

## Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

### 1. Identification

#### 1.1. Product identifier

Code: **US.178.00B.001**  
Product name: **POLIFOND 78 BIANCO**

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

Intended use: **PAINT - WHITE POLYURETHANE BASECOAT**

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

Name: **ASTRA VERNICI S.R.L.**  
Full address: **Via Della Industria, 4**  
District and Country: **24052 Azzano San Paolo (BG) Italia**  
Tel.: **+39 035 530019**  
Fax: **+39 035 531714**  
e-mail address of the competent person responsible for the Safety Data Sheet: **msds@astravernici.it**

#### 1.4. Emergency telephone number

For urgent inquiries refer to: **+39035530019**

### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

##### Classification and Hazard Statement

Flammable liquid, category 3

Carcinogenicity, category 1A

Specific target organ toxicity - repeated exposure, category 1

Aspiration hazard, category 1

Eye irritation, category 2

Skin irritation, category 2

Flammable liquid and vapour.

May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

Causes serious eye irritation.

Causes skin irritation.

##### Hazard pictograms:



Signal words:

**Danger**

##### Hazard statements:

**H226**

Flammable liquid and vapour.

**H350**

May cause cancer.

**H372**

Causes damage to organs through prolonged or repeated exposure.

**H304**

May be fatal if swallowed and enters airways.

**H319**

Causes serious eye irritation.

**H315**

Causes skin irritation.

##### Precautionary statements:

###### Prevention:

**P210**

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

**P260**

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

**P202**

Do not handle until all safety precautions have been read and understood.

## 2. Hazards identification ... / >>

|             |                                                                                 |
|-------------|---------------------------------------------------------------------------------|
| <b>P242</b> | Use only non-sparking tools.                                                    |
| <b>P201</b> | Obtain special instructions before use.                                         |
| <b>P233</b> | Keep container tightly closed.                                                  |
| <b>P280</b> | Wear protective gloves/ protective clothing / eye protection / face protection. |
| <b>P270</b> | Do not eat, drink or smoke when using this product.                             |
| <b>P264</b> | Accurately wash thoroughly after handling.                                      |
| <b>P240</b> | Ground / bond container and receiving equipment.                                |
| <b>P243</b> | Take precautionary measures against static discharge.                           |
| <b>P241</b> | Use explosion-proof electrical / ventilating / lighting / equipment.            |

### Response:

|                       |                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>P331</b>           | Do NOT induce vomiting.                                                                                                          |
| <b>P305+P351+P338</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| <b>P303+P361+P353</b> | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.                            |
| <b>P308+P313</b>      | IF exposed or concerned: Get medical advice / attention.                                                                         |
| <b>P301+P310</b>      | IF SWALLOWED: immediately call a POISON CENTER / doctor.                                                                         |
| <b>P314</b>           | Get medical advice / attention if you feel unwell.                                                                               |
| <b>P332+P313</b>      | If skin irritation occurs: Get medical advice / attention.                                                                       |
| <b>P337+P313</b>      | If eye irritation persists: Get medical advice / attention.                                                                      |
| <b>P302+P352</b>      | IF ON SKIN: wash with plenty of water.                                                                                           |
| <b>P362+P364</b>      | Take off contaminated clothing and wash it before reuse.                                                                         |
| <b>P370+P378</b>      | In case of fire: Use dry chemical or C02 to extinguish.                                                                          |

### Storage:

|                  |                                              |
|------------------|----------------------------------------------|
| <b>P403+P235</b> | Store in a well-ventilated place. Keep cool. |
| <b>P405</b>      | Store locked up.                             |

### Disposal:

|             |                                                                                         |
|-------------|-----------------------------------------------------------------------------------------|
| <b>P501</b> | Dispose of contents / container through a procedure in accordance with the regulations. |
|-------------|-----------------------------------------------------------------------------------------|

## 2.2. Other hazards

### Additional hazards

Repeated exposure may cause skin dryness or cracking.

