

Version 1.0

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SDS Record Number: CSSS-TCO-010-116817

## Section 1. Identification

**Product identifier:** Tinte 2000 25ml Art.Nr. 1772120000  
**Identification of the product:** See section 3  
**Recommended use:** Ink.  
**Recommended restrictions:** Not available.  
**Details of the supplier of the safety data sheet:**  
**Supplier(Manufacturer):** Weidmüller Interface GmbH & Co. KG  
**Address:** Klingenbergstraße 16, 32758 Detmold, Germany  
**Contact person(E-mail):** info@chemical-check.de, k.schnurbusch@chemical-check.de  
**Telephone:** +49 5231 14-0  
**Fax:** +49 5231 14-292083  
**Emergency number:** +49 (0) 700 / 24 112 112 (WR)

## Section 2. Hazards identification

**Hazard classification of substance or mixture:**

**WHMIS classification:** B2 - Flammable Liquid  
D2B - Toxic material causing other toxic effects

**Label elements:**

**WHIMIS Marks**



**Signal word:**

Danger

**Hazard statement:**

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

**Precautionary statement:**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.  
 Call a poison center /doctor if you feel unwell.  
 In case of fire: Use water jet spray / alcohol resistant foam / CO2 / dry extinguisher for extinction.  
 If eye irritation persists: Get medical advice/attention.  
 Store in a well-ventilated place. Keep cool. Keep container tightly closed.  
 Store locked up.  
 Dispose of contents/container in corroding with local regulation.  
 Not applicable.

#### Other hazards

### Section 3. Composition/information on ingredients

**Substance/Mixture:** Mixture

**Ingredient(s):**

Chemical Name	CAS No.	EC No.	Concentration
2-pyrrolidone	616-45-5	210-483-1	65-70%
butanone	78-93-3	201-159-0	15-20%
Color. C.I. Solvent Black 27	12237-22-8	-	1-5%

### Section 4. First aid measures

**First-aid measures by route of exposure:**

**Inhalation:** Remove person from danger area. Supply person with fresh air and consult doctor according to symptoms. If the person is unconscious, place in a stable side position and consult a doctor.

**Skin contact:** Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

**Eye contact:** Remove contact lenses. Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

**Ingestion:** Rinse the mouth thoroughly with water. Give copious water to drink - consult doctor immediately.

**Most important symptoms and effects, both acute and delayed:** Causes serious eye irritation. May cause drowsiness or dizziness.

**Indication of immediate medical attention and special treatment needed, if necessary:** Treat symptomatically.

### Section 5. Fire-fighting measures

**Suitable extinguishing media:** Use water jet spray / alcohol resistant foam / CO2 / dry extinguisher.

**Unsuitable extinguishing media:** Not available.

**Specific hazards arising from the chemical:** Oxides of carbon, oxides of nitrogen, toxic gases, explosive vapor/air mixture, dangerous vapors heavier than air.

**Protective equipment and precautions for firefighters:** In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

## Section 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Keep unprotected persons away. Remove possible causes of ignition - do not smoke. Ensure sufficient supply of air. Avoid contact with eyes or skin. If applicable, caution - risk of slipping.
<b>Environmental precautions:</b>	If leakage occurs, dam up. Resolve leaks if this possible without risk. Prevent surface and ground-water infiltration, as well as ground penetration. Prevent from entering drainage system. If accidental entry into drainage system occurs, inform responsible authorities.
<b>Methods and materials for containment and cleaning up:</b>	Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.

## Section 7. Handling and storage

<b>Precautions for safe handling:</b>	Ensure good ventilation. Avoid aerosol formation. Avoid inhalation of the vapors. Avoid contact with eyes or skin. Keep away from sources of ignition - Do not smoke. Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Also seal emptied tanks and tanks in the process after they have been used. Observe directions on label and instructions for use. Use working methods according to operating instructions.
<b>Conditions for safe storage, including any incompatibilities:</b>	Keep out of access to unauthorised individuals. Store product closed and only in original packing. Not to be stored in gangways or stair wells. Do not store with flammable or self-igniting materials. Only store at temperatures from 4°C to 25°C. Store in a well-ventilated place.

