

Safety data sheet

according to 1907/2006/EC, Article 31

Printing 02.07.2024

version number 8 (replaces version 7)

Revision: 02.07.2024

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

*1.1 Product identifier

*Trade name: TAN TITRATION SOLVENT : ASTM D664

*Article number: TANSOLVF

*Registration number

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

*Product category For experiments, research, or testing purposes only. Prohibited of use for other purposes.

*Application of the substance / the mixture Laboratory Chemicals

*1.3 Details of the supplier of the safety data sheet

*Manufacturer/Supplier:

Reagecon Diagnostics Ltd.

Shannon Free Zone,

Shannon,

Co. Clare,

Ireland.

Tel +353 61 472622

Fax +353 61 472642

*Further information obtainable by contacting: sds@reagecon.ie

*1.4 Emergency telephone number:

National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

For Hazardous Materials [or Dangerous Goods] Incident

Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC

For Ireland call +(353)-19014670

For Outside Ireland call +1 703-741-5970 / 1-800-424-9300 CCN849800

SECTION 2: Hazards identification

*2.1 Classification of the substance or mixture

*Classification according to Regulation (EC) No 1272/2008



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



health hazard

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

***Hazard pictograms**

GHS02 GHS07 GHS08

Signal word** *Danger*Hazard-determining components of labelling:**

TOLUENE

PROPAN-2-OL AR.

***Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

***Precautionary statements**

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

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment*****PBT:** Not applicable.***vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.

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***Dangerous components:**

CAS: 67-63-0 EINECS: 200-661-7	PROPAN-2-OL AR. Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 108-88-3 EINECS: 203-625-9	TOLUENE Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	25-50%

SECTION 4: First aid measures***4.1 Description of first aid measures*****After inhalation:** In case of unconsciousness place patient stably in side position for transportation.***After skin contact:**

Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.

***After eye contact:**

Promptly wash eyes with plenty of water for up to 15 minutes. Open eyes wide apart and rinse well to remove any contact lenses. Do not remove contact lenses by hand. Continue to rinse.. If symptoms persist, consult a doctor.

***After swallowing:**

Do not induce vomiting; call for medical help immediately. Rinse mouth thoroughly with water and give large amounts of water to drink. Never give anything by mouth to an unconscious person.

Caution if victim vomits. Risk of aspiration. Keep airways free. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture** No further relevant information available.5.3 Advice for firefighters*****Protective equipment:**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers

SECTION 6: Accidental release measures***6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment as described in Section 8 below. Keep unprotected persons away.

***6.2 Environmental precautions:**

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

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 section 13.

Ensure adequate ventilation.

***6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

*7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

*Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

*7.2 Conditions for safe storage, including any incompatibilities

*Storage:

*Requirements to be met by storerooms and receptacles: Store in a cool location.

*Information about storage in one common storage facility: Not required.

*Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

*7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

*8.1 Control parameters

*Ingredients with limit values that require monitoring at the workplace:

CAS: 67-63-0 PROPAN-2-OL AR.

WEL Short-term value: 1250 mg/m³, 500 ppmLong-term value: 999 mg/m³, 400 ppm

CAS: 108-88-3 TOLUENE

WEL Short-term value: 384 mg/m³, 100 ppmLong-term value: 191 mg/m³, 50 ppm

Sk

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

*8.2 Exposure controls

*Appropriate engineering controls No further data; see section 7.

*Individual protection measures, such as personal protective equipment

*General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

*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.

Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as back up to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

*Hand protection



Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Always ensure that gloves are inspected before use.

Selection of protective gloves must include consideration of the penetration times along with rates of diffusion and degradation. The selected glove should comply with the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

***Material of gloves**

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.

Fluorocarbon rubber (Viton) gloves are recommended for splash contact.

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific use scenario.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

***Penetration time of glove material**

In the absence of data above, the exact break through time has to be sourced from the manufacturer of the protective gloves and has to be observed.

***Eye/face protection**

Tightly sealed goggles: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information*****Physical state**

Liquid

***Colour:**

According to product specification

***Odour:**

Characteristic

***Odour threshold:**

Not determined.

***Melting point/freezing point:**

Undetermined.

***Boiling point or initial boiling point and boiling range**

82 °C

***Flammability**

Highly flammable.