## 3. Composition/information on ingredients

### 3.2. Mixtures

#### Contains:

| Identification                                                 | Conc. % | Classification:                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TITANIUM DIOXIDE</b>                                        |         |                                                                                                                                                                                                                                                                                                                                                           |
|                                                                | 14.11   | <b>Carcinogenicity, category 2 H351</b>                                                                                                                                                                                                                                                                                                                   |
| EC 236-675-5                                                   |         |                                                                                                                                                                                                                                                                                                                                                           |
| CAS 13463-67-7                                                 |         |                                                                                                                                                                                                                                                                                                                                                           |
| REACH Reg. 01-2119489379-17-xxxx                               |         |                                                                                                                                                                                                                                                                                                                                                           |
| <b>REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE</b> |         |                                                                                                                                                                                                                                                                                                                                                           |
|                                                                | 8.8     | <b>Flammable liquid, category 3 H226, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332, Aspiration hazard, category 1 H304, Specific target organ toxicity - repeated exposure, category 2 H373, Eye irritation, category 2 H319, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335</b> |
| EC 905-562-9                                                   |         |                                                                                                                                                                                                                                                                                                                                                           |
| CAS                                                            |         |                                                                                                                                                                                                                                                                                                                                                           |
| REACH Reg. 01-2119555267-33-xxxx                               |         |                                                                                                                                                                                                                                                                                                                                                           |
| <b>ETHYL ACETATE</b>                                           |         |                                                                                                                                                                                                                                                                                                                                                           |
| INDEX 607-022-00-5                                             | 7.25    | <b>Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336</b>                                                                                                                                                                                                              |
| EC 205-500-4                                                   |         |                                                                                                                                                                                                                                                                                                                                                           |
| CAS 141-78-6                                                   |         |                                                                                                                                                                                                                                                                                                                                                           |
| REACH Reg. 01-2119475103-46-xxxx                               |         |                                                                                                                                                                                                                                                                                                                                                           |
| <b>N-BUTYL ACETATE</b>                                         |         |                                                                                                                                                                                                                                                                                                                                                           |
| INDEX 607-025-00-1                                             | 2.5     | <b>Flammable liquid, category 3 H226, Specific target organ toxicity - single exposure, category 3 H336</b>                                                                                                                                                                                                                                               |
| EC 204-658-1                                                   |         |                                                                                                                                                                                                                                                                                                                                                           |
| CAS 123-86-4                                                   |         |                                                                                                                                                                                                                                                                                                                                                           |
| REACH Reg. 01-2119485493-29-xxxx                               |         |                                                                                                                                                                                                                                                                                                                                                           |

### 3. Composition/information on ingredients ... / >>

#### XYLENE

INDEX 601-022-00-9 2.4

Flammable liquid, category 3 H226, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332, Aspiration hazard, category 1 H304, Specific target organ toxicity - repeated exposure, category 2 H373, Eye irritation, category 2B H320, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335

EC 215-535-7

CAS 1330-20-7

REACH Reg. 01-2119488216-32-xxxx

#### NITROCELLULOSE

INDEX 603-037-00-6 1.539

Explosive, division 1.1 H201

EC 682-719-5

CAS 9004-70-0

REACH Reg. Non disponibile / Not available

#### 2-METHOXY-1-METHYLETHYL ACETATE

INDEX 607-195-00-7 1

Flammable liquid, category 3 H226

EC 203-603-9

CAS 108-65-6

REACH Reg. 01-2119475791-29-xxxx

#### ETHANOL

INDEX 603-002-00-5 0.12

Flammable liquid, category 2 H225, Carcinogenicity, category 1A H350

EC 200-578-6

CAS 64-17-5

REACH Reg. 01-2119457610-43-0050

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### 4. First-aid measures

#### 4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice.

Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

#### Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

Specific information on symptoms and effects caused by the product are unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

If symptoms occur, whether acute or delayed, consult a doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

## 5. Fire-fighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## 6. Accidental release measures

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

### 7. Handling and storage ... / >>

2-METHOXY-1-METHYLETHYL ACETATE

Store in an inert atmosphere, sheletered from moisture because it hydrolises easily.

