

Material safety data sheet for WriteWallPaint whiteboard markers ink

all colours



SDS number: WUXH00065022

Whitebord Ink

Version No:1.0

Safety Data Sheet (Conforms to Regulation (EC) No 1907/2006 and Regulation (EU) No 2015/830)

Issue Date:27/11/2017 S.REACH.DEU.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier White Board Ink Product name Synonyms Not Available Other means of identification Not Available 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses Use of the board marker pen Uses advised against Not Applicable 1.3. Details of the supplier of the safety data sheet Supplier name Address Telephone **Emergency telephone** Importer name Address Telephone Email 1.4. Emergency telephone number Association / Organisation **Emergency telephone numbers** Other emergency telephone numbers **SECTION 2 HAZARDS IDENTIFICATION** 2.1. Classification of the substance or mixture Considered a hazardous mixture according to Reg. (EC) No 1272/2008 and their amendments. Not classified as Dangerous Goods for transport purposes. Classification according to regulation (EC) No 1272/2008 H319 - Eye Irritation Category 2, H336 - Specific target organ toxicity - single exposure Category 3 (narcotic effects) [CLP] 2.2 Label elements Hazard pictogram(s)

Hazard statement(s)

| H319 | Causes serious eye irritation. |
|------|------------------------------------|
| H336 | May cause drowsiness or dizziness. |

Supplementary statement(s)

SIGNAL WORD

WARNING

Not Applicable

CLP classification (additional)

Not Applicable

Precautionary statement(s) General

| P101 | If medical advice is needed, have product container or label at hand. | |
|------|---|--|
| P102 | Keep out of reach of children. | |
| P103 | Read label before use. | |

Precautionary statement(s) Prevention

| P271 | Use only outdoors or in a well-ventilated area. |
|------|--|
| P261 | Avoid breathing mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

Precautionary statement(s) Response

| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | | |
|----------------|--|--|--|
| P312 | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. | | |
| P337+P313 | If eye irritation persists: Get medical advice/attention. | | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | | |

Precautionary statement(s) Storage

| P405 | Store locked up. | |
|-----------|--|--|
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. | |

Precautionary statement(s) Disposal

| P501 | Dispose of contents/container in accordance with local regulations. |
|------|---|

2.3. Other hazards

Cumulative effects may result following exposure*.

 $REACh - Art.57-59: The \ mixture \ does \ not \ contain \ Substances \ of \ Very \ High \ Concern \ (SVHC) \ at \ the \ SDS \ print \ date.$

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

| 1.CAS No 2.EC No 3.Index No 4.REACH No | %[weight] | Name | Classification according to regulation (EC) No 1272/2008 [CLP] |
|---|-----------|---------------------------|--|
| 1.64-17-5 2.200-578-6 3.603-002-00-5 4.Not Available | 50 | <u>ethanol</u> | Flammable Liquid Category 2, Eye Irritation Category 2; H225,H319 |
| 1.67-63-0 2.200-661-7 3.603-117-00-0 4.Not Available | 30 | <u>isopropanol</u> | Flammable Liquid Category 2, Eye Irritation Category 2, Specific target organ toxicity - single exposure Category 3 (narcotic effects); H225, H319, H336 |
| 1.27214-90-0 2.248-333-2 3.Not Available 4.Not Available | 5 | diisooctyl sebacate | Not Classified |
| 1.123-95-5 2.204-666-5 3.Not Available 4.Not Available | 5 | butyl stearate | Not Classified |
| 1.103-23-1 2.203-090-1 3.Not Available 4.Not Available | 3 | dioctyl adipate | Not Classified |
| 1.1333-86-4 2.215-609-9 3.Not Available 4.Not Available | 0-7 | C.I. Pigment Black | Not Classified |
| 1.147-14-8 2.205-685-1 3.Not Available 4.Not Available | 0-7 | C.I. Pigment Blue 15:3 | Not Classified |

