Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

1. Identification

1.1. Product identifier

Code:	**US.710.20B.002**
Product name	**FINIPUR 610/20 WHITE**

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

Intended use	**PAINT - WHITE POLYURETHANE FINISH**

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	Flammable liquid and vapour.
Carcinogenicity, category 1A	May cause cancer.
Reproductive toxicity, category 2	Suspected of damaging fertility or the unborn child.
Aspiration hazard, category 1	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	Causes serious eye irritation.
Skin irritation, category 2	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	May cause respiratory irritation.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H226	Flammable liquid and vapour.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.

2. Hazards identification ... / >>

Precautionary statements:
Prevention:

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves / protective clothing / eye protection / face protection.

Response:

P301+P310	IF SWALLOWED: immediately call a POISON CENTER / doctor.
P302+P334	IF ON SKIN: Immerse in cool water / wrap in wet bandages.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice / attention if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use dry chemical or C02 to extinguish.

Storage:

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.

Disposal:

P501	Dispose of contents / container through a procedure in accordance with the regulations.

2.2. Other hazards

Information not available

3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification		Conc. %	Classification:
TITANIUM DIOXIDE			
		26.712	**Carcinogenicity, category 2 H351**
EC	*236-675-5*		
CAS	*13463-67-7*		
REACH Reg.	*01-2119489379-17-xxxx*		
XYLENE (MIXTURE OF ISOMERS)			
INDEX	*601-022-00-9*	14.666	**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, Hazardous to the aquatic environment, chronic toxicity, category 3 H412**
EC	*215-535-7*		
CAS	*1330-20-7*		
REACH Reg.	*01-2119488216-32-xxxx*		
N-BUTYL ACETATE			
INDEX	*607-025-00-1*	4.218	**Flammable liquid, category 3 H226, Specific target organ toxicity - single exposure, category 3 H336**
EC	*204-658-1*		
CAS	*123-86-4*		
REACH Reg.	*01-2119485493-29-xxxx*		
XYLENE			
INDEX	*601-022-00-9*	3.408	**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*		
2-METHOXY-1-METHYLETHYL ACETATE			
INDEX	*607-195-00-7*	2.379	**Flammable liquid, category 3 H226**
EC	*203-603-9*		
CAS	*108-65-6*		
REACH Reg.	*01-2119475791-29-xxxx*		

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

MASS REACTION BETWEEN METHYLBENZENE AND XYLEN

1.861 **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**

EC *905-588-0*
CAS
REACH Reg. *01-2119539452-40-xxxx*

ETHYL ACETATE

INDEX *607-022-00-5* 1.61 **Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336**

EC *205-500-4*
CAS *141-78-6*
REACH Reg. *01-2119475103-46-xxxx*

PROPYLIDYNETRIMETHANOL

0.33 **Reproductive toxicity, category 2 H361**

EC *201-074-9*
CAS *77-99-6*
REACH Reg. *01-2119486799-10-XXXX*

ETHANOL

INDEX *603-002-00-5* 0.169 **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

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
ACGIH	-	434	100	651	150	
OEL	EU	221	50	442	100	SKIN
OSHA	USA	435	100			
CAL/OSHA	USA	435	100	655	150	
NIOSH	USA	435	100	655	150	

XYLENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
ACGIH	-		20			
OEL	EU	221	50	442	100	SKIN
OSHA	USA	435	100			
CAL/OSHA	USA	435	100	655	150	
NIOSH	USA	435	100	655	150	

TITANIUM DIOXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	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	mg/m3	ppm	
OEL	EU	275	50	550	100	SKIN
CAL/OSHA	USA	541	100	811	150	SKIN

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

ETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	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	mg/m3	ppm	
OEL	EU	734	200	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	mg/m3	ppm	
OEL	EU	241	50	723	150	
ACGIH	-		50		150	
OSHA	USA	710	150			
CAL/OSHA	USA	710	150	950	200	
NIOSH	USA	710	150	950	200	

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

XYLENE (MIXTURE OF ISOMERS)
XILENE (MISCELA DI ISOMERI): Adopted Biological Exposure Indices (BEIs) - ACGIH (2012): Determinant: Methylhippuric acids in urine / Sampling Time: End of shift / BEI®: 1,5 g/g creatinine / Notation: none.

