

## Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

### 1. Identification

#### 1.1. Product identifier

Code: **INUR1398**  
Product name: **INDURITORE B 1398**

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

Identified Uses	Industrial	Professional	Consumer
Additive for paint products	✓	-	-

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

Name: **ICRO COATINGS S.p.A.**  
Full address: **Via Bedeschi, 25**  
District and Country: **24040 Chignolo D'Isola (BG) Italia**  
Tel.: **+39 035 999711**  
Fax: **+39 035 999712**  
e-mail address of the competent person responsible for the Safety Data Sheet: **gianluca.cerina@icro.it**  
Supplier: **ICRO COATINGS S.p.A. con Socio Unico - Via Bedeschi 25 - 24040 Chignolo d'Isola (BG) - Italy**

#### 1.4. Emergency telephone number

For urgent inquiries refer to: **Hartley group - 10616 Bailey Road STE. D - Cornelius, NC 28031 - USA - +01 704-230-4047**

### 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 2	Highly flammable liquid and vapour.
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.
Skin sensitization, category 1	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	May cause drowsiness or dizziness.

##### Hazard pictograms:



Signal words: **Danger**

##### Hazard statements:

<b>H225</b>	Highly flammable liquid and vapour.
<b>H361</b>	Suspected of damaging fertility or the unborn child.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.

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

<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.

Precautionary statements:

Prevention:

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P260</b>	Do not breathe dust / fume / gas / mist / vapours / spray.
<b>P202</b>	Do not handle until all safety precautions have been read and understood.
<b>P242</b>	Use only non-sparking tools.
<b>P201</b>	Obtain special instructions before use.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P271</b>	Use only outdoors or in a well-ventilated area.
<b>P264</b>	Wash thoroughly with water after use.
<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.
<b>P272</b>	Contaminated work clothing should not be allowed out of the workplace.

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 or doctor.
<b>P312</b>	If you feel unwell, contact a POISON CENTER or doctor.
<b>P333+P313</b>	If skin irritation or rash occurs: Get medical advice / attention.
<b>P337+P313</b>	If eye irritation persists: Get medical advice / attention.
<b>P304+P340</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
<b>P302+P352</b>	IN CASE OF CONTACT WITH 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 powder to extinguish.
<b>P363</b>	Wash contaminated clothing before reuse.

Storage:

<b>P403+P235</b>	Store in a well-ventilated place. Keep cool.
<b>P403+P233</b>	Store in a well-ventilated place. Keep container tightly closed.
<b>P405</b>	Store locked up.

Disposal:

<b>P501</b>	Dispose of the product / container in accordance with current legislation
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#### 2.2. Other hazards

Additional hazards

Contains isocyanates. May produce an allergic reaction.

### 3. Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification:
<b>N-BUTYL ACETATE</b>		
CAS	123-86-4	$17.5 \leq x < 20$
EC	204-658-1	
INDEX	607-025-00-1	
<b>ETHYL ACETATE</b>		
CAS	141-78-6	$15 \leq x < 17.5$
EC	205-500-4	
INDEX	607-022-00-5	
<b>AROMATIC POLYISOCYANATE</b>		
CAS	53317-61-6	$15 \leq x < 17.5$
EC	500-120-8	
INDEX		

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## 3. Composition/information on ingredients ... / &gt;&gt;

**METHYL ETHYL KETONE**CAS 78-93-3  $15 \leq x < 17.5$ 

Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336

EC 201-159-0  
INDEX 606-002-00-3**TOLUENE**CAS 108-88-3  $12.5 \leq x < 15$ 

Flammable liquid, category 2 H225, Reproductive toxicity, category 2 H361, Aspiration hazard, category 1 H304, Specific target organ toxicity - repeated exposure, category 2 H373, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H336

EC 203-625-9  
INDEX 601-021-00-3**XYLENE (MIXTURE OF ISOMERS)**CAS 1330-20-7  $12.5 \leq x < 15$ 

Flammable liquid, category 3 H226, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332, Skin irritation, category 2 H315

EC 215-535-7  
INDEX 601-022-00-9**BENZENE, 1,3-DIISOCYANATOMETHYL-, HOMOPOLYMER**CAS 9017-01-0  $5 \leq x < 7.5$ 

Eye irritation, category 2 H319, Skin sensitization, category 1 H317

EC 618-500-8  
INDEX**ETHYLBENZENE**CAS 100-41-4  $2 \leq x < 3$ 

Flammable liquid, category 2 H225, Acute toxicity, category 4 H332, Aspiration hazard, category 1 H304, Specific target organ toxicity - repeated exposure, category 2 H373

EC 202-849-4  
INDEX 601-023-00-4

\* There is a batch to batch variation.