| 1.6535-46-2 2.229-440-3 3.Not Available 4.Not Available | 0-7 | C.I. Pigment Red | Not Classified |
|--|-----|---------------------------|----------------|
| 1.1328-53-6 2.215-524-7 3.Not Available 4.Not Available | 0-7 | C.I. Pigment Green 7 | Not Classified |
| 1.2786-76-7 2.220-509-3 3.Not Available 4.Not Available | 0-7 | C.I. Pigment Red | Not Classified |
| 1.5567-15-7 2.226-939-8 3.611-024-00-1 4.Not Available | 0-7 | C.I. Pigment Yellow 83 | Not Classified |
| 1.6358-30-1 2.228-767-9 3.Not Available 4.Not Available | 0-5 | C.I. Pigment Violet 23 | Not Classified |

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

| Eye Contact | If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|---|
| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. For thermal burns: Decontaminate area around burn. Consider the use of cold packs and topical antibiotics. |
| Inhalation | If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. |
| Ingestion | Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically

Periodic medical surveillance should be carried out on persons in occupations exposed to the manufacture or bulk handling of the product and this should include hepatic function tests and urinalysis examination. [ILO Encyclopaedia]

For acute or short term repeated exposures to ethanol:

- Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- ▶ Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
- Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
- Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
- $\,\blacktriangleright\,$ Fructose administration is contra-indicated due to side effects.

For acute or short term repeated exposures to isopropanol:

- Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
- Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
- There are no antidotes.
- ▶ Management is supportive. Treat hypotension with fluids followed by vasopressors.
- Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
- Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

5.3. Advice for firefighters

| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. |
|-----------------------|--|
| Fire/Explosion Hazard | Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2) hydrogen chloride phosgene nitrogen oxides (NOx) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. |

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

| Minor Spills | Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. |
|--------------|--|
| Major Spills | Moderate hazard. ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. |

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

| Safe handling | Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. |
|-------------------------------|--|
| Fire and explosion protection | ▶ DO NOT allow clothing wet with material to stay in contact with skin See section 5 |
| Other information | Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. |

| Suitable container | PP container. Check all containers are clearly labelled and free from leaks. |
|-------------------------|--|
| Storage incompatibility | Isopropanol (syn: isopropyl alcohol, IPA): • forms ketones and unstable peroxides on contact with air or oxygen; the presence of ketones especially methyl ethyl ketone (MEK, 2-butanone) will accelerate the rate of peroxidation • reacts violently with strong oxidisers, powdered aluminium (exothermic), crotonaldehyde, diethyl aluminium bromide (ignition), dioxygenyl tetrafluoroborate (ignition/ ambient temperature), chromium trioxide (ignition), potassium-tert-butoxide (ignition), nitroform (possible explosion), oleum (pressure increased in closed container), cobalt chloride, aluminium triisopropoxide, hydrogen plus palladium dust (ignition), oxygen gas, phosgene, phosgene plus iron salts (possible explosion), sodium dichromate plus sulfuric acid (exothermic/ incandescence), triisobutyl aluminium • reacts with phosphorus trichloride forming hydrogen chloride gas • reacts, possibly violently, with alkaline earth and alkali metals, strong acids, strong caustics, acid anhydrides, halogens,aliphatic amines, aluminium isopropoxide, isocyanates, acetaldehyde, barium perchlorate (forms highly explosive perchloric ester compound), benzoyl peroxide, chromic acid, dialkytzincs, dichlorine oxide, ethylene oxide (possible explosion), hexamethylene diisocyanate (possible explosion), hydrogen peroxide (forms explosive compound), hypochlorous acid, isopropyl chlorocarbonate, lithium aluminium tetrahydroaluminate, nitric acid, nitrogen dioxide, nitrogen tetraoxide (possible explosion), pentafluoroguanidine, perchloric acid (especially hot), permonosulfuric acid, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium, triintromethane • attacks some plastics, rubber and coatings • reacts with metallic aluminium at high temperature • may generate electrostatic charges • Avoid oxidising agents, acids, acid chlorides, acid anhydrides, oxidising and reducing agents. • reacts, possibly violentty, with alkaline metals and alkaline earth metals to produce hydrogen • react with strong acids, strong acids |

