Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

1 Identification

· **Product identifier**

· **Trade name** **TESA 60168 CHEMICAL RESISTANCE**

· **Application of the substance / the mixture**
Coating material
Priming
Intermediate
Adhesives

· **Manufacturer/Supplier:**
tesa SE
Hugo-Kirchberg-Str. 1
D-22848 Norderstedt
Germany
Tel.: +49-40-88899-101

· **Informing department:**
tesa SE, Corporate Regulatory Affairs
SDS@tesa.com, Tel.: +49-40-88899-6954

· **Emergency telephone number:**
Reception Headquarters
tesa SE, Hugo-Kirchberg-Str. 1, 22848 Norderstedt, Germany
Phone: +49 40 88899 2667 (Mon.-Thurs. 07:00-18:00h, Fr. 07:00-15:00h)

2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS02 Flame

Flammable Liquids 2 H225 Highly flammable liquid and vapor.


GHS07

Eye Irritation 2A H319 Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**
ethyl acetate
propan-2-ol

· **Hazard statements**
Highly flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.

· **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use only outdoors or in a well-ventilated area.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

Trade name TESA 60168 CHEMICAL RESISTANCE

(Contd. of page 1)

Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system**
· **NFPA ratings (scale 0-4)**

Health = 2
Fire = 3
Reactivity = 0

· **HMIS ratings (scale 0-4)**

Health = 2
Fire = 3
Reactivity = 0

· **Other hazards** The product does not contain any elutable organically bound halogen compounds which may lead to an increase in the AOX value during wastewater analysis.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Solvent mixture with additives.
Adhesion Promoter

· **Characterisation equipment, container:** None

· **Dangerous components:**

141-78-6	ethyl acetate Flammable Liquids 2, H225 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	<100%
67-63-0	propan-2-ol Flammable Liquids 2, H225 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	<10%
546-68-9	tetraisopropoxytitanium Eye Irritation 2A, H319	<2.5%

· **Additional information** The wording of the listed hazard statements can be found in section 16.

4 First-aid measures

· **Description of first aid measures**
· **General information** Instantly remove any clothing soiled by the product.
· **After inhalation** Supply fresh air; consult phsician in case of symptoms.
· **After skin contact** Instantly wash with water and soap and rinse thoroughly.
· **After eye contact** Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist.
· **After swallowing** Consult a doctor if symptoms persist
· **Information for doctor**
· **Most important symptoms and effects, both acute and delayed** May cause drowsiness / dizziness.
· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

Trade name TESA 60168 CHEMICAL RESISTANCE

(Contd. of page 2)

5 Fire-fighting measures

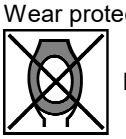
· **Extinguishing media**
· **Suitable extinguishing agents** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.

· **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
· **Special hazards arising from the substance or mixture** In the event of a fire may be released:
Nitrogen oxides (NOx)
Under certain fire conditions, traces of other toxic substances cannot be excluded.

· **Advice for firefighters**
· **Protective equipment:** Put on breathing apparatus.
Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**



Prevent material from reaching sewage system, holes and cellars.

· **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **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 information on disposal.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
141-78-6	ethyl acetate	1,200 ppm
67-63-0	propan-2-ol	400 ppm
546-68-9	tetraisopropoxytitanium	22 mg/m³
123-54-6	pentane-2,4-dione	75 ppm
67-64-1	acetone	200 ppm
96-33-3	methyl acrylate	6 ppm
141-32-2	butyl acrylate	8.3 ppm

· **PAC-2:**		
141-78-6	ethyl acetate	1,700 ppm
67-63-0	propan-2-ol	2000* ppm
546-68-9	tetraisopropoxytitanium	250 mg/m³
123-54-6	pentane-2,4-dione	110 ppm
67-64-1	acetone	3200* ppm
96-33-3	methyl acrylate	170 ppm
141-32-2	butyl acrylate	130 ppm

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

Trade name TESA 60168 CHEMICAL RESISTANCE

(Contd. of page 3)

· **PAC-3:**		
141-78-6	ethyl acetate	10000** ppm
67-63-0	propan-2-ol	12000** ppm
546-68-9	tetraisopropoxytitanium	1,500 mg/m³
123-54-6	pentane-2,4-dione	200 ppm
67-64-1	acetone	5700* ppm
96-33-3	methyl acrylate	1,000 ppm
141-32-2	butyl acrylate	480 ppm

7 Handling and storage

· **Handling**
· **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.
Handle only outside or in explosion protected rooms.
Fumes can combine with air to form an explosive mixture.

· **Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and containers:** Store in cool location.
· **Information about storage in one common storage facility:** Prohibition of co-storage with substances of storage classes 1, 2A, 4.1A, 4.1B, 4.2, 4.3, 5.1A, 5.1C, 5.2, 6.1B, 6.2, 7
Co-storage restrictions with substances of storage classes 5.1B, 6.1A, 6.1D, 11
· **Further information about storage conditions:** Store container in a well ventilated position.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Store only outside or in explosion proof rooms.
When storing flammable liquids, the national laws must be observed!
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**
· **Components with critical values that require monitoring at the workplace:** The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

141-78-6 ethyl acetate	
PEL	Long-term value: 1400 mg/m³, 400 ppm
REL	Long-term value: 1400 mg/m³, 400 ppm

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

Trade name TESA 60168 CHEMICAL RESISTANCE

(Contd. of page 4)

TLV	Long-term value: 400 ppm
67-63-0 propan-2-ol	
PEL	Long-term value: 980 mg/m³, 400 ppm
REL	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

· **Ingredients with biological limit values:**

67-63-0 propan-2-ol	
BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **Exposure controls**
· **Personal protective equipment**
· **General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes.