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

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

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

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

Information not available

## 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.

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### 5. Fire-fighting measures ... / >>

#### 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.

#### 7.3. 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) 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.

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

TLV-ACGIH

ACGIH 2021

#### XYLENE (MIXTURE OF ISOMERS)

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	434	100	651	150	
OEL	EU	221	50	442	100	SKIN
OSHA	USA	435	100			
CAL/OSHA	USA	435	100	655 (C)	3000 (C)	

#### TOLUENE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	192	50	384	100	SKIN
TLV-ACGIH	-		20			
OSHA	USA		200		300	
CAL/OSHA	USA	37	10	560 (C)	500 (C)	SKIN
NIOSH	USA	375	100	560	150	

#### ETHYLBENZENE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	87	20			
OEL	EU	442	100	884	200	SKIN
OSHA	USA	435	100			
CAL/OSHA	USA	22	5	130	30	
NIOSH	USA	435	100	545	125	

#### METHYL ETHYL KETONE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	590	200	885	300	
OEL	EU	600	200	900	300	
OSHA	USA	590	200			
CAL/OSHA	USA	590	200	885	300	
NIOSH	USA	590	200	885	300	

#### ETHYL ACETATE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	1441	400			
OEL	EU	734	200	1468	400	
OSHA	USA	1400	400			
CAL/OSHA	USA	1.4	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	
TLV-ACGIH	-		50		150	
OEL	EU	241	50	723	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.

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

#### 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 (OSHA 29 CFR 1910.138).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

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	liquid	
Colour	colourless	
Odour	typical of solvent	
Odour threshold	Not applicable	
pH	Not applicable	
Melting point / freezing point	Not applicable	
Initial boiling point	77 °C (170,6 °F)	
Boiling range	77 - 137°C	
Flash point	-9 °C (15,8 °F)	
Evaporation rate	Not determined	
Flammability (solid, gas)	not applicable	
Lower inflammability limit	1 % (V/V) 20 °C	
Upper inflammability limit	11.5 % (V/V) 20 °C	
Lower explosive limit	1.1 % (V/V) 20 °C	Temperature: 20 °C
Upper explosive limit	11.5 % (V/V) 20 °C	Temperature: 20 °C
Vapour pressure	Not determined	
Vapour density	3.04	
Relative density	0.97 g/cm <sup>3</sup> @ 20°C	
Solubility	soluble in organic solvents	
Partition coefficient: n-octanol/water	Not applicable	
Auto-ignition temperature	404 °C	
Decomposition temperature	Not applicable	
Viscosity	Not available	
Explosive properties	not applicable	
Oxidising properties	not applicable	

#### 9.2. Other information

VOC : 78,25 % - 759,03 g/litre

### 10. Stability and reactivity

#### 10.1. Reactivity

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

TOLUENE

**INUR1398 - INDURITORE B 1398****10. Stability and reactivity ... / >>**

Avoid exposure to: light.

METHYL ETHYL KETONE

Reacts with: light metals, strong oxidants. Attacks various types of plastic materials. 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 (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.

TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic acid, organic nitrocompounds. May form explosive mixtures with: air. May react dangerously with: strong oxidising agents, strong acids, sulphur.

ETHYLBENZENE

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

METHYL ETHYL KETONE

May form peroxides with: air, light, strong oxidising agents. Risk of explosion on contact with: hydrogen peroxide, nitric acid, sulphuric acid. May react dangerously with: oxidising agents, trichloromethane, alkalis. 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.

METHYL ETHYL KETONE

Avoid exposure to: sources of heat.

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**

METHYL ETHYL KETONE

Incompatible with: strong oxidants, inorganic acids, ammonia, copper, chloroform.

ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, aluminium, nitrates, chlorosulphuric acid. Incompatible materials: plastic materials.

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.

ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane.

**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

Information not available

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

#### 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.

##### TOLUENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

##### ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

##### N-BUTYL 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.

##### TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

##### ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispešl). Is irritating for skin, conjunctiva and respiratory tract.