- dichlorine oxide, ethylene oxide, hypochlorous acid, isopropyl chlorocarbonate, lithium tetrahydroaluminate, nitrogen dioxide, pentafluoroguanidine, phosphorus halides, phosphorus pentasulfide, tangerine oil, triethylaluminium, triisobutylaluminium
- should not be heated above 49 deg. C. when in contact with aluminium equipment
- Toxic gases are formed by mixing azo and azido compounds with acids, aldehydes, amides, carbamates, cyanides, inorganic fluorides, halogenated organics, isocyanates, ketones, metals, nitrides, peroxides, phenols, epoxides, acyl halides, and strong oxidising or reducing agents.
- Flammable gases are formed by mixing azo and azido compounds with alkali metals.
- Explosive combination can occur with strong oxidising agents, metal salts, peroxides, and sulfides
- Azo, diazo and azido compounds can detonate especially where organic azides have been sensitised by the addition of metal salts or strong acids. Secondary alcohols and some branched primary alcohols may produce potentially explosive peroxides after exposure to light and/ or heat.

7.3. Specific end use(s)

See section 1.2

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|-------------|-------------------|---------------------|---------------|---------------|---------------|
| Germany Recommended Exposure Limits - MAK Values (English) | ethanol | Ethanol | 960 mg/m3 / 500 ppm | II (2) ppm | Not Available | Not Available |
| Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German) | ethanol | Ethanol | 960 mg/m3 / 500 ppm | Not Available | Not Available | Not Available |
| Germany Recommended Exposure Limits - MAK Values (English) | isopropanol | Isopropyl alcohol | 500 mg/m3 / 200 ppm | II (2) ppm | Not Available | Not Available |
| Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German) | isopropanol | Propan-2-ol | 500 mg/m3 / 200 ppm | Not Available | Not Available | Not Available |

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment.

8.2.2. Personal protection









- Safety glasses with side shields.
- Chemical goggles. Eye and face protection
 - Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Hands/feet protection

▶ Wear chemical protective gloves, e.g. PVC.

▶ Wear safety footwear or safety gumboots, e.g. Rubber

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final

Personal hygiene is a key element of effective hand care.

Body protection

See Other protection below

Other protection

- Overalls. P.V.C. apron.
- Barrier cream.

Thermal hazards

Not Available

Respiratory protection

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Appearance | black,blue,red,green,violet,yellow,orange,skyblue,pink liquid | | |
|---|---|---|---------------|
| Physical state | Liquid | Relative density (Water = 1) | Not Available |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Avai ab e | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Flammable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | pH as a solution (1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

9.2. Other information

Not Available

SECTION 10 STABILITY AND REACTIVITY

| 10.1.Reactivity | See section 7.2 |
|--|--|
| 10.2. Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| 10.3. Possibility of hazardous reactions | See section 7.2 |
| 10.4. Conditions to avoid | See section 7.2 |
| 10.5. Incompatible materials | See section 7.2 |
| 10.6. Hazardous decomposition products | See section 5.3 |

SECTION 11 TOXICOLOGICAL INFORMATION

| 11.1. Information on toxicolog | gical effects | | |
|--------------------------------|---|---|--|
| Inhaled | The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness. Aliphatic alcohols with more than 3-carbons cause headache, dizziness, drowsiness, muscle weakness and delirium, central depression, coma, seizures and behavioural changes. Secondary respiratory depression and failure, as well as low blood pressure and irregular heart rhythms, may follow. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. The odour of isopropanol may give some warning of exposure, but odour fatigue may occur. Inhalation of isopropanol may produce irritation of the nose and throat with sneezing, sore throat and runny nose. | | |
| | confusion, delirium and coma. | system symptoms. These include headache, muscle weakness and inco-ordination, giddiness, roduce nausea, vomiting, bleeding from the digestive tract, abdominal pain, and diarrhoea. Effects on the | |
| | Blood concentration | Effects | |
| Ingestion | <1.5 g/L | Mild: impaired vision, co-ordination and reaction time; emotional instability | |
| gcv. | 1.5-3.0 g/L | Moderate: Slurred speech, confusion, inco-ordination, emotional instability, disturbances in perception and senses, possible blackouts, and impaired objective performance in standardized tests. Possible double vision, flushing, fast heart rate, sweating and incontinence. | |