### 7.3. Specific end use(s)

Information not available

## 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory references:

|     |              |                                                                                                                                                                                                                                                                                            |
|-----|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USA | NIOSH-REL    | NIOSH publication No. 2005-149, 3th printing, 2007.                                                                                                                                                                                                                                        |
| USA | OSHA-PEL     | Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.                                                                                                                                                                                                            |
| USA | CAL/OSHA-PEL | California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).                                                                                                                                                                                       |
| EU  | OEL EU       | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
|     | TLV-ACGIH    | ACGIH 2025                                                                                                                                                                                                                                                                                 |

#### REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE

##### Threshold Limit Value

| Type  | Country | TWA/8h | STEL/15min | Remarks / Observations |
|-------|---------|--------|------------|------------------------|
|       |         | mg/m3  | ppm        |                        |
| OEL   | EU      | 221    | 50         | SKIN                   |
| ACGIH | -       | 434    | 100        |                        |

#### XYLENE

##### Threshold Limit Value

| Type     | Country | TWA/8h | STEL/15min | Remarks / Observations |
|----------|---------|--------|------------|------------------------|
|          |         | mg/m3  | ppm        |                        |
| ACGIH    | -       | 20     |            |                        |
| OEL      | EU      | 221    | 50         | SKIN                   |
| OSHA     | USA     | 435    | 100        |                        |
| CAL/OSHA | USA     | 435    | 100        |                        |
| NIOSH    | USA     | 435    | 100        |                        |

#### TITANIUM DIOXIDE

##### Threshold Limit Value

| Type     | Country | TWA/8h | STEL/15min | Remarks / Observations |
|----------|---------|--------|------------|------------------------|
|          |         | mg/m3  | ppm        |                        |
| ACGIH    | -       | 0.2    |            | RESP                   |
| OSHA     | USA     | 15     |            | INHAL                  |
| CAL/OSHA | USA     | 10     |            | INHAL                  |
| CAL/OSHA | USA     | 5      |            | RESP                   |

#### 2-METHOXY-1-METHYLETHYL ACETATE

##### Threshold Limit Value

| Type     | Country | TWA/8h | STEL/15min | Remarks / Observations |
|----------|---------|--------|------------|------------------------|
|          |         | mg/m3  | ppm        |                        |
| OEL      | EU      | 275    | 50         | SKIN                   |
| CAL/OSHA | USA     | 541    | 100        | SKIN                   |

### 8. Exposure controls/personal protection ... / >>

#### ETHANOL

##### Threshold Limit Value

| Type     | Country | TWA/8h | STEL/15min | Remarks / Observations |
|----------|---------|--------|------------|------------------------|
|          |         | mg/m3  | ppm        |                        |
| ACGIH    | -       |        | 1884       | 1000                   |
| OSHA     | USA     | 1900   | 1000       |                        |
| CAL/OSHA | USA     | 1900   | 1000       |                        |
| NIOSH    | USA     | 1900   | 1000       |                        |

#### ETHYL ACETATE

##### Threshold Limit Value

| Type     | Country | TWA/8h | STEL/15min | Remarks / Observations |
|----------|---------|--------|------------|------------------------|
|          |         | mg/m3  | ppm        |                        |
| OEL      | EU      | 734    | 1468       | 400                    |
| ACGIH    | -       | 1441   | 400        |                        |
| OSHA     | USA     | 1400   | 400        |                        |
| CAL/OSHA | USA     | 1400   | 400        |                        |
| NIOSH    | USA     | 1400   | 400        |                        |

#### N-BUTYL ACETATE

##### Threshold Limit Value

| Type     | Country | TWA/8h | STEL/15min | Remarks / Observations |
|----------|---------|--------|------------|------------------------|
|          |         | mg/m3  | ppm        |                        |
| OEL      | EU      | 241    | 723        | 150                    |
| ACGIH    | -       | 50     | 150        |                        |
| OSHA     | USA     | 710    | 150        |                        |
| CAL/OSHA | USA     | 710    | 950        | 200                    |
| NIOSH    | USA     | 710    | 950        | 200                    |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

#### HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (OSHA 29 CFR 1910.138): compatibility, degradation, permeability time.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose limit of use will be defined by the manufacturer (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties  
Appearance