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 class must be chosen according to the limit of use concentration (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	Value	Information
Appearance	dense liquid	
Colour	white	
Odour	typical of 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	flammable liquid	
Lower explosive limit	not available	
Upper explosive limit	not available	
Vapour pressure	not available	
Vapour density	not available	
Relative density	1.44 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)	70,49 %			
VOC :	29,85 %	-	429,81	g/litre

10. Stability and reactivity

10.1. Reactivity

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

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.

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

10. Stability and reactivity ... / >>

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

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

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.

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

XYLENE (MIXTURE OF ISOMERS)
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

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

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

11. Toxicological information ... / >>

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.

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

XYLENE (MIXTURE OF ISOMERS)
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.

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

TITANIUM DIOXIDE

LD50 (Oral):	> 10000 mg/kg Rat

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral):	3523 mg/kg Rat
LD50 (Dermal):	4350 mg/kg Rabbit
LC50 (Inhalation vapours):	26 mg/l/4h Rat

TALC

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

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral):	8530 mg/kg Rat
LD50 (Dermal):	> 5000 mg/kg Rat

11. Toxicological information ... / >>

MASS REACTION BETWEEN METHYLBENZENE AND XYLEN
LD50 (Oral): > 3523 mg/kg 3 523 - 4 000 mg/kg bw (Rat)
LD50 (Dermal): 12126 mg/kg bw Rabbit
LC50 (Inhalation vapours): > 6350 ppm 6 350 - 6 700 ppm (Rat)

ALUMINIUM HYDROXIDE
LD50 (Oral): 2000 mg/kg bw (Rat)
LC50 (Inhalation mists/powders): 888 mg/m3 888 - 2 300 mg/m³ air Rat)

PROPYLIDYNETRIMETHANOL
LD50 (Oral): 14700 mg/kg bw Rat
LD50 (Dermal): 10000 mg/kg bw Rabbit
LC50 (Inhalation mists/powders): 850 mg/m³ air Rat

ETHANOL
LD50 (Oral): > 5000 mg/kg Rat
LC50 (Inhalation vapours): 117 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

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 (MIXTURE OF ISOMERS)
IARC:3
7631-86-9 AMORPHOUS SILICATE HYDRATE
IARC:3
100-41-4 ETHYLBENZENE
ACGIH:: A3
IARC:2B
64-17-5 ETHANOL
ACGIH:: A3
IARC:1
108-88-3 TOLUENE
ACGIH:: A4
IARC:3

XYLENE (MIXTURE OF ISOMERS)
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".

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".

11. Toxicological information ... / >>

REPRODUCTIVE TOXICITY

Suspected of damaging fertility or the unborn child

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

May cause 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

MASS REACTION BETWEEN METHYLBENZENE AND XYLEN

LC50 - for Fish	> 26 mg/l/96h 2,6 - 8,4 mg/L
EC50 - for Crustacea	> 1 mg/l/48h 1 - 4,7 mg/L
EC50 - for Algae / Aquatic Plants	> 2.2 mg/l/72h 2,2 - 4,36 mg/L
Chronic NOEC for Fish	1.3 mg/l 56 days

ALUMINIUM HYDROXIDE

EC50 - for Crustacea	1.5 mg/l/48h 1,5 - 2,56 mg/L
EC50 - for Algae / Aquatic Plants	5.4 µg/L 5,4 - 570 µg/L

PROPYLIDYNETRIMETHANOL

LC50 - for Fish	1 g/l 1 - 10 g/L
EC50 - for Crustacea	13 g/l
EC50 - for Algae / Aquatic Plants	1 g/l

12.2. Persistence and degradability

TITANIUM DIOXIDE

Solubility in water	< 0.001 mg/l

Degradability: information not available

XYLENE (MIXTURE OF ISOMERS)