## Section 8. Exposure controls/personal protection

<b>Exposure limit(s):</b>	butanone (CAS# 78-93-3): The 8-Hour TWA Exposure Value is: 50 ppm. The 15-minute STEL is: 100 ppm.
<b>Engineering measures:</b>	Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.
<b>Individual protection measures:</b>	
<b>Eye/face protection:</b>	Tight fitting protective goggles with side protection (EN 166).
<b>Skin protection:</b>	Protective working clothes with long arms. If OES or MEL is exceeded. Gas mask filter A (EN 14387), code color brown. Observe wearing time limitations for respiratory protection equipment.
<b>Respiratory protection:</b>	
<b>Hand protection:</b>	Chemical resistant protective gloves (EN 374). Protective nitrile gloves (EN 374). Minimum layer thickness in mm: $\geq 0.35$ . Permeation time (penetration time) in minutes: $\geq 480$ . The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

## Section 9. Physical and chemical properties

<b>Appearance:</b>	
<b>Physical state:</b>	Liquid
<b>Form:</b>	Liquid
<b>Color:</b>	Black
<b>Odor:</b>	Characteristic
<b>Odour threshold:</b>	Not available

<b>PH:</b>	Not available
<b>Melting point/Freezing point:</b>	Not available
<b>Initial boiling point and boiling range:</b>	>35 °C
<b>Flash point:</b>	-4 °C (DIN 51755 (Abel-Pensky, closed cup))
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas) :</b>	Not available
<b>Upper/lower flammability or explosive limits:</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>Vapor density:</b>	Not available
<b>Density:</b>	0.981 kg/l (20°C)
<b>Solubility (H<sub>2</sub>O) :</b>	Not available
<b>Partition coefficient (n-octanol/water) :</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Molecular weight:</b>	Not applicable(For mixture)
<b>Molecular formula:</b>	Not applicable(For mixture)
<b>Viscosity:</b>	9 mPas (25°C, DIN 53019)
<b>Specific gravity:</b>	Not available
<b>Explosive properties:</b>	Not available
<b>Solvents content:</b>	Not available

## Section 10. Stability and reactivity

<b>Reactivity:</b>	The substance is stable under normal storage and handling conditions.
<b>Chemical stability:</b>	Material is stable under normal conditions
<b>Possibility of hazardous reactions:</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid:</b>	Contact with incompatible materials. Heating, open flame, ignition sources.
<b>Incompatible materials:</b>	Avoid contact with alkali metals, oxidizing agents, reducing agent.
<b>Hazardous decomposition products:</b>	Oxides of carbon, oxides of nitrogen, toxic gases, explosive vapor/air mixture, dangerous vapors heavier than air.

## Section 11. Toxicological information

### Information on toxicological effects

<b>Likely route of exposure:</b>	Eye contact, Skin contact.
<b>Symptoms related to the physical, chemical and toxicological characteristics –immediate or delayed</b>	The following may occur: Causes serious eye irritation. May cause drowsiness or dizziness.

#### Acute toxicity:

2-pyrrolidone(CAS#616-45-5)

<b>LD50(Oral, Rat):</b>	>2000 mg/kg
<b>LD50(Dermal, Rabbit):</b>	>2000 mg/kg
<b>LC50(Inhalation, Rat):</b>	Not available

#### Acute toxicity:

butanone (CAS#78-93-3)