| | | Slow breathing may occur rarely and fast breathing may develop in cases of metabolic acidosis, low blood sugar and low blood potassium. | |
|------------------------|--|--|--|
| | The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence. Swallowing 10 millilitres of isopropanol may cause serious injury; 100 millilitres may be fatal if not properly treated. The adult single lethal dose is approximately 250 millilitres. Isopropanol is twice as poisonous as ethanol, and the effects caused are similar, except that isopropanol does not cause an initial feeling of well-being. Swallowing may cause nausea, vomiting and diarrhea; vomiting and stomach inflammation is more prominent with isopropanol than with ethanol. | | |
| Skin Contact | through wounds, lesions or abrasions. Most liquid alcohols appear to act as primary skin in Open cuts, abraded or irritated skin should not be example, in the blood-stream, through, for example, couse of the material and ensure that any external dan 511ipa There is some evidence to suggest that the materia | its, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the | |
| Еуе | Direct contact of the eye with ethanol (alcohol) may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the comea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment. Isopropanol vapour may cause mild eye irritation at 400 parts per million. Splashes may cause severe eye irritation, possible burns to the comea and eye damage. Eye contact may cause tearing and blurring of vision. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. | | |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. Long term, or repeated exposure of isopropanol may cause inco-ordination and tiredness. Repeated inhalation exposure to isopropanol may produce sleepiness, inco-ordination and liver degeneration. Animal data show developmental effects only at exposure levels that produce toxic effects in adult animals. Isopropanol does not cause genetic damage. | | |
| | | | |
| White Board Ink | TOXICITY | IRRITATION | |
| | Not Available | Not Available | |
| ethanol | TOXICITY Dermal (rabbit) LD50: 17100 mg/kg ^[1] Inhalation (rat) LC50: 63926.976 mg/l/4h ^[2] Oral (rat) LD50: 7060 mg/kg ^[2] | IRRITATION Eye (rabbit): 500 mg SEVERE Eye (rabbit):100mg/24hr-moderate Skin (rabbit):20 mg/24hr-moderate Skin (rabbit):400 mg (open)-mild | |
| isopropanol | TOXICITY Dermal (rabbit) LD50: 12800 mg/kg ^[2] Inhalation (rat) LC50: 72.6 mg/l/4h ^[2] Oral (rat) LD50: 5000 mg/kg ^[2] | IRRITATION Eye (rabbit): 10 mg - moderate Eye (rabbit): 100 mg - SEVERE Eye (rabbit): 100mg/24hr-moderate Skin (rabbit): 500 mg - mild | |
| butyl stearate | TOXICITY Oral (rat) LD50: 32000 mg/kg ^[2] | IRRITATION Skin (rabbit): 500 mg moderate | |
| dioctyl adipate | TOXICITY Dermal (rabbit) LD50: 8410 mg/kg ^[2] Oral (rat) LD50: 7392 mg/kg ^[2] | IRRITATION Eye (rabbit): 500 mg (open) Eye (rabbit): 500 mg/24h - mild Skin (rabbit): 500 mg(open)-mild | |
| C.I. Pigment Black 7 | TOXICITY Dermal (rabbit) LD50: >3000 mg/kg ^[2] Oral (rat) LD50: >10000 mg/kg ^[1] | IRRITATION Not Available | |
| C.I. Pigment Blue 15:3 | TOXICITY Oral (rat) LD50: >10,000 mg/kg ^[2] | IRRITATION Eye (human): non irritant Skin (human): non irritant | |

