Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.11.2023 Version number 5 (replaces version 4) Revision: 13.11.2023

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

· **1.1 Product identifier**

· **Product name: Polyacrylate Solvent A3**
· **Chemical Identification:** chloroform / trichloromethane

· **Catalog number:** 56Z003498, 56L0034, 56L003430, 56L003450, 56L003492, 56U003430, 56U003450, 56U003492, SDT087

· **CAS No.:**
67-66-3

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

· **Application of the substance / the preparation:** Reagent for water analysis

· **1.3 Details of the supplier of the safety data sheet**

· **Supplier:**
Tintometer GmbH
Schleefstraße 8-12
44287 Dortmund
Made in Germany
www.lovibond.com
phone: +49 (0)231 94510-0
e-mail: sales@lovibond.com

The Tintometer Limited
Lovibond® House
Sun Rise Way
Amesbury
Wiltshire SP4 7GR
United Kingdom
phone : +44 1980 664800
e-mail: SDS@lovibond.uk

· **Informing department:**
e-mail: sds@lovibond.com
Product Safety Department

· **1.4 Emergency telephone number:**
+44 1235 239670
Languages: English

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

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


GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.
Repr. 2 H361d Suspected of damaging the unborn child.
STOT RE 1 H372 Causes damage to the kidneys and the liver through prolonged or repeated exposure.


GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.11.2023 Version number 5 (replaces version 4) Revision: 13.11.2023

Product name: Polyacrylate Solvent A3

(Contd. of page 1)

Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the GB CLP regulation.
· **Hazard pictograms**

GHS06 GHS08

· **Signal word** Danger
· **Hazard-determining components of labelling:**
trichloromethane
· **Hazard statements**
H302 Harmful if swallowed.
H331 Toxic if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H361d Suspected of damaging the unborn child.
H372 Causes damage to the kidneys and the liver through prolonged or repeated exposure.
· **Precautionary statements**
P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P302+P352 IF ON SKIN: Wash with plenty of water.
P405 Store locked up.
· **Additional information:**
Restricted to professional users.

· **2.3 Other hazards**
Contact with skin and inhalation of aerosols/ vapours of the preparation should be avoided.
Vapours have anaesthetic effect.
CAS 67-66-3: Danger by skin resorption.
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

· **Results of PBT and vPvB assessment**
Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.
· **Determination of endocrine-disrupting properties**
The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

· **3.1 Substances**
· **CAS No. Designation:**
CAS: 67-66-3 trichloromethane
· **Identification number(s):**
· **EC No:** 200-663-8
· **Index No:** 602-006-00-4
· **Acute toxicity estimate (ATE) values** LC50/4h inhalative: 3 mg/l
· **Impurities and stabilising additives:** CAS 513-35-9: ≥ 0.001% - ≤ 0.015%

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information**
Personal protection for the First Aider!
Instantly remove any clothing soiled by the product.
· **After inhalation**
Supply fresh air or oxygen; call for doctor.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

(Contd. of page 2)

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After skin contact**
Instantly rinse with water.
Seek medical treatment.

· **After eye contact** Rinse opened eye for several minutes (at least 15 min) under running water. Then consult doctor.

· **After swallowing**
Rinse out mouth and then drink 1-2 glasses of water.
Do not induce vomiting; instantly call for medical help.

· **4.2 Most important symptoms and effects, both acute and delayed:**
irritations
Drying-out effect resulting in rough and chapped skin.
absorption
after inhalation:
dizziness
drowsiness
headache
fatigue
cardiovascular disorders
unconsciousness
respiratory paralysis
after swallowing:
pain
vomiting
narcotic conditions

· **Danger**
Danger of impaired breathing.
Danger of disturbed cardiac rhythm.
Danger of pulmonary oedema.
Condition may deteriorate with alcohol consumption.

· **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** Use fire fighting measures that suit the environment.

· **5.2 Special hazards arising from the substance or mixture**
The product is not combustible.
Formation of toxic gases is possible during heating or in case of fire.
Can be released in case of fire:
Phosgene gas
Hydrogen chloride (HCl)
Carbon monoxide (CO) and carbon dioxide (CO_2)

· **5.3 Advice for firefighters**

· **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.

