

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# 2-Propanol / toluene / chloroform / water mixture mixed 100 : 100 : 100 : 3 volumetrically for deter

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

### 1.1. Product identifier

2-Propanol / toluene / chloroform / water mixture mixed 100: 100: 3 volumetrically for deter

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

## Uses advised against

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

## **Further Information**

This product is a mixture. REACH Registration Number see section 3.

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Flam. Liq. 2; H225

Acute Tox. 3; H331

Acute Tox. 4; H302

Asp. Tox. 1; H304

Skin Irrit. 2; H315

Eye Irrit. 2; H319

Muta. 2; H341

Carc. 2; H351

Repr. 2; H361d

STOT SE 3; H336

STOT RE 1; H372 STOT RE 2; H373

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

### Regulation (EC) No 1272/2008



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## Hazard components for labelling

trichloromethane

toluene

propan-2-ol; isopropyl alcohol; isopropanol

Signal word: Danger

Pictograms:







#### **Hazard statements**

H225	Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.

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.

P260 Do not breathe mist/vapours/spray.

P308 IF exposed or concerned:

P310 Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P403+P235 Store in a well-ventilated place. Keep cool.

## Special labelling of certain mixtures

For use in industrial installations only.

### 2.3. Other hazards

No data available

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures



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### Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) N	o 1272/2008)	•	
67-66-3	trichloromethane			45 - < 50 %
	200-663-8	602-006-00-4	01-2119486657-20	
	Carc. 2, Muta. 2, Repr. 2, Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 1; H351 H341 H361d H331 H302 H315 H319 H336 H372			
108-88-3	toluene			25 - < 30 %
	203-625-9	601-021-00-3	01-2119471310-51	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H225 H361d H315 H336 H373 H304 H412			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			20 - < 25 %
	200-661-7	603-117-00-0		
	Flam. Liq. 2, Eye Irrit. 2, STOT S	E 3; H225 H319 H336	•	

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity			
	Specific Conc. I	Limits, M-factors and ATE				
67-66-3	200-663-8	trichloromethane	45 - < 50 %			
	inhalation: ATE	E = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); oral: LD50 = 908				
108-88-3	203-625-9	toluene	25 - < 30 %			
	inhalation: LC5	0 = 28,1 mg/l (vapours); dermal: LD50 = > 5000 mg/kg; oral: LD50 = 5580 mg/kg				

## **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

## **General information**

Self-protection of the first aider

#### After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Call a physician immediately.

## After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

## After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

## After ingestion

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.



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

Irritant — skin irritation and eye damage, Headache

Dizziness, Dizziness

Vomiting, Inebriation

Spasms, Circulatory collapse

Respiratory complaints, Dyspnoea

Unconsciousness

Narcotic effects

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

No data available

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

### Suitable extinguishing media

Foam.

Extinguishing powder

Carbon dioxide (CO2)

## Unsuitable extinguishing media

no restriction

#### 5.2. Special hazards arising from the substance or mixture

Combustible liquids

Beware of reignition.

Hazardous combustion products

In case of fire may be liberated:

Carbon dioxide (CO2) Carbon monoxide

Hydrogen chloride (HCI)

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Heating causes rise in pressure with risk of bursting.

## 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

## **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

### **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

## General advice

Keep away from sources of ignition - No smoking.

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

Take action to prevent static discharges.

## For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.



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**Emergency procedures** 

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

#### For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

#### 6.3. Methods and material for containment and cleaning up

#### For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

#### Other information

Provide adequate ventilation.

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

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

## 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

## Advice on safe handling

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

#### Advice on protection against fire and explosion

Take action to prevent static discharges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

Draw up and observe skin protection programme.

### Further information on handling

Take off immediately all contaminated clothing and wash it before reuse.

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

## 7.2. Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place.

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

Store in a place accessible by authorized persons only.



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## Further information on storage conditions

Keep cool. Protect from sunlight.