Solubility in water	100 - 1000 mg/l

Rapidly degradable

TALC

Solubility in water	< 0.1 mg/l

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

ETHYL ACETATE

Solubility in water	> 10000 mg/l

Rapidly degradable

12. Ecological information ... / >>

ETHANOL
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)
Partition coefficient: n-octanol/water 3.12
BCF 25.9

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

ETHYL ACETATE
Partition coefficient: n-octanol/water 0.68
BCF 30

ETHANOL
Partition coefficient: n-octanol/water -0.35

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)
Partition coefficient: soil/water 2.73

N-BUTYL ACETATE
Partition coefficient: soil/water < 3

XYLENE
Partition coefficient: soil/water 2.73

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 ≥ 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. Transport information ... / >>

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 lt	Tunnel restriction code: (D/E)
	Special provision: 163, 367, 650		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 lt	
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 (MIXTURE OF ISOMERS)
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:

15. Regulatory information ... / >>

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):
No component(s) listed.

EPA List of Lists:
313 Category Code:
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
78-92-2 BUTAN-2-OL
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 (MIXTURE OF ISOMERS)
1330-20-7 XYLENE
100-41-4 ETHYLBENZENE
141-78-6 ETHYL ACETATE
123-86-4 N-BUTYL ACETATE
110-19-0 ISOBUTYL ACETATE

EPCRA 313 TRI:
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
78-92-2 BUTAN-2-OL
1330-20-7 XYLENE
100-41-4 ETHYLBENZENE

RCRA Code:
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
1330-20-7 XYLENE
141-78-6 ETHYL ACETATE

CAA 112 (r) RMP TQ:
No component(s) listed.

State Regulations

Massachussetts:
1314-23-4 ZIRCONIUM DIOXIDE
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
78-92-2 BUTAN-2-OL
1330-20-7 XYLENE
14807-96-6 TALC
7631-86-9 AMORPHOUS SILICATE HYDRATE
13463-67-7 TITANIUM DIOXIDE
100-41-4 ETHYLBENZENE
64-17-5 ETHANOL
141-78-6 ETHYL ACETATE
123-86-4 N-BUTYL ACETATE
110-19-0 ISOBUTYL ACETATE

Minnesota:
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
78-92-2 BUTAN-2-OL
1330-20-7 XYLENE
14807-96-6 TALC
7631-86-9 AMORPHOUS SILICATE HYDRATE
13463-67-7 TITANIUM DIOXIDE

15. Regulatory information ... / >>

100-41-4	ETHYLBENZENE
64-17-5	ETHANOL
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE
110-19-0	ISOBUTYL ACETATE

New Jersey:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
78-92-2	BUTAN-2-OL
1330-20-7	XYLENE
14807-96-6	TALC
13463-67-7	TITANIUM DIOXIDE
100-41-4	ETHYLBENZENE
64-17-5	ETHANOL
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE
110-19-0	ISOBUTYL ACETATE

New York:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
1330-20-7	XYLENE
100-41-4	ETHYLBENZENE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE
110-19-0	ISOBUTYL ACETATE

Pennsylvania:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
78-92-2	BUTAN-2-OL
1330-20-7	XYLENE
7631-86-9	AMORPHOUS SILICATE HYDRATE
13463-67-7	TITANIUM DIOXIDE
100-41-4	ETHYLBENZENE
64-17-5	ETHANOL
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE
110-19-0	ISOBUTYL ACETATE

California:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
78-92-2	BUTAN-2-OL
1330-20-7	XYLENE
14807-96-6	TALC
7631-86-9	AMORPHOUS SILICATE HYDRATE
100-41-4	ETHYLBENZENE
64-17-5	ETHANOL
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE
110-19-0	ISOBUTYL ACETATE

Proposition 65:
WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

108-88-3 TOLUENE

	NSRL / MADL (µg/day)				
Hazard type	Oral	Dermal	Inhalation	Intravenous	Note
Development toxicity	7000				-

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

Substances subject to the Rotterdam Convention:
None

15. Regulatory information ... / >>

Substances subject to the Stockholm Convention:
None

16. Other information

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H320	Cause eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

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)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

16. Other information ... / >>

- 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 Comunication 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
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"
- Minensota Chapter 5206 Departemnt 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:
03 / 09 / 14.