Value  
dense liquid

Information

### 9. Physical and chemical properties ... / >>

|                                        |                    |      |                     |                                                                                                 |
|----------------------------------------|--------------------|------|---------------------|-------------------------------------------------------------------------------------------------|
| Colour                                 | white              |      |                     |                                                                                                 |
| Odour                                  | solvent            |      |                     |                                                                                                 |
| Odour threshold                        | not available      |      |                     |                                                                                                 |
| pH                                     | not available      |      |                     | Reason for missing data:substance/mixture is non-polar/aprotic (eg: an organic solvent mixture) |
| Melting point / freezing point         | not available      |      |                     |                                                                                                 |
| Initial boiling point                  | not available      |      |                     |                                                                                                 |
| Boiling range                          | not available      |      |                     |                                                                                                 |
| Flash point                            | 23 ≤ T ≤ 60        | °C   | (73,4 ≤ T ≤ 140 °F) |                                                                                                 |
| Evaporation rate                       | not available      |      |                     |                                                                                                 |
| Flammability                           | not available      |      |                     | Reason for missing data:substance/mixture is non-polar/aprotic (eg: an organic solvent mixture) |
| Lower explosive limit                  | not available      |      |                     |                                                                                                 |
| Upper explosive limit                  | not available      |      |                     |                                                                                                 |
| Vapour pressure                        | not available      |      |                     |                                                                                                 |
| Vapour density                         | not available      |      |                     |                                                                                                 |
| Relative density                       | 1.6                | Kg/l |                     |                                                                                                 |
| Solubility                             | insoluble in water |      |                     |                                                                                                 |
| Partition coefficient: n-octanol/water | not available      |      |                     |                                                                                                 |
| Auto-ignition temperature              | not available      |      |                     |                                                                                                 |
| Decomposition temperature              | not available      |      |                     |                                                                                                 |
| Viscosity                              | > 20,5 mm2/s       |      |                     | Temperature: 20 °C                                                                              |
| Explosive properties                   | not applicable     |      |                     |                                                                                                 |
| Oxidising properties                   | not applicable     |      |                     |                                                                                                 |

#### 9.2. Other information

|                              |         |          |         |
|------------------------------|---------|----------|---------|
| Total solids (250°C / 482°F) | 74,85 % |          |         |
| VOC :                        | 24,15 % | - 386,40 | g/litre |

### 10. Stability and reactivity

#### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

##### CALCIUM CARBONATE

Decomposes at temperatures above 800°C/1472°F.

##### 2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

##### NITROCELLULOSE

Avoid exposure to: heat,naked flames.Avoid contact with: strong oxidants.Fire hazard.Decomposes under the effect of heat.

##### ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

##### N-BUTYL ACETATE

Decomposes on contact with: water.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

##### XYLENE

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

##### 2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances,strong acids,alkaline metals.

##### ETHANOL

Risk of explosion on contact with: alkaline metals,alkaline oxides,calcium hypochlorite,sulphur monofluoride,acetic anhydride,acids,concentrated hydrogen peroxide,perchlorates,perchloric acid,perchloronitrile,mercury nitrate,nitric acid,silver,silver nitrate,ammonia,silver oxide,ammonia,strong oxidising agents,nitrogen dioxide.May react dangerously with: bromoacetylene,chlorine acetylene,bromine trifluoride,chromium trioxide,chromyl chloride,fluorine,potassium tert-butoxide,lithium hydride,phosphorus

**10. Stability and reactivity ... / >>**

trioxide,black platinum,zirconium (IV) chloride,zirconium (IV) iodide.Forms explosive mixtures with: air.

**NITROCELLULOSE**

Avoid exposure to: heat,shocks.Possibility of explosion.

**ETHYL ACETATE**

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

**N-BUTYL ACETATE**

Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

**ETHANOL**

Avoid exposure to: sources of heat,naked flames.

**ETHYL ACETATE**

Avoid exposure to: light,sources of heat,naked flames.

**N-BUTYL ACETATE**

Avoid exposure to: moisture,sources of heat,naked flames.

**10.5. Incompatible materials****CALCIUM CARBONATE**

Incompatible with: acids.

**2-METHOXY-1-METHYLETHYL ACETATE**

Incompatible with: oxidising substances,strong acids,alkaline metals.

**ETHYL ACETATE**

Incompatible with: acids,bases,strong oxidants,chlorosulphuric acid.

**N-BUTYL ACETATE**

Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

**CALCIUM CARBONATE**

May develop: calcium oxides,carbon oxides.

**NITROCELLULOSE**

May develop: nitric oxide.