| | TOXICITY | IRRITATION | | | |
|--------------------------------------|---|--------------------------|------------------------------|--|--|
| C.I. Pigment Red 112 | Oral (rat) LD50: >5000 mg/kg ^[2] | Not Available | | | |
| | | | | | |
| C.I. Pigment Green 7 | TOXICITY | IRRITATION | | | |
| Sin Figure 1 | Oral (rat) LD50: >2000 mg/kg ^[1] | Not Available | | | |
| | | | | | |
| C.I. Pigment Red 170 | TOXICITY | IRRITATION | | | |
| | Oral (rat) LD50: >10000 mg/kg ^[2] | Not Available | | | |
| | | | | | |
| | TOXICITY | IRRITATION | | | |
| C.I. Pigment Yellow 83 | Oral (rat) LD50: >1230 mg/kg ^[1] | | Eye (rabbit): non-irritating | | |
| | | Skin (rabbit): n | on-irritating | | |
| | | | | | |
| C.I. Pigment Violet 23 | TOXICITY | IRRITATION | | | |
| | Oral (rat) LD50: >2000 mg/kg ^[1] | Skin (rabbit): N | on-irritating * | | |
| Legend: | Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances | | | | |
| | | | | | |
| Acute Toxicity | 0 | Carcinogenicity | 0 | | |
| Skin Irritation/Corrosion | 0 | Reproductivity | 0 | | |
| Serious Eye Damage/Irritation | ~ | STOT - Single Exposure | ~ | | |
| Respiratory or Skin sensitisation | 0 | STOT - Repeated Exposure | 0 | | |
| Mutagenicity | 0 | Aspiration Hazard | 0 | | |

Legend:

Data available but does not fill the criteria for classification
 Data available to make classification
 Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

| White Board Ink | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|-----------------|---------------|--------------------|-------------------------------|---------------------|---------------|
| wnite Board Ink | Not Available | Not Available | Not Available | Not Available | Not Available |
| | | | | | |
| | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | 42mg/L | 4 |
| ethanol | EC50 | 48 | Crustacea | 2mg/L | 4 |
| | EC50 | 96 | Algae or other aquatic plants | 17 <u>.</u> 921mg/L | 4 |
| | NOEC | 2016 | Fish | 0.000375mg/L | 4 |
| | | | | | · |
| isopropanol | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | >1400mg/L | 4 |
| | EC50 | 48 | Crustacea | 12500mg/L | 5 |
| | EC50 | 72 | Algae or other aquatic plants | >1000mg/L | 1 |
| | EC29 | 504 | Crustacea | =100mg/L | 1 |
| | NOEC | 5760 | Fish | 0.02mg/L | 4 |
| | ' | | | <u>'</u> | <u> </u> |
| | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | LC50 | 96 | Fish | >0.78mg/L | 4 |
| | EC50 | 48 | Crustacea | 0.66mg/L | 5 |
| dioctyl adipate | EC50 | 72 | Algae or other aquatic plants | >1.4mg/L | 1 |
| | BCF | 672 | Fish | 0.25mg/L | 4 |
| | NOEC | 504 | Crustacea | >=0.0044mg/L | 2 |

| OINT | 96 96 TEST DURATION (HR) | Fish Fish SPECIES | =1000mg/L =1000mg/L VALUE | 1 1 SOURCE |
|----------------|----------------------------------|---|--|--|
| | TEST DURATION (HR) | | , , | |
| TNIC | ` ' | SPECIES | VALUE | SOURCE |
| OINT | ` ' | SPECIES | VALUE | SOURCE |
| | 96 | | | |
| | 30 | Fish | >100mg/L | 2 |
| | 48 | Crustacea | >110mg/L | 2 |
| | 504 | Crustacea | 30mg/L | 2 |
| | | | | |
| OINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
| | 96 | Fish | 124mg/L | 2 |
| | | ' | <u> </u> | · |
| d from 1. IUCL | LID Toxicity Data 2. Europe ECHA | Registered Substances - Ecotoxicolo | | 3. EPIWIN Suite V |
| | OINT d from 1. IUC - Aquatic To | 504 DINT TEST DURATION (HR) 96 d from 1. IUCLID Toxicity Data 2. Europe ECHA - Aquatic Toxicity Data (Estimated) 4. US EPA, | 504 Crustacea DINT TEST DURATION (HR) SPECIES 96 Fish d from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicolo | 504 Crustacea 30mg/L DINT TEST DURATION (HR) SPECIES VALUE 96 Fish 124mg/L d from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Ass |