· **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

· **Advice for non-emergency personnel:**
Wear protective equipment. Keep unprotected persons away.
Avoid substance contact.
Do not breathe vapors/spray.
Ensure adequate ventilation
Use breathing protection against the effects of fumes/dust/aerosol.

· **Advice for emergency responders:** Protective equipment: see section 8

· **6.2 Environmental precautions:**
Damp down gases/fumes/haze with water spray jet.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

(Contd. of page 3)

Do not allow product to reach sewage system or water bodies.
If material reaches soil inform authorities responsible for such cases.

· **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, universal binders).
Dispose of contaminated material as waste according to item 13.

· **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

· **Advice on safe handling:**
Open and handle container with care.
Work only in fume cupboard.
Prevent formation of aerosols.

· **Hygiene measures:**
Do not inhale gases / fumes / aerosols.
Do not get in eyes, on skin, or on clothing.
Take off immediately all contaminated clothing.
Store protective clothing separately.
Wash hands during breaks and at the end of the work.
Do not eat, drink or smoke when using this product.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Requirements to be met by storerooms and containers:**
Store in cool location.
Photo-sensitive product. Store in brown-glass or stainless steel containers.
Unsuitable material for container: plastics
Unsuitable material for container: aluminium.

· **Information about storage in one common storage facility:** Store away from oxidising agents.

· **Further information about storage conditions:**
Store in a locked cabinet or with access restricted to technical experts or their assistants.
Protect from heat and direct sunlight.
Store container in a well ventilated position.
Store in the dark.
Protect from the effects of light.
Protect from humidity and keep away from water.

· **Recommended storage temperature:** 20°C +/- 5°C

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

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
CAS: 67-66-3 trichloromethane	
WEL (Great Britain)	Long-term value: 9.9 mg/m³, 2 ppm Sk
IOELV (European Union)	Long-term value: 10 mg/m³, 2 ppm Skin

· **Regulatory information**
WEL (Great Britain): EH40/2020
IOELV (European Union): (EU) 2019/1831

· **DNELs**
Derived No Effect Level (DNEL)

CAS: 67-66-3 trichloromethane		
Dermal	DNEL	0.94 mg/kg (Worker / long-term /systemic effects)
Inhalative	DNEL	333 mg/m³ (Worker / acute / systemic effects)
		2.5 mg/m³ (Worker / long-term / local effects)

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.11.2023 Version number 5 (replaces version 4) Revision: 13.11.2023

Product name: Polyacrylate Solvent A3

(Contd. of page 4)

		2.5 mg/m³ (Worker / long-term /systemic effects) 0.18 mg/m³ (Consumer / long-term / systemic effects)

· **Recommended monitoring procedures:**
Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

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

· **8.2 Exposure controls**

· **Engineering measures:**
Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
See item 7.

· **Individual protection measures, such as personal protective equipment**
Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.
· **Eye/face protection**
Tightly sealed safety glasses.
Use safety glasses that have been tested and approved in accordance with government standards such as EN 166.
· **Hand protection**
Solvent resistant gloves
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
· **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)
Recommended thickness of the material: ≥ 0.7 mm
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Breakthrough time: > 480 min
· **Other skin protection (body protection):** Solvent resistant protective clothing
· **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
· **Recommended filter device for short term use:** Filter AX

· **Environmental exposure controls** Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **Physical state**	Fluid
· **Form:**	Liquid
· **Colour:**	Colourless
· **Odour:**	Sweetish
· **Odour threshold:**	CAS 67-66-3: 205ppm (Merck)
· **Melting point/Freezing point:**	-63°C
· **Boiling point or initial boiling point and boiling range**	61°C
· **Flammability**	The product is not combustible.
· **Explosive properties:**	Product is not explosive.
· **Lower and upper explosion limit**	
Lower:	Not applicable.
Upper:	Not applicable.
· **Flash point:**	Not applicable.
· **Auto-ignition temperature:**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **pH**	Mixture is non-polar/aprotic.
· **Kinematic viscosity**	Not determined.
· **Solubility**	
· **Water at 20°C:**	8 g/l Not miscible or difficult to mix
· **Organic solvents:**	Miscible with many organic solvents
· **Partition coefficient n-octanol/water (log value)**	1.97 log POW
· **Vapour pressure at 20°C:**	211 hPa