##### 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.

#### 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.

##### TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

##### 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).

#### ACUTE TOXICITY

##### BENZENE, 1,3-DIISOCYANATOMETHYL-, HOMOPOLYMER

LD50 (Oral): > 5000 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



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

**TOLUENE**  
LD50 (Oral): 5580 mg/kg Rat  
LD50 (Dermal): 12124 mg/kg Rabbit  
LC50 (Inhalation vapours): 28.1 mg/l/4h Rat

**ETHYLBENZENE**  
LD50 (Oral): 3500 mg/kg Rat  
LD50 (Dermal): 15354 mg/kg Rabbit

**METHYL ETHYL KETONE**  
LD50 (Oral): 2737 mg/kg Rat  
LD50 (Dermal): 6480 mg/kg Rabbit  
LC50 (Inhalation vapours): 23.5 mg/l/8h Rat

**N-BUTYL ACETATE**  
LD50 (Oral): 10768 mg/kg Rat  
LD50 (Dermal): 17600 mg/kg Rabbit  
LC50 (Inhalation vapours): 21.1 mg/l/4h Rat

#### SKIN CORROSION / IRRITATION

Causes skin irritation

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

#### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### Carcinogenicity Assessment:

108-88-3 TOLUENE  
ACGIH:: A4  
IARC:3

1330-20-7 XYLENE (MIXTURE OF ISOMERS)  
ACGIH:: A4  
IARC:3

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

26471-62-5 M-TOLYLIDENE DIISOCYANATE  
IARC:2B  
NTP: Reasonably Anticipated

#### 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".

#### TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).  
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

#### ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).  
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

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

#### REPRODUCTIVE TOXICITY

Suspected of damaging fertility or the unborn child

#### STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

#### 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

##### ETHYLBENZENE

LC50 - for Fish 48.5 mg/l/96h pimephales  
EC50 - for Crustacea 75 mg/l/48h daphnia magna

##### N-BUTYL ACETATE

LC50 - for Fish 18 mg/l/96h pimephales promelas  
EC50 - for Algae / Aquatic Plants 675 mg/l/72h

#### 12.2. Persistence and degradability

##### XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l  
Rapidly degradable

##### TOLUENE

Solubility in water 100 - 1000 mg/l  
Rapidly degradable

##### ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l  
Rapidly degradable

##### METHYL ETHYL KETONE

Solubility in water > 10000 mg/l  
Rapidly degradable

##### ETHYL ACETATE

Solubility in water > 10000 mg/l  
Rapidly degradable

##### N-BUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

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

#### 12.3. Bioaccumulative potential

##### XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water 3.12

BCF 25.9

##### TOLUENE

Partition coefficient: n-octanol/water 2.73

BCF 90

##### ETHYLBENZENE

Partition coefficient: n-octanol/water 3.6

##### METHYL ETHYL KETONE

Partition coefficient: n-octanol/water 0.3

##### ETHYL ACETATE

Partition coefficient: n-octanol/water 0.68

BCF 30

##### N-BUTYL ACETATE

Partition coefficient: n-octanol/water 2.3

BCF 15.3

#### 12.4. Mobility in soil

##### XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2.73

##### N-BUTYL ACETATE

Partition coefficient: soil/water < 3

#### 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.

##### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### 14. Transport information

#### 14.1. UN number

ADR / RID, IMDG, IATA: 1993

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### 14. Transport information ... / >>

#### 14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE; METHYL ETHYL KETONE)  
IMDG: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE; METHYL ETHYL KETONE)  
IATA: FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE; METHYL ETHYL KETONE)

#### 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: II

#### 14.5. Environmental hazards

ADR / RID: NO  
IMDG: NO  
IATA: NO

#### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 1 L	Tunnel restriction code: (D/E)
	Special provision: 274, 601, 640D		
IMDG:	EMS: F-E, S-E	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3	

#### 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)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE

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

No component(s) listed.

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

No component(s) listed.

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

Clean Water Act – Priority Pollutants:

108-88-3	TOLUENE
100-41-4	ETHYLBENZENE

Clean Water Act – Toxic Pollutants:

108-88-3	TOLUENE
100-41-4	ETHYLBENZENE

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

108-88-3	TOLUENE
78-93-3	METHYL ETHYL KETONE

EPA List of Lists:

313 Category Code:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
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)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE

EPCRA 313 TRI:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE

RCRA Code:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations

Massachussetts:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE

Minnesota:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE

New Jersey:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
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### 15. Regulatory information ... / >>

108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE

#### New York:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE

#### Pennsylvania:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL KETONE
141-78-6	ETHYL ACETATE
123-86-4	N-BUTYL ACETATE

#### California:

1330-20-7	XYLENE (MIXTURE OF ISOMERS)
108-88-3	TOLUENE
100-41-4	ETHYLBENZENE
78-93-3	METHYL ETHYL 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.

#### 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

Substances subject to the Stockholm Convention:

None

### 16. Other information

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

<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H361</b>	Suspected of damaging fertility or the unborn child.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<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>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.

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### 16. Other information ... / >>

#### 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
- 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 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

**INUR1398 - INDURITORE B 1398****16. Other information ... / >>**

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:

09.