

Safety Data Sheet according to (EC) No 1907/2006 as amended

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INDASOL SP450

SDS No. : 145565

V004.12

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

1.1. Product identifier

INDASOL SP450

UFI: D0R3-K030-W004-CK88

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

Intended use:

Cleaner

1.3. Details of the supplier of the safety data sheet

Industrial Adhesive Solutions Ltd

10 Crystal Drive

Sandwell Business Park

Smethwick

B66 1QG

Great Britain

Phone: +44 (0) 121 5569900

technical@indasol.co.uk

For Safety Data Sheet updates please visit our website www.indasol.co.uk

1.4. Emergency telephone number

Not 24 hours Tel: +44 (0) 121 5569900

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Flammable liquids

Category 2

H225 Highly flammable liquid and vapour.

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure

Category 3

H336 May cause drowsiness or dizziness.

Target organ: Central nervous system

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains

Propan-2-ol

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

Eye contact:

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

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

EYE: Irritation, conjunctivitis.

Vapors may cause drowsiness and dizziness.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

Water jet (solvent-containing product).

5.2. Special hazards arising from the substance or mixture

In case of fire toxic gases can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Avoid contact with skin and eyes.

Keep unprotected persons away.

Danger of slipping on spilled product.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Ground/bond container and receiving equipment.
- Use explosion proof electric equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid open flames and sources of ignition.

Hygiene measures:

- Do not eat, drink or smoke while working.
- Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

- Ensure good ventilation/extraction.
- Keep away from heat and direct sunlight.
- Store in a cool, frost-free place.
- Storage at 5 to 25°C is recommended.

7.3. Specific end use(s)

Cleaner

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Propan-2-ol 67-63-0 [PROPAN-2-OL]	400	999	Time Weighted Average (TWA):		EH40 WEL
Propan-2-ol 67-63-0 [PROPAN-2-OL]	500	1.250	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]	200		Time Weighted Average (TWA):		IR_OEL
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]	400		Short Term Exposure Limit (STEL):	15 minutes	IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Propan-2-ol 67-63-0	aqua (freshwater)		140,9 mg/l				
Propan-2-ol 67-63-0	aqua (marine water)		140,9 mg/l				
Propan-2-ol 67-63-0	sediment (freshwater)				552 mg/kg		
Propan-2-ol 67-63-0	sediment (marine water)				552 mg/kg		
Propan-2-ol 67-63-0	Soil				28 mg/kg		
Propan-2-ol 67-63-0	aqua (intermittent releases)		140,9 mg/l				
Propan-2-ol 67-63-0	sewage treatment plant (STP)		2251 mg/l				
Propan-2-ol 67-63-0	oral				160 mg/kg		
Titanium tetrabutanolate 5593-70-4	aqua (freshwater)		0,08 mg/l				
Titanium tetrabutanolate 5593-70-4	aqua (intermittent releases)		2,25 mg/l				
Titanium tetrabutanolate 5593-70-4	aqua (marine water)		0,008 mg/l				
Titanium tetrabutanolate 5593-70-4	sewage treatment plant (STP)		65 mg/l				
Titanium tetrabutanolate 5593-70-4	sediment (freshwater)				0,069 mg/kg		
Titanium tetrabutanolate 5593-70-4	sediment (marine water)				0,007 mg/kg		
Titanium tetrabutanolate 5593-70-4	Soil				0,017 mg/kg		
Titanium tetrabutanolate 5593-70-4	Predator						no potential for bioaccumulation

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Propan-2-ol 67-63-0	Workers	dermal	Long term exposure - systemic effects		888 mg/kg	
Propan-2-ol 67-63-0	Workers	inhalation	Long term exposure - systemic effects		500 mg/m3	
Propan-2-ol 67-63-0	General population	dermal	Long term exposure - systemic effects		319 mg/kg	
Propan-2-ol 67-63-0	General population	inhalation	Long term exposure - systemic effects		89 mg/m3	
Propan-2-ol 67-63-0	General population	oral	Long term exposure - systemic effects		26 mg/kg	
Titanium tetrabutanolate 5593-70-4	General population	oral	Long term exposure - systemic effects		3,75 mg/kg	no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	General population	dermal	Long term exposure - systemic effects		37,5 mg/kg	no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	General population	inhalation	Long term exposure - systemic effects		152 mg/m3	no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	Workers	inhalation	Long term exposure - systemic effects		127 mg/m3	no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	Workers	inhalation	Long term exposure - local effects			no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	Workers	dermal	Long term exposure - systemic effects			no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	Workers	dermal	Long term exposure - local effects			no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	General population	inhalation	Long term exposure - local effects			no potential for bioaccumulation
Titanium tetrabutanolate 5593-70-4	General population	dermal	Long term exposure - local effects			no potential for bioaccumulation

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Use only in well ventilated areas.

Respiratory protection:

In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).

This recommendation should be matched to local conditions.

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Goggles which can be tightly sealed.
Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.
Protective clothing that covers arms and legs.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway), or equivalent.