12.2. Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------------------|-----------------------------|-----------------------------|
| ethanol | LOW (Half-life = 2.17 days) | LOW (Half-life = 5.08 days) |
| isopropanol | LOW (Half-life = 14 days) | LOW (Half-life = 3 days) |
| diisooctyl sebacate | LOW | LOW |
| butyl stearate | LOW | LOW |
| dioctyl adipate | LOW (Half-life = 56 days) | LOW (Half-life = 1.08 days) |
| C.I. Pigment Blue 15:3 | HIGH | HIGH |
| C.I. Pigment Yellow 83 | HIGH | HIGH |

12.3. Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------------------|------------------------|
| ethanol | LOW (LogKOW = -0.31) |
| isopropanol | LOW (LogKOW = 0.05) |
| diisooctyl sebacate | LOW (LogKOW = 10.2268) |
| butyl stearate | LOW (LogKOW = 9.704) |
| dioctyl adipate | HIGH (BCF = 2700) |
| C.I. Pigment Blue 15:3 | LOW (BCF = 11) |
| C.I. Pigment Green 7 | LOW (BCF = 74) |
| C.I. Pigment Yellow 83 | LOW (LogKOW = 8.6648) |

12.4. Mobility in soil

| Ingredient | Mobility |
|------------------------|------------------------|
| ethanol | HIGH (KOC = 1) |
| isopropanol | HIGH (KOC = 1.06) |
| diisooctyl sebacate | LOW (KOC = 665000) |
| butyl stearate | LOW (KOC = 391800) |
| dioctyl adipate | LOW (KOC = 48630) |
| C.I. Pigment Blue 15:3 | LOW (KOC = 1000000000) |
| C.I. Pigment Yellow 83 | LOW (KOC = 1126000) |

12.5.Results of PBT and vPvB assessment

| | Р | В | Т |
|-------------------------|---------------|---------------|---------------|
| Relevant available data | Not Available | Not Available | Not Available |
| PBT Criteria fulfilled? | Not Available | Not Available | Not Available |

12.6. Other adverse effects

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

Reduction

Reuse

Recycling

Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

DO NOT allow wash water from cleaning or process equipment to enter drains.

It may be necessary to collect all wash water for treatment before disposal.

In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

Where in doubt contact the responsible authority.

Recycle wherever possible or consult manufacturer for recycling options.

- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

Waste treatment options
Sewage disposal options

Not Available

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant

NO

Not Available

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| Land transport (ADR): NOT R | EGULATED FOR TRANSPORT OF D | ANGEROUS GOODS | |
|---------------------------------------|--|----------------|--|
| 14.1.UN number | Not Applicable | | |
| 14.2.UN proper shipping name | Not Applicable | | |
| 14.3. Transport hazard class(es) | Class Not Applicable Subrisk Not Applicable | | |
| 14.4.Packing group | Not Applicable | | |
| 14.5 Environmental hazard | Not Applicable | | |
| 14.6. Special precautions for user | Hazard identification (Kemler) Classification code Not App Hazard Label Not App Special provisions Not App Limited quantity Not App | cable cable | |

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| 14.1. UN number | Not Applicable | | |
|------------------------------------|---|---|--|
| 14.2. UN proper shipping name | Not Applicable | | |
| 14.3. Transport hazard class(es) | ICAO/IATA Class Not Applicable ICAO / IATA Subrisk Not Applicable ERG Code Not Applicable | | |
| 14.4. Packing group | Not Applicable | | |
| 14.5. Environmental hazard | Not Applicable | | |
| 14.6. Special precautions for user | Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Limited Quantity Packing Instructions No | ot Applicable | |