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

(Contd. of page 5)

· **Density and/or relative density**	
· **Density at 20°C:**	1.48 g/cm³
· **Relative density:**	Not determined.
· **Relative gas density**	4.12
· **Particle characteristics**	Not applicable (liquid).

· **9.2 Other information**

· **Information with regard to physical hazard classes**	
· **Corrosive to metals**	Void
· **Other safety characteristics**	
· **Oxidising properties:**	none
· **Additional information**	
· **Organic solvents:**	100.0 %
· **Molecular formula**	CHCl3

SECTION 10: Stability and reactivity

· **10.1 Reactivity** see section 10.3
· **10.2 Chemical stability**
Stable at ambient temperature (room temperature).
Contains the following stabiliser:
CAS 513-35-9: ≥ 0.001% - ≤ 0.015%
heat-sensitive
sensitivity to light
· **10.3 Possibility of hazardous reactions**
Reacts with strong oxidizing agents
Reacts with strong alkali
Reacts with powdered metals
· **10.4 Conditions to avoid** Strong heating (decomposition)
· **10.5 Incompatible materials:**
rubber
various plastics
aluminium
· **10.6 Hazardous decomposition products:**
Phosgen
Hydrogen chloride (HCl)
In case of fire: see section 5.

SECTION 11: Toxicological information

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

· **Acute toxicity**
Harmful if swallowed.
Toxic if inhaled.

· **LD/LC50 values that are relevant for classification:**

CAS: 67-66-3 trichloromethane

Oral	LD50	695 mg/kg (rat) (RTECS)
Inhalative	LC50/4h	3 mg/l (ATE) (Vapour)

· **Skin corrosion/irritation** Causes skin irritation.
· **Serious eye damage/irritation** Causes serious eye irritation.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Suspected of causing cancer.
· **Reproductive toxicity** Suspected of damaging the unborn child.

· **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

(Contd. of page 6)

· **STOT (specific target organ toxicity) -repeated exposure**
Causes damage to the kidneys and the liver through prolonged or repeated exposure.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

· **Information on likely routes of exposure**
The main routes of absorption of trichloromethane (T.) in the workplace are via the respiratory tract and the skin.
Inhaled T. is rapidly absorbed into the blood.
In kinetic studies on humans and laboratory animals, good uptake of T. via intact skin was demonstrated.
In a kinetic study in volunteers, effective absorption via the digestive tract was demonstrated.
In animal studies, T. was better absorbed from aqueous solutions than from oily formulations. [GESTIS]

· **Additional toxicological information:**
CAS: 67-66-3 trichloromethane
. (source: GESTIS) Main toxic effects: acute: Irritant effect on eyes and skin, disruption of the central nervous system (narcotic effect) and cardiac function; Functional disorders and damage to the liver and kidneys chronic: liver damage, also kidney damage in animal experiments and local changes in the nasal mucosa after inhalation Further information: The sweet odor of T. can be perceived from around 200 ppm (approx. 1000 mg/m³). In the case of prolonged or repeated exposure in particular, this does not suffice as a warning effect, since toxic effects occur even below this concentration.

· **11.2 Information on other hazards**
· **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

· **Other information**
This substance / mixture should be handled with particular care.
Other dangerous properties can not be excluded.
According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
CAS: 67-66-3 trichloromethane	
EC50	79 mg/l/48h (Daphnia magna) (IUCLID)
NOEC	120 mg/l (Daphnia magna) (11d)
LC50	18 mg/l/96h (bluegill) (IUCLID)

· **12.2 Persistence and degradability**	
CAS: 67-66-3 trichloromethane	
OECD 301 C	0 % / 14 d (not biodegradable)

· **12.3 Bioaccumulative potential**
BCF = Bioconcentration factor
Pow = n-octanol/wasser partition coefficient
log Pow 1-3 = Not worth-mentioning accumulating in organisms.