**11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**11.1. Information on toxicological effects**Metabolism, toxicokinetics, mechanism of action and other information**2-METHOXY-1-METHYLETHYL ACETATE**

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure**N-BUTYL ACETATE**

WORKERS: inhalation; contact with the skin.

**XYLENE**

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

**2-METHOXY-1-METHYLETHYL ACETATE**

WORKERS: inhalation; contact with the skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**N-BUTYL ACETATE**

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

### 11. Toxicological information ... / >>

#### XYLENE

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

#### 2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies.

Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

#### Interactive effects

#### N-BUTYL ACETATE

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

#### XYLENE

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

#### ACUTE TOXICITY

#### CALCIUM CARBONATE

LD50 (Oral): 6450 mg/kg Rat

#### TITANIUM DIOXIDE

LD50 (Oral): > 10000 mg/kg Rat

#### TALC

LC50 (Inhalation mists/powders): > 2.1 mg/l/4h Rat

#### REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE

LD50 (Oral): 3523 mg/kg Rat

LD50 (Dermal): 12126 mg/kg Rat

LC50 (Inhalation vapours): 27124 mg/m3 Rat

#### FATTY ACIDS, C16-18, ZINC SALTS

LD50 (Oral): 5000 mg/kg bw (Rat)

LD50 (Dermal): 2000 mg/kg bw (Rabbit)

LC50 (Inhalation vapours): 5.7 mg/l air (Rat)

#### N-BUTYL ACETATE

LD50 (Oral): > 6400 mg/kg Rat

LD50 (Dermal): > 5000 mg/kg Rabbit

LC50 (Inhalation vapours): 21.1 mg/l/4h Rat

#### XYLENE

LD50 (Oral): 3523 mg/kg Rat

LD50 (Dermal): 4350 mg/kg Rabbit

LC50 (Inhalation vapours): 26 mg/l/4h Rat

#### NITROCELLULOSE

LD50 (Oral): > 5000 mg/kg Rat

#### 2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral): 8530 mg/kg Rat

LD50 (Dermal): > 5000 mg/kg Rat

#### ETHANOL

LD50 (Oral): > 5000 mg/kg Rat

LC50 (Inhalation vapours): 117 mg/l/4h Rat

**11. Toxicological information** ... / >>SKIN CORROSION / IRRITATION

Causes skin irritation  
Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

May cause cancer

Carcinogenicity Assessment:

13463-67-7     TITANIUM DIOXIDE  
                  ACGIH:: A4  
                  IARC:2B

1330-20-7     XYLENE  
                  ACGIH:: A4  
                  IARC:3

100-41-4     ETHYLBENZENE  
                  ACGIH:: A3  
                  IARC:2B

64-17-5     ETHANOL  
                  ACGIH:: A3  
                  IARC:1

TALC

Overall IARC evaluation: Perineal use of talc-based body powder is possibly carcinogenic to humans (Group2B). Inhaled talc not containing asbestos or asbestiform fibres is not classifiable as to its carcinogenicity (Group 3).

XYLENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).  
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Causes damage to organs