· **Breathing equipment:** Use respiratory protection with filter A 2.
Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

· **Protection of hands:**

Solvent resistant gloves

Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves** Butyl rubber, BR
Use solvent resistant gloves.
Suitability and resistance of a glove depend on the conditions of use, such as frequency and duration of contact, chemical resistance of the glove material, thickness and fit of the gloves. As a general rule, the glove manufacturer should be consulted for the necessary information. Contaminated or damaged gloves should be replaced immediately.

· **Penetration time of glove material** Butyl rubber (layer thickness min. 0.3 mm) max. 15 minutes
The exact breakthrough time must be obtained from the protective glove manufacturer and must be observed.

· **As protection from splashes gloves made of the following materials are suitable:** Fluorocarbon rubber (Viton)

· **Not suitable are gloves made of the following materials:** Nitrile rubber, NBR
Natural rubber, NR
Neoprene gloves

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

Trade name TESA 60168 CHEMICAL RESISTANCE

(Contd. of page 5)

· **Eye protection:** Safety glasses recommended during refilling.

Safety glasses

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Colour:	According to product specification
· **Smell:**	Product specific
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	77 °C (170.6 °F)
· **Flash point:**	-1 °C (30.2 °F)
· **Inflammability (solid, gaseous)**	Not applicable.
· **Auto igniting:**	425 °C (797 °F)
· **Decomposition temperature:**	Not determined.
· **Self-inflammability:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
· **Critical values for explosion:**	
Lower:	2.1 Vol %
Upper:	11.5 Vol %
· **Steam pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Vapor pressure at 50 °C (122 °F):**	360 hPa (270 mm Hg)
· **Density**	Not determined
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water at 20 °C (68 °F):	79 g/l
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
dynamic:	Not determined.
kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	96 %
Solids content:	4 %

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 6)

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known
· **Conditions to avoid** Protect from heat.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **on the eye:** Irritant effect.
· **Sensitization:** No sensitizing effect known.
· **Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

67-63-0	propan-2-ol	3
96-33-3	methyl acrylate	2B
141-32-2	butyl acrylate	3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/14/2023 Reviewed on 06/14/2023

Trade name TESA 60168 CHEMICAL RESISTANCE

(Contd. of page 7)

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated under adherence to official regulations.

· **Uncleaned packagings:** Packaging must be emptied of its residual contents. Empty packaging must be taken to a proper waste disposal facility for recovery or disposal in accordance with the legal regulations. Packaging that is not completely empty must be disposed of in coordination with the regional waste disposal company.

14 Transport information

· **UN-Number**
· **DOT, ADR, IMDG, IATA** UN1993

· **UN proper shipping name**
· **DOT** Flammable liquids, n.o.s. (Ethyl acetate, Isopropanol)
· **ADR** FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ISOPROPANOL (ISOPROPYL ALCOHOL)), (vapour pressure at 50°C not more than 110 kPa)
· **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE, ISOPROPANOL (ISOPROPYL ALCOHOL))

· **Transport hazard class(es)**

· **DOT**

· **Class** 3 Inflammable liquids
· **Label** 3

· **ADR**

· **Class** 3 (F1) Inflammable liquids
· **Label** 3

· **IMDG, IATA**

· **Class** 3 Inflammable liquids
· **Label** 3

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 8)

· **Packing group**	
· **DOT, ADR, IMDG, IATA**	II
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Inflammable liquids
· **Kemler Number:**	33
· **EMS Number:**	F-E,S-E
· **Stowage Category**	B
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· **ADR**	
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 1993 FLAMMABLE LIQUID, N.O.S. (VAPOUR PRESSURE AT 50°C NOT MORE THAN 110 KPA) (ETHYL ACETATE, ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II

15 Regulatory information

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

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Cancerogenity categories**

· **TLV (Threshold Limit Value)**

67-63-0	propan-2-ol	A4
67-64-1	acetone	A4
96-33-3	methyl acrylate	A4
141-32-2	butyl acrylate	A4

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations** avoids

· **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 9)

· **Decree to be applied in case of technical fault:** Critical quantity values according to the regulations on accidents should be adhered to.

· **Technical instructions (air):**

Class	Share in %
NK	95.8

· **Other regulations, limitations and prohibitive regulations**

· **TSCA**	
141-78-6	ethyl acetate
67-63-0	propan-2-ol
546-68-9	tetraisopropoxytitanium
26710-97-4	2-Propenoic acid, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate

· **SARA Section 313**	
67-63-0	propan-2-ol

· **SARA section 355**
-

· **Proposition 65 - Cancer**
-

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

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:** tesa SE, Corporate Regulatory Affairs
· **Contact:** tesa SE, Corporate Regulatory Affairs, Email: SDS@tesa.com, Tel.: +4940-88899-0
· **Date of preparation / last revision** 06/14/2023
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flammable Liquids 2: Flammable liquids – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3