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Delivery form	liquid
Colour	Clear
Odor	alcohol-like
Physical state	liquid
Melting point	Not applicable, Product is a liquid
Solidification temperature	< -50 °C (< -58 °F)
Initial boiling point	82 °C (179.6 °F)
Flammability	Flammable liquid
Explosive limits	
lower [mass/vol]	2 g/m ³
lower	2,0 % (V);
upper [mass/vol]	12 g/m ³
upper	13,4 % (V);
Flash point	12,00 °C (53.6 °F); no method / method unknown
Auto-ignition temperature	425 °C (797 °F)
Decomposition temperature	Not applicable, Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen conditions of use
pH	5 - 6
(20 °C (68 °F); Conc.: 10 % product; Solvent: Demineralised water)	
Viscosity (kinematic)	2,43 mm ² /s
(20 °C (68 °F);)	
Solubility (qualitative)	Miscible
(20 °C (68 °F); Solvent: Water)	
Partition coefficient: n-octanol/water	Not applicable
	Mixture
Vapour pressure	43 hPa
(20 °C (68 °F))	
Vapour pressure	229 hPa
(50 °C (122 °F))	
Density	0,78 - 0,79 g/cm ³ no method / method unknown
(20 °C (68 °F))	
Relative vapour density:	2
(20 °C)	
Particle characteristics	Not applicable

Product is a liquid

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidizers.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Heat, flames, sparks and other sources of ignition.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

No decomposition if used according to specifications.

SECTION 11: Toxicological information

General toxicological information:

An allergic reaction cannot be excluded after repeated skin contact.

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

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Propan-2-ol 67-63-0	LD50	5.840 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
Titanium tetrabutanolate 5593-70-4	LD50	3.122 mg/kg	rat	not specified
Titanium tetrabutanolate 5593-70-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Propan-2-ol 67-63-0	LD50	12.870 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Titanium tetrabutanolate 5593-70-4	LD50	5.300 mg/kg	rabbit	not specified

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Titanium tetrabutanolate 5593-70-4	LC50	11 mg/l	dust/mist	4 h	rat	not specified

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Propan-2-ol 67-63-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Propan-2-ol 67-63-0	Category II		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Propan-2-ol 67-63-0	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Propan-2-ol 67-63-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propan-2-ol 67-63-0	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Propan-2-ol 67-63-0		inhalation: vapour	104 w 6 h/d, 5 d/w	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Propan-2-ol 67-63-0	NOAEL P 853 mg/kg	One generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One-Generation Reproduction Toxicity Study)
Propan-2-ol 67-63-0	NOAEL P 500 mg/kg NOAEL F1 1.000 mg/kg	Two generation study	oral: gavage	rat	equivalent or similar to OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

STOT-single exposure:

No data available.

STOT-repeated exposure:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Propan-2-ol 67-63-0		inhalation: vapour	104 w 6 h/d, 5 d/w	rat	OECD Guideline 451 (Carcinogenicity Studies)

Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances CAS-No.	Viscosity (kinematic) Value	Temperature	Method	Remarks
Propan-2-ol 67-63-0	1,8 mm ² /s	40 °C	ASTM Standard D7042	

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information**General ecological information:**

Do not empty into drains, soil or bodies of water.

12.1. Toxicity**Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Propan-2-ol 67-63-0	LC50	> 9.640 - 10.000 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (aquatic invertebrates):

No data available.

Chronic toxicity (aquatic invertebrates):

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Propan-2-ol 67-63-0	NOEC	30 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Propan-2-ol 67-63-0	NOEC	1.000 mg/l	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Titanium tetrabutanolat 5593-70-4	EC50	225 mg/l	96 h	Algae, algal mat (Algae)	not specified

Toxicity (microorganisms):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %	30 d	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)
Titanium tetrabutanolat 5593-70-4	readily biodegradable	aerobic	> 60 %	28 d	OECD 301 A - F

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Propan-2-ol 67-63-0	0,05		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	PBT / vPvB
Propan-2-ol 67-63-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Titanium tetrabutanolat 5593-70-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users.

SECTION 14: Transport information

14.1. UN number or ID number

ADR	1219
RID	1219
ADN	1219
IMDG	1219
IATA	1219

14.2. UN proper shipping name

ADR	ISOPROPANOL
RID	ISOPROPANOL
ADN	ISOPROPANOL
IMDG	ISOPROPANOL
IATA	Isopropanol

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable Tunnelcode: (D/E)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Not applicable
VOC content (2010/75/EU)	99,8 %

VOC Paints and Varnishes (EU):

Regulatory Basis:	Directive 2004/42/EC
Product (sub)category:	B(a) Preparatory and cleaning products
Phase I (from 1.1.2007):	850 g/l
max. VOC content:	780,5 g/l

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

ED:	Substance identified as having endocrine disrupting properties
EU OEL:	Substance with a Union workplace exposure limit
EU EXPLD 1:	Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2	Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC:	Substance of very high concern (REACH Candidate List)
PBT:	Substance fulfilling persistent, bioaccumulative and toxic criteria
PBT/vPvB:	Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very bioaccumulative criteria
vPvB:	Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

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This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.