Protect against: Light

## 7.3. Specific end use(s)

Laboratory chemicals

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
67-66-3	Chloroform	2	9.8		TWA (8 h)	
67-63-0	Propan-2-ol	200	-		TWA (8 h)	
		400	-		STEL (15 min)	
108-88-3	Toluene	50	192		TWA (8 h)	
		100	384		STEL (15 min)	

## **Biological limit values**

CAS No	Substance	Parameter	Value	Test material	Sampling time
108-88-3	Toluene	Toluene	0.02 mg/L		Prior to last shift of workweek
67-63-0	2-Propanol	Acetone	40 mg/L	-	End of shift at end of workweek



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## **DNEL/DMEL values**

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
67-66-3	trichloromethane				
Worker DNEL,	long-term	inhalation	systemic	2,5 mg/m³	
Worker DNEL,	acute	inhalation	systemic	333 mg/m³	
Worker DNEL,	long-term	inhalation	local	2,5 mg/m³	
Worker DNEL,	long-term	dermal	systemic	0,94 mg/kg bw/day	
Consumer DN	EL, long-term	inhalation	systemic	0,18 mg/m³	
108-88-3	toluene				
Worker DNEL,	long-term	inhalation	systemic	192 mg/m³	
Worker DNEL,	acute	inhalation	systemic	384 mg/m³	
Worker DNEL,	long-term	inhalation	local	192 mg/m³	
Worker DNEL,	acute	inhalation	local	384 mg/m³	
Worker DNEL,	long-term	dermal	systemic	384 mg/kg bw/day	
Consumer DN	EL, long-term	inhalation	systemic	56,5 mg/m³	
Consumer DN	EL, acute	inhalation	systemic	226 mg/m³	
Consumer DN	EL, long-term	inhalation	local	56,5 mg/m³	
Consumer DN	EL, acute	inhalation	local	226 mg/m³	
Consumer DN	EL, long-term	dermal	systemic	226 mg/kg bw/day	
Consumer DN	EL, long-term	oral	systemic	8,13 mg/kg bw/day	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
Worker DNEL,	long-term	inhalation	systemic	500 mg/m³	
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day	
Consumer DNEL, long-term		inhalation	systemic	89 mg/m³	
Consumer DN	EL, long-term	dermal	systemic	319 mg/kg bw/day	
Consumer DN	EL, long-term	oral	systemic	26 mg/kg bw/day	



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#### **PNEC values**

CAS No	Substance	
Environmen	tal compartment	Value
67-66-3	trichloromethane	
Freshwater		0,146 mg/l
Freshwater	(intermittent releases)	0,133 mg/l
Marine wate	r	0,015 mg/l
Freshwater	sediment	0,45 mg/kg
Marine sedir	ment	0,09 mg/kg
Micro-organ	sms in sewage treatment plants (STP)	0,048 mg/l
Soil		0,56 mg/kg
108-88-3	toluene	
Freshwater		0,68 mg/l
Freshwater	(intermittent releases)	0,68 mg/l
Marine wate	г	0,68 mg/l
Freshwater	sediment	16,39 mg/kg
Marine sedir	ment	16,39 mg/kg
Micro-organ	sms in sewage treatment plants (STP)	13,61 mg/l
Soil		2,89 mg/kg
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater		140,9 mg/l
Freshwater	(intermittent releases)	140,9 mg/l
Marine wate	r	140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sedir	nent	552 mg/kg
Secondary p	poisoning	160 mg/kg
Micro-organ	sms in sewage treatment plants (STP)	2251 mg/l
Soil		28 mg/kg

### 8.2. Exposure controls

## Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

## Individual protection measures, such as personal protective equipment

## Eye/face protection

goggles

Face protection umbrella

### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 890 Vitoject®
Suitable material: FKM (fluoro rubber) 0,7 mm
Wearing time with permanent contact: > 480 min



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By short-term hand contact

Trade name/designation: KCL 890 Vitoject® Suitable material: FKM (fluoro rubber) 0,7 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

#### Skin protection

Take off immediately all contaminated clothing and wash it before reuse.

Wear fire resistant or flame retardant clothing.

Wash hands and face before breaks and after work and take a shower if necessary.

#### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

Danger of explosion

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: clear

Odour: characteristic
Odour threshold: No data available

Melting point/freezing point:

No data available
Boiling point or initial boiling point and

>35 °C

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available <21 °C Flash point: Auto-ignition temperature: No data available Decomposition temperature: No data available No data available pH-Value: No data available Viscosity / kinematic: Water solubility: No data available

Solubility in other solvents

No data available

Dissolution rate: No data available Partition coefficient n-octanol/water: No data available Dispersion stability: No data available Vapour pressure: No data available Vapour pressure: No data available Density: 1,0445 g/cm<sup>3</sup> Relative density: No data available Bulk density: No data available



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Relative vapour density:

Particle characteristics:

No data available

No data available

### 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Sustaining combustion:

Sustaining combustion

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

No data available

### Other safety characteristics

No data available Evaporation rate: Solvent separation test: No data available Solvent content: No data available Solid content: No data available Sublimation point: No data available No data available Softening point: Pour point: No data available No data available Viscosity / dynamic: No data available Flow time: No data available

# Further Information No data available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Vapours may form explosive mixtures with air.

## 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

## 10.3. Possibility of hazardous reactions

Oxidising agent

Nitric acid

Acetic acid

Strong acid

## 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

Plastic articles

Rubber articles

## 10.6. Hazardous decomposition products

**SECTION 5: Firefighting measures** 

## **Further information**

No data available

# **SECTION 11: Toxicological information**

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



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#### Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

### **Acute toxicity**

Toxic if inhaled.

Harmful if swallowed.

### **ATEmix** calculated

ATE (oral) 1942 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 6,420 mg/l; ATE (inhalation dust/mist) 1,069 mg/l

CAS No	Chemical name	Chemical name					
	Exposure route	Dose		Species	Source	Method	
67-66-3	trichloromethane						
	oral	LD50 mg/kg	908	Rat	Toxicology and Applied Pharmacology 52,	OECD Guideline 401	
	inhalation vapour	ATE	3 mg/l				
	inhalation dust/mist	ATE	0,5 mg/l				
108-88-3	toluene						
	oral	LD50 mg/kg	5580	Rat	Toxicology 4, 5-15 (1975)	EU Method B.1	
	dermal	LD50 mg/kg	> 5000	Rabbit	American Industrial Hygiene Association	Study investigated mortality in groups o	
	inhalation (4 h) vapour	LC50	28,1 mg/l	Rat	Study report (1980)	OECD Guideline 403	

## Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

### Sensitising effects

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

### Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (trichloromethane)

Suspected of causing cancer. (trichloromethane)

Suspected of damaging the unborn child. (trichloromethane; toluene)

### STOT-single exposure

May cause drowsiness or dizziness. (trichloromethane; toluene; propan-2-ol; isopropyl alcohol; isopropanol)

#### STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure. (trichloromethane)

May cause damage to organs through prolonged or repeated exposure. (toluene)

#### **Aspiration hazard**

May be fatal if swallowed and enters airways.

## Information on likely routes of exposure

There are no data available on the mixture itself.

## Specific effects in experiment on an animal

There are no data available on the mixture itself.

## Additional information on tests

There are no data available on the mixture itself.

## **Practical experience**

There are no data available on the mixture itself.

## 11.2. Information on other hazards



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## **Endocrine disrupting properties**

There are no data available on the mixture itself.

#### Other information

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

## **Further information**

Irritant — skin irritation and eye damage, Headache Dizziness, Dizziness Vomiting, Inebriation Spasms, Circulatory collapse Respiratory complaints, Dyspnoea

Unconsciousness

Narcotic effects

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Harmful to aquatic life with long lasting effects.



