

Product name:	TRANSCOPY LIQUID	Page:	1/9
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0001	SDS-ID:	US-EN/14.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name: TRANSCOPY LIQUID
Cat. No. 40900090, 40900092

CAS-No.: 141-78-6

EC No.: 205-500-4

REACH Reg. No.: 01-2119475103-46-xxxx

Container size: 40 ml

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

Application: For 3D or metallographic replica

Details of the supplier of the safety data sheet

Supplier: Struers A/S
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

Responsible for material safety data sheet authoring: Responsible for material safety data sheet authoring: DHI
Any questions to the contents of this material safety data sheet should be sent to:
lisbeth.mygind@struers.dk

Emergency telephone number

Emergency telephone: Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071

SAFETY DATA SHEET

Product name: TRANSCOPY LIQUID Page: 2/9
Revision Date: 2013-11-28 Print date: 2013-11-28
Document No.: M0001 SDS-ID: US-EN/14.0

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

The product is classified:

67/548/EEC: F;R11 Xi;R36 R66, R67

GHS: Flam. Liq. 2;H225 - Eye Irrit. 2;H319 - STOT SE 3;H336

Physical and Chemical Hazards: The product is highly flammable, and explosive vapors/air mixtures may be formed even at normal room temperatures.

Human health: Causes serious eye irritation. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking. Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain.

Environment: The hazardous properties of the product in the environment are considered to be limited.

Label elements



DANGER

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501a Dispose of contents/container in accordance with local regulations.

NFPA Rating: Health:1 Fire:3 Reactivity:0 Other:-

Other hazards

PBT/vPvB: Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

The product contains: solvents.

SAFETY DATA SHEET

Product name: TRANSCOPY LIQUID Page: 3/9
Revision Date: 2013-11-28 Print date: 2013-11-28
Document No.: M0001 SDS-ID: US-EN/14.0

67/548/EEC:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
100	141-78-6	205-500-4	01-2119475103-46-xxxx	Ethyl acetate	F;R11 Xi;R36 R66 R67	

GHS:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
100	141-78-6	205-500-4	01-2119475103-46-xxxx	Ethyl acetate	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066	

References: The full text for all R-phrases and hazard statements are displayed in section 16.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

Inhalation: Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Not known.

SAFETY DATA SHEET

Product name:	TRANSCOPY LIQUID	Page:	4/9
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0001	SDS-ID:	US-EN/14.0

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Special hazards arising from the substance or mixture

Specific hazards: Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember.

Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not smoke or use open fire, or other sources of ignition. Avoid inhalation of vapors and contact with skin and eyes.

Environmental precautions

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up

Spill Cleanup Methods: Absorb spillage with non-combustible, absorbent material.

Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Avoid inhalation of vapors and contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Do not smoke or use open fire or other sources of ignition. Take precautionary measures against static discharges.

Technical precautions: Mechanical ventilation may be required. Provide easy access to water supply and eye wash facilities.

Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: Follow rules for flammable liquids.

Storage conditions: Store in tightly closed original container in a dry, cool and well-ventilated place. Avoid contact with oxidizing agents.

Specific end use(s)

Specific use(s): Not relevant.

SAFETY DATA SHEET

Product name: TRANSCOPY LIQUID Page: 5/9
Revision Date: 2013-11-28 Print date: 2013-11-28
Document No.: M0001 SDS-ID: US-EN/14.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
141-78-6	Ethyl acetate	-	400 ppm	TWA	-	ACGIH
141-78-6	Ethyl acetate	-	400 ppm	1400 mg/m3 TWA	-	OSHA

Exposure controls

Engineering measures: An eye wash bottle must be available at the work site. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with gas filter, type A2.

Hand protection: Butyl rubber gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection: Wear face shield if there is risk of splashes.

Skin protection: No special precautions.

Hygiene measures: Wash hands after handling.

Environmental Exposure Controls: Not available.

SAFETY DATA SHEET

Product name:	TRANSCOPY LIQUID	Page:	6/9
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0001	SDS-ID:	US-EN/14.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: colorless liquid

Odor: odor of alcohol

pH: Not available.

Melting point: -83°C

Boiling point: 77°C

Flash point: -4°C

Explosion limits: 2,1-11,5 vol%

Vapor pressure: 93 hPa (20°C)

Relative density: 0,9

Solubility: partly soluble in water

Partition coefficient (n-octanol/water): 0,73 (20°C)

Auto-ignition temperature (°C): 460°C

Viscosity: Dynamic viscosity: 0,44 mPa*s (20°C)

Other information

Other data: VOC (Volatile Organic Substances): 902 g/l (calculated)

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Reactivity: None known.

Chemical stability

Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions

Hazardous Reactions: None known.

Conditions to avoid

Conditions/materials to avoid: Avoid exposing to heat and contact with strong oxidizing substances.

Incompatible materials

Incompatible materials: None known.

Hazardous decomposition products

Hazardous decomposition products: None in particular.

SAFETY DATA SHEET

Product name:	TRANSCOPY LIQUID	Page:	7/9
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0001	SDS-ID:	US-EN/14.0

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhalation: Vapors and spray mist may irritate throat and respiratory system and cause coughing. In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness and nausea.

Skin contact: Prolonged contact may cause redness, irritation and dry skin.

Eye contact: Irritating and may cause redness and pain.

Ingestion: May irritate and cause malaise.

Specific effects: Prolonged or frequent inhalation of vapors in high concentrations may cause permanent damage to the nervous system, including the brain.

Carcinogenicity:
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
OSHA: No.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity: The environmental hazard of the product is considered to be limited.

Persistence and degradability

Degradability: The degradability of the product has not been stated.

Bioaccumulative potential

Bioaccumulative potential: Partition coefficient (n-octanol/water): 0,73 (20°C)

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT/vPvB: Not relevant.

Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code: 16 05 08

SAFETY DATA SHEET

Product name:	TRANSCOPY LIQUID	Page:	8/9
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0001	SDS-ID:	US-EN/14.0

SECTION 14: TRANSPORT INFORMATION

UN number

UN-No: 1173

UN proper shipping name

Proper Shipping Name: ETHYL ACETATE

Additional IMDG information:

EmS: F-E, S-D

MFAG: 1

Transport hazard class(es)

Class: 3

Packing group

PG: II

Environmental hazards

Marine pollutant: No.

Environmentally Hazardous substance: No.

Special precautions for user

Special precautions: None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

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

Special provisions: TSCA: Listed.

National regulation: Europe/USA:
This Material Safety Data Sheet has been prepared according to the EU-regulation.

Threshold Limit Values (2013), ACGIH, by the American Conference on Governmental Industrial Hygienists.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants (OSHA), with amendments.

Chemical Safety Assessment

CSA status: Not relevant.

SAFETY DATA SHEET

Product name:	TRANSCOPY LIQUID	Page:	9/9
Revision Date:	2013-11-28	Print date:	2013-11-28
Document No.:	M0001	SDS-ID:	US-EN/14.0

SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: -
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

Additional information: Classification according to Regulation (EC) No. 1272/2008:
Calculation method.

Wording of H-statements:

R11	Highly flammable.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapors may cause drowsiness and dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.
www.dhigroup.com.