobenzene R10 / Xn; R20 / N; R51-53	0,25 - 0,5

Additional information

Full text of R-phrases: see section 16.

Full text of H-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures:

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

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Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (BGR 132)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 35 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

EC No. CAS No.	Description	type	Limit value		Unit
			STEL (EC)	TWA (EC)	
202-849-4 100-41-4	ethylbenzene		552	441	mg/m3
			125	100	ppm
203-628-5 108-90-7	chlorobenzene			234	mg/m3
				50	ppm
215-535-7 1330-20-7	xylene		441	220	mg/m3
		WEL	100	50	ppm

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215-535-7	xylene		650 mmol/mol creatinine
1330-20-7		BMGV	

Additional information

TWA (EC): occupational exposure limit value
STEL (EC): short-term occupational exposure limit value

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: butyl rubber
Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Recommendation Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state	liquid
Colour	as labeled
Odour	typical

Safety relevant basis data	Unit	Method	Remark
Flash point:	25 °C	DIN 53213	
Ignition temperature in °C:	200 °C		
Lower explosion limit	0,8 Vol-%		
Upper explosion limit	9,8 Vol-%		
Vapour pressure at 20 °C:	30,00 mbar		
Density at 20 °C:	1,07 g/cm³		
Water solubility (g/L)	not soluble		
pH at 20 °C:	-		
Viscosity at 20 °C	> 90 s 4 mm	DIN 53211	
Solvent separation test (%)	< 3 %	ADR/RID	
Solid content (%):	60,89 Wt %		
solvent content:			
Organic solvents:	38 Wt %		
Water:	1 Wt %		

9.2. Other information:

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to

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chapter 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

Toxicological data are not available.

Irritant and corrosive effects

Toxicological data are not available.

Sensitisation

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this preparation do not meet the criteria for classification as CMR category 1 or 2 according to 67/548/EEC.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers. See chapters 2 and 15 for details.

SECTION 12: Ecological information

overall evaluation

There is no information available on the preparation itself .
Do not allow to enter into surface water or drains.

12.1. Toxicity

Toxicological data are not available.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC

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and is classified for eco-toxicological properties accordingly. See Sections 2 and 15 for details.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080312 waste ink containing dangerous substances

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number

1210

14.2. UN proper shipping name

Land transport (ADR/RID):	Printing ink
Sea transport (IMDG):	PRINTING INK
Air transport (ICAO-TI / IATA-DGR):	Printing ink

14.3. Transport hazard class(es)

Land transport (ADR/RID):	KEINE GÜTER DER KLASSE 3 in containers > 450 l: class 3, item 31c
Sea transport (IMDG) for packages < 30 litres:	3 Transport in accordance with the provisions of paragraph 2.3.2.5 of the IMDG Code.
Air transport (ICAO-TI / IATA-DGR)	3

14.4. Packing group

III

14.5. Environmental hazards

Land transport (ADR/RID)	n.a.
Marine pollutant	n.a.

14.6. Environmental hazards

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code D/E

Sea transport (IMDG)

EmS-No. F-E, S-D

14.7. Special precautions for user

not applicable

SECTION 15: Regulatory information

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

EU legislation

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

VOC-value (in g/L) ISO 11890-2:	405,652
VOC-value (in g/L) ASTM D 2369:	411,058

National regulations

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Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
 Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

SECTION 16: Other information

Relevant R-and H-phrases (Number and full text):

Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	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).
Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Repr. 2 / H361	Reproductive toxicity	Suspected of damaging the unborn child.
Acute Tox. 3 / H331	Acute toxicity (inhalative)	Toxic if inhaled.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
STOT RE 1 / H372	Specific target organ toxicity (repeated exposure)	Causes 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).
F; R11	Highly flammable	Highly flammable
Xn; R20-48/20-65	Harmful	Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Harmful: may cause lung damage if swallowed.
R10		Flammable
Xn; R20	Harmful	Harmful by inhalation.
N; R51-53	Dangerous for the environment	Toxic to aquatic life. May cause long-term adverse effects in the aquatic environment.
R67		Harmful: may cause lung damage if swallowed.
Xn; R20/21-48/20-65	Harmful	Vapours may cause drowsiness and dizziness.
		Harmful by inhalation and in contact with skin.
		Harmful: danger of serious damage to health by prolonged exposure through inhalation.
		Harmful: may cause lung damage if swallowed.
Xi; R36/37/38	Irritant	Irritating to eyes, respiratory system and skin.
Xi; R37	Irritant	Irritating to respiratory system.
Xn; R65	Harmful	Harmful: may cause lung damage if swallowed.
R66		Repeated exposure may cause skin dryness or cracking.

Additional information

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in

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chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

remark

n.a. = not applicable