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CAS No	Chemical name								
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
67-66-3	trichloromethane								
	Acute fish toxicity	LC50 171 mg/l	103 -	96 h	Pimephales promelas	Bulletin of Environmental Contamination	Method after: Procedures recommended by		
	Acute algae toxicity	ErC50 mg/l	13,3	72 h	Chlamydomonas reinhardtii	Environmental Science and Pollution Rese	A modified cell multiplication inhibitio		
	Acute crustacea toxicity	EC50 mg/l	152,5	48 h	other aquatic mollusc: Crassostrea gigas	Study report (2002)	other: ASTM Method E724-94		
	Crustacea toxicity	NOEC	13 mg/l	21 d	Daphnia magna	Water Research 23(4), 501-510 (1989)	other: Recommendation of the		
	Acute bacteria toxicity	EC50	840 mg/l	0,5 h	activated sludge of a predominantly domestic sewag	Toxicity Assessment: An International Jo	OECD Guideline 209		
108-88-3	toluene								
	Acute fish toxicity	LC50	5,5 mg/l	96 h	Oncorhynchus kisutch	Transactions A. Fish. Soc. 110, 430-436.	Fry were exposed to toluene in a flow th		
	Acute algae toxicity	ErC50 mg/l	> 433	96 h	Pseudokirchneriella subcapitata	REACh Registration Dossier	Method: other		
	Acute crustacea toxicity	EC50 mg/l	11,5	48 h	Daphnia magna	REACh Registration Dossier	Method: other		
	Fish toxicity	NOEC mg/l	1,39	40 d	Oncorhynchus kisutch	Transactions A. Fish. Soc. 110, 430-436.	Fry were exposed to toluene in a flow th		
	Algae toxicity	NOEC mg/l	> 400	7 d	Scenedesmus quadricauda	REACh Registration Dossier	Method: other		
	Crustacea toxicity	NOEC mg/l	0,74	7 d	Ceriodaphnia dubia	Ecotoxicol. Environ. Saf. 39, 136-146. (	other: US EPA 600/4-91-003		
67-63-0	propan-2-ol; isopropyl alc	ohol; isoprop	panol						
	Acute fish toxicity	LC50 mg/l	10000	96 h	Pimephales promelas	Publication (1983)	OECD Guideline 203		

## 12.2. Persistence and degradability

There are no data available on the mixture itself.

## 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

## Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-66-3	trichloromethane	1,97
108-88-3	toluene	2,73
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05



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#### BCF

CAS No	Chemical name	BCF	Species	Source
67-66-3	trichloromethane	690	Selenastrum capricornutum	Environmental Scienc
108-88-3	toluene	90	Leuciscus idus melanotus	Chemosphere 14 (10).

#### 12.4. Mobility in soil

There are no data available on the mixture itself.

## 12.5. Results of PBT and vPvB assessment

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

## 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

Do not allow to enter into surface water or drains.

Avoid release to the environment.

#### **Further information**

There are no data available on the mixture itself.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

## **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not empty into drains.

## Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number or ID number: UN 1992

14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (toluene, trichloromethane)

14.3. Transport hazard class(es): 3 14.4. Packing group: Ш Hazard label: 3+6.1Classification code: FT1 **Special Provisions:** 274 Limited quantity: 1 L Excepted quantity: F2 Transport category: 2 Hazard No: 336 Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1992

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, TOXIC, N.O.S. (toluene, trichloromethane)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3+6.1Classification code:FT1



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Special Provisions:274 802Limited quantity:1 LExcepted quantity:E2

Marine transport (IMDG)

**14.1. UN number or ID number:** UN 1992

14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (toluene, trichloromethane)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3+6.1Special Provisions:274Limited quantity:1 LExcepted quantity:E2EmS:F-E. S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1992

14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (toluene, trichloromethane)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3+6.1Special Provisions:A3Limited quantity Passenger:1 LPassenger LQ:Y341Excepted quantity:E2

IATA-packing instructions - Passenger:352IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:364IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

## **SECTION 15: Regulatory information**

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

## **EU** regulatory information

Restrictions on use (REACH, annex XVII): Entry 3, Entry 32, Entry 40, Entry 48

Information according to Directive

2012/18/EU (SEVESO III):

P5c FLAMMABLE LIQUIDS

## **National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

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

child-bearing age.

Water hazard class (D): 3 - highly hazardous to water

## **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 2,12.



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## Abbreviations and acronyms

Flam. Liq: Flammable liquid Acute Tox: Acute toxicity Asp. Tox: Aspiration hazard Skin Irrit: Skin irritation Eye Irrit: Eye irritation

Muta: Germ cell mutagenicity Carc: Carcinogenicity Repr: Reproductive toxicity

STOT SE: Specific target organ toxicity - single exposure STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Chronic: Chronic aquatic hazard

### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 3; H331	Calculation method
Acute Tox. 4; H302	Calculation method
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Muta. 2; H341	Calculation method
Carc. 2; H351	Calculation method
Repr. 2; H361d	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 1; H372	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	Calculation method

## Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

## **Further Information**

H412

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Harmful to aquatic life with long lasting effects.





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

2-Propanol / toluene / chloroform / water mixture mixed 100 : 100 : 100 : 3 volumetrically for deter

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(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)