ASPIRATION HAZARD

Toxic for aspiration

**12. Ecological information**

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

**12.1. Toxicity**

## 12. Ecological information ... / >>

### REACTION MASS OF ETHYLBENZENE AND M-XYLENE AND P-XYLENE

LC50 - for Fish 2.6 mg/l/96h 2.6 mg/l per p-xylene; >1.3 mg/l per mix-xylene

### FATTY ACIDS, C16-18, ZINC SALTS

LC50 - for Fish 112 µg/L 112 - 10 000 000 µg/L

EC50 - for Crustacea 155 µg/L 155 - 2 909 µg/L

### 12.2. Persistence and degradability

#### CALCIUM CARBONATE

Solubility in water 0.1 - 100 mg/l

#### TITANIUM DIOXIDE

Solubility in water < 0.001 mg/l

Degradability: information not available

#### TALC

Solubility in water < 0.1 mg/l

#### ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

#### N-BUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

#### XYLENE

Solubility in water 100 - 1000 mg/l

Rapidly degradable

#### 2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

#### ETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

### 12.3. Bioaccumulative potential

#### ETHYL ACETATE

Partition coefficient: n-octanol/water 0.68

BCF 30

#### N-BUTYL ACETATE

Partition coefficient: n-octanol/water 2.3

BCF 15.3

#### XYLENE

Partition coefficient: n-octanol/water 3.12

BCF 25.9

#### 2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water 1.2

#### ETHANOL

Partition coefficient: n-octanol/water -0.35

### 12.4. Mobility in soil

#### N-BUTYL ACETATE

Partition coefficient: soil/water < 3

#### XYLENE

Partition coefficient: soil/water 2.73

## 12. Ecological information ... / >>

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

### 12.6. Other adverse effects

Information not available

## 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.  
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.  
The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.  
CONTAMINATED PACKAGING  
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## 14. Transport information

Classification according to the UN model on transport of dangerous goods.

### 14.1. UN number

ADR / RID, IMDG, IATA: UN 1263

### 14.2. UN proper shipping name

ADR / RID: PAINT  
IMDG: PAINT  
IATA: PAINT

### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



### 14.4. Packing group

ADR / RID, IMDG, IATA: III

### 14.5. Environmental hazards

ADR / RID: NO  
IMDG: not marine pollutant  
IATA: NO

### 14.6. Special precautions for user

|            |                                  |                         |                                |
|------------|----------------------------------|-------------------------|--------------------------------|
| ADR / RID: | HIN - Kemler: 30                 | Limited Quantities: 5 L | Tunnel restriction code: (D/E) |
|            | Special provision: 163, 367, 650 |                         |                                |
| IMDG:      | EMS: F-E, S-E                    | Limited Quantities: 5 L |                                |
| IATA:      | Cargo:                           | Maximum quantity: 220 L | Packaging instructions: 366    |
|            | Passengers:                      | Maximum quantity: 60 L  | Packaging instructions: 355    |
|            | Special provision:               | A3, A72, A192           |                                |

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

## 15. Regulatory information

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

#### U.S. Federal Regulations

##### TSCA:

All components of this product are listed on US Toxic Substances Control Act (TSCA) Inventory or are exempt from the listing / notification requirements.

##### Clean Air Act Section 112(b):

|           |              |
|-----------|--------------|
| 1330-20-7 | XYLENE       |
| 100-41-4  | ETHYLBENZENE |

##### Clean Air Act Section 602 Class I Substances:

No component(s) listed.

##### Clean Air Act Section 602 Class II Substances:

No component(s) listed.

##### Clean Water Act – Priority Pollutants:

|          |              |
|----------|--------------|
| 100-41-4 | ETHYLBENZENE |
|----------|--------------|

##### Clean Water Act – Toxic Pollutants:

|          |              |
|----------|--------------|
| 100-41-4 | ETHYLBENZENE |
|----------|--------------|

##### DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

##### DEA List II Chemicals (Essential Chemicals):

|         |                     |
|---------|---------------------|
| 78-93-3 | ETHYL METHYL KETONE |
|---------|---------------------|

##### EPA List of Lists:

##### 313 Category Code:

|           |              |
|-----------|--------------|
| 1330-20-7 | XYLENE       |
| 100-41-4  | ETHYLBENZENE |

##### EPCRA 302 EHS TPQ:

No component(s) listed.

##### EPCRA 304 EHS RQ:

No component(s) listed.

##### CERCLA RQ:

|           |                     |
|-----------|---------------------|
| 1330-20-7 | XYLENE              |
| 100-41-4  | ETHYLBENZENE        |
| 78-93-3   | ETHYL METHYL KETONE |
| 141-78-6  | ETHYL ACETATE       |
| 123-86-4  | N-BUTYL ACETATE     |

##### EPCRA 313 TRI:

|           |              |
|-----------|--------------|
| 1330-20-7 | XYLENE       |
| 100-41-4  | ETHYLBENZENE |

##### RCRA Code:

|           |                     |
|-----------|---------------------|
| 1330-20-7 | XYLENE              |
| 78-93-3   | ETHYL METHYL KETONE |
| 141-78-6  | ETHYL ACETATE       |

##### CAA 112 (r) RMP TQ:

No component(s) listed.