CAS: 67-66-3 trichloromethane	
log Pow	1.97 (.)

· **Bioconcentration factor (BCF)**	
CAS: 67-66-3 trichloromethane	
BCF	6 (bluegill) (0,11 mg/l, 14d) (Lepomis macrochirus)

· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects** Avoid transfer into the environment.
· **Water hazard:**
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.11.2023 Version number 5 (replaces version 4) Revision: 13.11.2023

Product name: Polyacrylate Solvent A3

(Contd. of page 7)

Danger to drinking water if even extremely small quantities leak into soil.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to disposers of hazardous waste.

· **European waste catalogue**	
14 06 02*	other halogenated solvents and solvent mixtures

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

SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR, IMDG, IATA**	UN1888
· **14.2 UN proper shipping name**	
· **ADR**	1888 CHLOROFORM
· **IMDG, IATA**	CHLOROFORM
· **14.3 Transport hazard class(es)**	
· **ADR**	
· **Class**	6.1 (T1) Toxic substances.
· **Label**	6.1
· **IMDG, IATA**	
· **Class**	6.1 Toxic substances.
· **Label**	6.1
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	III
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Warning: Toxic substances.
· **Kemler Number:**	60
· **EMS Number:**	F-A,S-A
· **Segregation groups**	(SGG10) Liquid halogenated hydrocarbons
· **Stowage Category**	A
· **Stowage Code**	SW2 Clear of living quarters.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	2

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.11.2023 Version number 5 (replaces version 4) Revision: 13.11.2023

Product name: Polyacrylate Solvent A3

(Contd. of page 8)

· **Tunnel restriction code**	E
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

*
SECTION 15: Regulatory information

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

· **Poisons Act UK**

· **Regulated explosives precursors**
Substance is not listed.

· **Regulated poisons**
Substance is not listed.

· **Reportable explosives precursors**
Substance is not listed.

· **Reportable poisons**
Substance is not listed.

· **Regulation (EU) 2019/1148 on the marketing and use of explosives precursors** not regulated

· **Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)**
Annex I Part 1

· **Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of dual-use items and technology:**
Substance is not listed.

· **Regulation (EC) No 273/2004 on drug precursors**
Substance is not listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.

· **Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:**
Substance is not listed.

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**
Substance is not listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**
Substance is not listed.

· **Substances of very high concern (SVHC) according to REACH, Article 57**
This product does not contain any substances of very high concern above the legal concentration limit of ≥ 0.1% (w / w).
· **Substances of very high concern (SVHC) according to UK REACH**
This product does not contain any substances of very high concern above the legal concentration limit of ≥ 0.1% (w / w).

· **Directive 2012/18/EU (SEVESO III):**
· **Named dangerous substances - ANNEX I** Substance is not listed.
· **Seveso category** H2 ACUTE TOXIC
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 32

· **Information about limitation of use:**
Employment restrictions concerning young persons must be observed (94/33/EC).
Employment restrictions concerning pregnant and lactating women must be observed (92/85/EEC).

· **National regulations**

· **VOC-value EC:** 1479.9 g/l

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

(Contd. of page 9)

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

*
SECTION 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.
This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Training hints** Provide adequate information, instruction and training for operators.

· **Abbreviations and acronyms:**
STOT: specific target organ toxicity
SE: single exposure
RE: repeated exposure
EC50: half maximal effective concentration
IC50: half maximal inhibitory concentration
NOEL or NOEC: No Observed Effect Level or Concentration
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

· **Sources**
Data arise from safety data sheets, reference works and literature.
RTECS (Registry of Toxic Effects of Chemical Substances)
IUCLID (International Uniform Chemical Information Database)
GESTIS- Stoffdatenbank (Substance Database, Germany)
ECHA: European CHemicals Agency http://echa.europa.eu

· *** Data compared to the previous version altered.**