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| 14.1. UN number | Not Applicable |
|----------------------------------|---|
| 14.2. UN proper shipping name | Not Applicable |
| 14.3. Transport hazard class(es) | IMDG Class Not Applicable IMDG Subrisk Not Applicable |

| 14.4. Packing group | Not Applicable |
|------------------------------------|---|
| 14.5. Environmental hazard | Not Applicable |
| 14.6. Special precautions for user | EMS Number Not Applicable Special provisions Not Applicable Limited Quantities Not Applicable |

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.7. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

ETHANOL(64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

European Customs Inventory of Chemical Substances ECICS (English)

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

Germany Recommended Exposure Limits - MAK Values - Carcinogens Germany Recommended Exposure Limits - MAK Values - Pregnancy Risk Group

Classifications & Germ Cell Mutagens
Germany Recommended Exposure Limits - MAK Values (English)

Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German)

ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

European Customs Inventory of Chemical Substances ECICS (English)

European Trade Union Confederation (ETUC) Priority List for REACH Authorisation European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

Germany Recommended Exposure Limits - MAK Values - Pregnancy Risk Group Classifications & Germ Cell Mutagens

Germany Recommended Exposure Limits - MAK Values (English)

Germany TRGS 900 - Limit Values for the Workplace Atmosphere (German)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

DIISOOCTYL SEBACATE(27214-90-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

BUTYL STEARATE(123-95-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

DIOCTYL ADIPATE(103-23-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances

European Customs Inventory of Chemical Substances ECICS (English)
European Trade Union Confederation (ETUC) Priority List for REACH Authorisation

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

C.I. PIGMENT BLACK 7(1333-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of Substances

European List of Notified Chemical Substances (ELINCS)

European Customs Inventory of Chemical Substances ECICS (English)

European Trade Union Confederation (ETUC) Priority List for REACH Authorisation European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

C.I. PIGMENT BLUE 15:3(147-14-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

C.I. PIGMENT RED 112(6535-46-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

C.I. PIGMENT GREEN 7(1328-53-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English) European List of Notified Chemical Substances (ELINCS) European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

C.I. PIGMENT RED 170(2786-76-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

C.I. PIGMENT YELLOW 83(5567-15-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 2) Carcinogens: category
1B (Table 3.1)/category 2 (Table 3.2)
European Customs Inventory of Chemical Substances ECICS (English)
European Trade Union Confederation (ETUC) Priority List for REACH Authorisation

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and

European Union (EU) Régulation (EC) No 12/2/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

Germany TRGS 905 - List of Carringgenic Mutagenic or Reproductive Toxic Substan

Germany TRGS 905 - List of Carcinogenic, Mutagenic or Reproductive Toxic Substances (German) $\,$

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

C.I. PIGMENT VIOLET 23(6358-30-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English)

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable -: 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008 and their amendments

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

15.3. Classification of Substances and Mixtures into Water Hazard Classes

PREPARATION IS WGK 3

| Name | WGK | Score | Source |
|------------------------|-------------------------|-------|--|
| ETHANOL | 1 | | W: VwVwS |
| ISOPROPANOL | 1 | | W: VwVwS |
| DIISOOCTYL SEBACATE | non-hazardous to waters | 0 | Calculated |
| BUTYL STEARATE | 1 | | P: Classification according to annex 3 |
| DIOCTYL ADIPATE | 2 | | P: Classification according to annex 3 |
| C.I. PIGMENT BLACK 7 | non-hazardous to waters | | W: Wwws |
| C.I. PIGMENT BLUE 15:3 | non-hazardous to waters | | W: Wwws |
| C.I. PIGMENT RED 112 | non-hazardous to waters | 0 | Calculated |
| C.I. PIGMENT GREEN 7 | 1 | | P: Classification according to annex 3 |
| C.I. PIGMENT RED 170 | non-hazardous to waters | 0 | Calculated |
| C.I. PIGMENT YELLOW 83 | 3 | | V: KBwS-Decision |
| C.I. PIGMENT VIOLET 23 | 1 | | P: Classification according to annex 3 |

SECTION 16 OTHER INFORMATION

Full text Risk and Hazard codes

H225

Highly flammable liquid and vapour.

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered. For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index