#### State Regulations

##### Massachusetts:

### 15. Regulatory information ... / >>

1330-20-7 XYLENE  
14807-96-6 TALC  
13463-67-7 TITANIUM DIOXIDE  
100-41-4 ETHYLBENZENE  
64-17-5 ETHANOL  
9004-70-0 NITROCELLULOSE  
78-93-3 ETHYL METHYL KETONE  
141-78-6 ETHYL ACETATE  
123-86-4 N-BUTYL ACETATE

#### Minnesota:

1330-20-7 XYLENE  
14807-96-6 TALC  
13463-67-7 TITANIUM DIOXIDE  
100-41-4 ETHYLBENZENE  
64-17-5 ETHANOL  
78-93-3 ETHYL METHYL KETONE  
141-78-6 ETHYL ACETATE  
123-86-4 N-BUTYL ACETATE

#### New Jersey:

1330-20-7 XYLENE  
14807-96-6 TALC  
13463-67-7 TITANIUM DIOXIDE  
100-41-4 ETHYLBENZENE  
64-17-5 ETHANOL  
9004-70-0 NITROCELLULOSE  
78-93-3 ETHYL METHYL KETONE  
141-78-6 ETHYL ACETATE  
123-86-4 N-BUTYL ACETATE

#### New York:

1330-20-7 XYLENE  
100-41-4 ETHYLBENZENE  
78-93-3 ETHYL METHYL KETONE  
141-78-6 ETHYL ACETATE  
123-86-4 N-BUTYL ACETATE

#### Pennsylvania:

1330-20-7 XYLENE  
13463-67-7 TITANIUM DIOXIDE  
100-41-4 ETHYLBENZENE  
64-17-5 ETHANOL  
9004-70-0 NITROCELLULOSE  
78-93-3 ETHYL METHYL KETONE  
141-78-6 ETHYL ACETATE  
123-86-4 N-BUTYL ACETATE

#### California:

1330-20-7 XYLENE  
14807-96-6 TALC  
100-41-4 ETHYLBENZENE  
64-17-5 ETHANOL  
78-93-3 ETHYL METHYL KETONE  
141-78-6 ETHYL ACETATE  
123-86-4 N-BUTYL ACETATE

#### Proposition 65:

**WARNING!** This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

#### 100-41-4 ETHYLBENZENE

| NSRL / MADL (µg/day) |      |        |            |             |      |
|----------------------|------|--------|------------|-------------|------|
| Hazard type          | Oral | Dermal | Inhalation | Intravenous | Note |
| Carcinogenicity      | 41   |        | 54         |             | -    |

#### International Regulations

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

### 15. Regulatory information ... / >>

Substances subject to the Rotterdam Convention:  
None

Substances subject to the Stockholm Convention:  
None

### 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

|             |                                                                    |
|-------------|--------------------------------------------------------------------|
| <b>H201</b> | Explosive; mass explosion hazard.                                  |
| <b>H225</b> | Highly flammable liquid and vapour.                                |
| <b>H226</b> | Flammable liquid and vapour.                                       |
| <b>H350</b> | May cause cancer.                                                  |
| <b>H351</b> | Suspected of causing cancer.                                       |
| <b>H312</b> | Harmful in contact with skin.                                      |
| <b>H332</b> | Harmful if inhaled.                                                |
| <b>H372</b> | Causes damage to organs through prolonged or repeated exposure.    |
| <b>H304</b> | May be fatal if swallowed and enters airways.                      |
| <b>H373</b> | May cause damage to organs through prolonged or repeated exposure. |
| <b>H319</b> | Causes serious eye irritation.                                     |
| <b>H320</b> | Cause eye irritation.                                              |
| <b>H315</b> | Causes skin irritation.                                            |
| <b>H335</b> | May cause respiratory irritation.                                  |
| <b>H336</b> | May cause drowsiness or dizziness.                                 |

#### LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: Regulation (EC) 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REACH: Regulation (EC) 1907/2006
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

#### GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)

**16. Other information ... / >>**

- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachusetts 105 CMR Department of public health 670.000: "Right to Know"
- Minnesota Chapter 5206 Department Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**CALCULATION METHODS FOR CLASSIFICATION**

Product classification derives from criteria established by the OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200), unless determined otherwise in Section 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.

**Changes to previous review:**

The following sections were modified:

02 / 09 / 11 / 12 / 14.