

Issue date: 04/29/2015

Tinte 2000 25ml Art.Nr. 1772120000
Version 1.0

Revision date: 04/29/2015

1. Identification

Product name	Tinte 2000 25ml Art.Nr. 1772120000
Synonyms	-
CAS #	See section 3
Product code	-
Product use	Ink.
Manufacturer/Supplier	
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 telephone Number:	+49 (0) 700 / 24 112 112 (WR)

2. Hazard(s) identification

GHS classification

Physical hazards	Flammable liquids	Category 2
Health hazards	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity after single exposure	Category 3
Environmental hazards	Not classified	

GHS label elements

Hazard Pictograms



Signal word	Danger
Hazard statement	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statement

Prevention	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.
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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.

Response

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.

Storage

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in corroding with local regulation.

3. Composition / information on ingredients

Components	CAS#	Percent
2-pyrrolidone	616-45-5	65-70%
butanone	78-93-3	15-20%
Color. C.I. Solvent Black 27	12237-22-8	1-5%

5 percent of the mixture consists of component (s) of unknown toxicity.

4. First-aid Measures

First aid procedures

Eye contact

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

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.

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.

Ingestion

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

Notes to physician

Treat symptoms.

5. Fire-fighting measures

Flammable properties

Highly flammable.

Extinguishing media

Suitable extinguishing media

Water jet spray / alcohol resistant foam / CO₂ / dry extinguisher.

Unsuitable extinguishing media

Not available.

Firefighting equipment/instructions

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.

Hazardous combustion products

Oxides of carbon, oxides of nitrogen, toxic gases, explosive vapor/air mixture, dangerous vapors heavier than air.

6. Accidental release measures

Personal precautions

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. For personal protection see section 8.

Environmental precautions

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.

Methods for cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.

7. Handling and storage

Handling

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. For precautions see section 2.2.

Storage

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.

8. Exposure controls / personal protection

Control parameters:

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA:

Source	Ingredient	TWA	STEL	Peak
US OSHA Permissible Exposure Levels (PELs) - Table Z1	butanone	590 mg/m ³ /200 ppm	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	butanone	200 ppm	300 ppm	Not Available
US NIOSH Recommended Exposure Limits (RELs)	butanone	590 mg/m ³ /200 ppm	885 mg/m ³ /300 ppm	Not Available

EMERGENCY LIMITS:

Ingredient	TEEL-1	TEEL-2	TEEL-3
2-pyrrolidone	0.17 ppm	1.9 ppm	19 ppm

Ingredient	Original IDLH	Revised IDLH
2-pyrrolidone	Not Available	Not Available
butanone	3,000 ppm	3,000 [Unch] ppm
Color. C.I. Solvent Black 27	Not Available	Not Available

Exposure controls:

Appropriate engineering controls:

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.

Individual protection measures, such as personal protective equipment:

Eye / face protection

Tight fitting protective goggles with side protection (EN 166).

Skin protection

Chemical resistant protective gloves (EN 374). Protective nitrile gloves (EN 374). Minimum layer thickness in mm: ≥ 0.35 . Permeation time (penetration time) in minutes: ≥ 480 . The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended. Protective working clothes with long arms.

Respiratory protection

If OES or MEL is exceeded. Gas mask filter A (EN 14387), code color brown. Observe wearing time limitations for respiratory protection equipment.

General hygiene considerations

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

9. Physical and chemical properties

Appearance

Physical state

Liquid

Form

Liquid

Color

Black

Odor

Characteristic

Odor threshold

Not available

pH

Not available

Vapor pressure

Not available

Melting point/Freezing point

Not available

initial boiling point and boiling range

>35 °C

Flash point

-4 °C (DIN 51755 (Abel-Pensky, closed cup))

Evaporation rate

Not available

Flammability (solid, gas)

Not available

Explosion limits

Not available

Vapor density

Not available

Relative density

Not available

Solubility (water)

Not available

Partition coefficient	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Specific gravity	Not available
Density	0.981 kg/l (20°C)
Flammability limits in air, upper, %by volume	Not available
Flammability limits in air, lower, % by volume	Not available
VOC	Not available
Percent volatile	Not available
Other data	
Viscosity	9 mPas (25°C, DIN 53019)

10. Stability and reactivity

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Incompatible materials. Heating, open flame, ignition sources.
Incompatible materials	Avoid contact with alkali metals, oxidizing agents, reducing agent.
Hazardous decomposition products	Oxides of carbon, oxides of nitrogen, toxic gases, explosive vapor/air mixture, dangerous vapors heavier than air.
Possibility of hazardous reactions	No dangerous reactions are known.

11. Toxicological information

Toxicokinetics, metabolism and distribution:

Non-human toxicological data:	Not available
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Information on toxicological effects:

Acute toxicity:

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

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

Acute toxicity:

butanone (CAS#78-93-3)

LD50(Oral, Rat):	>2600 mg/kg
LD50(Dermal, Rabbit):	5000 mg/kg
LC50(Inhalation, Rat):	34.5 mg/l/4h

Skin corrosion/Irritation:	Not classified
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Serious eye damage/irritation:	Causes serious eye irritation.
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Respiratory or skin sensitization:	Not classified
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Germ cell mutagenicity:	Not classified
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Carcinogenicity:	Not classified
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Reproductive toxicity:	Not classified
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STOT- single exposure:	May cause drowsiness or dizziness.
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STOT-repeated exposure:	Not classified
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Aspiration hazard:	Not classified
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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	N/A
EC50	>500mg/l	48h	Daphnia	OECD 202	N/A	N/A
EC50	>500 mg/l	72h	Algae	OECD 201	N/A	N/A

butanone (CAS#78-93-3)

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

Persistence and degradability:

butanone (CAS#78-93-3): Ready biodegradability.

Bioaccumulative potential:

butanone (CAS#78-93-3): Bioaccumulation is unlikely (Log Pow < 1).

Mobility in soil:

Not available.

Results of PBT&vPvB assessment:

The mixture does not contain any PBT&vPvB substance.

Other adverse effects:

No known significant effects or critical hazards.

13. Disposal considerations

Disposal instructions

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

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Basic shipping requirements:

UN number	UN1210
Proper shipping name	Printing ink, flammable
Hazard class	3
Packing group	II
Environmental hazards	No

IATA

UN number	UN1210
UN proper shipping name	Printing ink, flammable
Transport hazard class(es)	3
Packing group	II
Environmental hazards	No

IMDG

UN number	UN1210
UN proper shipping name	Printing ink, flammable
Transport hazard class(es)	3

Packing group II
Environmental hazards No

15. Regulatory information

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

2-pyrrolidone (616-45-5) is found on the following regulatory lists	"US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory" List.
butanone (78-93-3) is found on the following regulatory lists	"US - Hawaii Air Contaminant Limits" List. "US - Idaho - Limits for Air Contaminants" List. "US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values" List. "US - Alaska Limits for Air Contaminants" List. "US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants" List. "US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants" "US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory" List.
C.I. Solvent Black 27(12237-22-8) is found on the following regulatory lists	"US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory" List.

16. Other information, including date of preparation or last revision

HMIS® ratings	Health: 2 Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 3 Instability: 0
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
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