Lower and upper explosion limit**Lower:**

1.2 Vol %

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*Upper:	12 Vol %
*Flash point:	13 °C
*Auto-ignition temperature:	425 °C
*Decomposition temperature:	Not determined.
*pH	Not determined.
*Viscosity:	
*Kinematic viscosity	Not determined.
*Dynamic:	Not determined.
*Solubility	
*water:	Fully miscible.
*Partition coefficient n-octanol/water (log value)	Not determined.
*Vapour pressure at 20 °C:	43 hPa
*Density and/or relative density	
*Density:	Not determined.
*Relative density	Not determined.
*Vapour density	Not determined.

***9.2 Other information**

*Appearance:	
*Form:	Liquid
*Important information on protection of health and environment, and on safety.	
*Ignition temperature:	Product is not selfigniting.
*Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
*Solvent content:	
*Organic solvents:	99.5 %
*Change in condition	
*Evaporation rate	Not determined.

***Information with regard to physical hazard classes**

*Explosives	Void
*Flammable gases	Void
*Aerosols	Void
*Oxidising gases	Void
*Gases under pressure	Void
*Flammable liquids	Highly flammable liquid and vapour.
*Flammable solids	Void
*Self-reactive substances and mixtures	Void
*Pyrophoric liquids	Void
*Pyrophoric solids	Void
*Self-heating substances and mixtures	Void
*Substances and mixtures, which emit flammable gases in contact with water	Void
*Oxidising liquids	Void
*Oxidising solids	Void
*Organic peroxides	Void
*Corrosive to metals	Void
*Desensitised explosives	Void

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 No dangerous reactions known.
- *10.4 Conditions to avoid No further relevant information available.

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*10.5 Incompatible materials: No further relevant information available.

*10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

*11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

*Acute toxicity Based on available data, the classification criteria are not met.

*LD/LC50 values relevant for classification:

CAS: 67-63-0 PROPAN-2-OL AR.

Oral	LD50	4,570 mg/kg (rat)
Dermal	LD50	13,400 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

*Skin corrosion/irritation Causes skin irritation.

*Serious eye damage/irritation Causes serious eye irritation.

*Reproductive toxicity Suspected of damaging the unborn child.

*STOT-single exposure May cause drowsiness or dizziness.

*STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

*Aspiration hazard May be fatal if swallowed and enters airways.

*11.2 Information on other hazards

*Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

*12.1 Toxicity

*Aquatic toxicity: No further relevant information available.

*12.2 Persistence and degradability No further relevant information available.

*12.3 Bioaccumulative potential No further relevant information available.

*12.4 Mobility in soil No further relevant information available.

*12.5 Results of PBT and vPvB assessment

*PBT: Not applicable.

*vPvB: Not applicable.

*12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

*12.7 Other adverse effects

*Additional ecological information:

*General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

*Uncleaned packaging:

*Recommendation: Disposal must be made according to official regulations.

*Recommended cleansing agents: Water, if necessary together with cleansing agents.

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SECTION 14: Transport information

*14.1 UN number or ID number	
*ADR, IMDG, IATA	UN1219
*14.2 UN proper shipping name	
*ADR	1219 ISOPROPANOL (ISOPROPYL ALCOHOL)
	1219 ISOPROPANOL (ISOPROPYL ALCOHOL)
*IMDG, IATA	ISOPROPANOL (ISOPROPYL ALCOHOL)
*14.3 Transport hazard class(es)	
*ADR, IMDG, IATA	
	
*Class	3 Flammable liquids.
*Label	3
*14.4 Packing group	
*ADR, IMDG, IATA	II
*14.5 Environmental hazards:	
*Marine pollutant:	No
*14.6 Special precautions for user	Warning: Flammable liquids.
*Hazard identification number (Kemler code):	33
*EMS Number:	F-E,S-D
*Stowage Category	B
*14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
*Transport/Additional information:	
*ADR	
*Limited quantities (LQ)	1L
*Transport category	2
*Tunnel restriction code	D/E
*UN "Model Regulation":	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II

SECTION 15: Regulatory information

*15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
*Poisons Act
*Regulated explosives precursors
None of the ingredients is listed.
*Regulated poisons
None of the ingredients is listed.
*Reportable explosives precursors
None of the ingredients is listed.
*Reportable poisons
None of the ingredients is listed.
*Directive 2012/18/EU
*Named dangerous substances - ANNEX I None of the ingredients is listed.

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***Seveso category P5c FLAMMABLE LIQUIDS**

***Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t**

***Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t**

***National regulations:**

***Breakdown regulations:**

Class	Share in %
Wasser	0.5
NK	99.5

***Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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

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.

***Relevant Phrases:**

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

***Department issuing SDS:** Health and Safety

***Contact:** sds@reagecon.ie

***Abbreviations and acronyms:**

UK REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1