<b>LD50(Oral, Rat):</b>	>2600 mg/kg
<b>LD50(Dermal, Rabbit):</b>	5000 mg/kg

<b>LC50(Inhalation, Rat):</b>	34.5 mg/l/4h
<b>Skin corrosion/Irritation:</b>	Not classified
<b>Serious eye damage/irritation:</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization:</b>	Not classified
<b>Germ cell mutagenicity:</b>	Not classified
<b>Carcinogenicity:</b>	Not classified
<b>Reproductive toxicity:</b>	Not classified
<b>STOT- single exposure:</b>	May cause drowsiness or dizziness.
<b>STOT-repeated exposure:</b>	Not classified
<b>Aspiration hazard:</b>	Not classified

## Section 12. Ecological information

**Toxicity:** 2-pyrrolidone (CAS#616-45-5)

Acute toxicity	Time	Species	Method	Evaluation	Remarks
LC50	>4600 mg/l	96h	Fish	OECD 203	N/A
EC50	>500mg/l	48h	Daphnia	OECD 202	N/A
EC50	>500 mg/l	72h	Algae	OECD 201	N/A

butanone (CAS#78-93-3)

Acute toxicity	Time	Species	Method	Evaluation	Remarks
LC50	1690 mg/l	96h	Fish	OECD 203	N/A
EC50	308 mg/l	48h	Daphnia	OECD 202	N/A
EC50	1972 mg/l	72h	Algae	OECD 201	N/A

<b>Persistence and degradability:</b>	Butanone (CAS#78-93-3): Ready biodegradability.
<b>Bioaccumulative potential:</b>	Butanone (CAS#78-93-3): Bioaccumulation is unlikely (Log Pow < 1).
<b>Mobility in soil:</b>	No data available.
<b>Other adverse effects:</b>	No data available.

## Section 13. Disposal considerations

<b>Disposal methods:</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Waste from residues/unused products:</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging:</b>	Pay attention to local and national official regulations. Recommendation: Do not perforate, cut up or weld uncleaned container.

## Section 14. Transport information

### ADR

<b>UN number</b>	UN1210
<b>Proper shipping name</b>	Printing ink, flammable
<b>Hazard class</b>	3
<b>Packing group</b>	II
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.

### IATA

<b>UN number</b>	UN1210
<b>Proper shipping name</b>	Printing ink, flammable
<b>Hazard class</b>	3
<b>Packing group</b>	II
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>IMDG</b>	
<b>UN number</b>	UN1210
<b>Proper shipping name</b>	Printing ink, flammable
<b>Hazard class</b>	3
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>EmS</b>	F-E , S-D
<b>Special precautions</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>RID</b>	
<b>UN number</b>	UN1210
<b>Proper shipping name</b>	Printing ink, flammable
<b>Hazard class</b>	3
<b>Packing group</b>	II
<b>Special precautions Read safety</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>TDG</b>	
<b>UN number</b>	UN1210
<b>Proper shipping name</b>	Printing ink, flammable
<b>Hazard class</b>	3
<b>Packing group</b>	II
<b>Special precautions Read safety</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>ADR; IATA; IMDG; RID;TDG</b>	



**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** No information available

## Section 15. Regulatory information

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

**United States of America**

**TSCA list**

All components of this product are on the TSCA inventory.

**Canada**

**DSL:**

All components of this product are on the Canadian DSL.

**WHMIS:**

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the Safety Data Sheet (SDS) contains all of the information required by the CPR.

**GHS classification:**

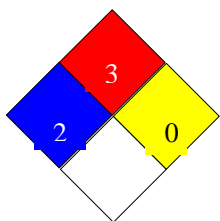
Flammable liquids Category 2

Skin corrosion/irritation Category 2

Specific target organ toxicity, single exposure; Narcotic effects Category 3

**GHS labeling:****HMIS:**

Health – 2, Flammability – 3, Reactivity – 0

**Section 16. Other information****National Fire Protection Association (U.S.A)****Indication of changes:**

Version 1.0 Amended by WHMIS.

**Training instructions:**

Not applicable.

**Further information:**

This information is based upon the present state of our knowledge. This MSDS has been compiled and is solely intended for this product.

**Notice to reader:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.