

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

1. Identification

1.1. Product identifier

Code: **INLL0102**
Product name: **INDURITORE B 102**

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: **#####**

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:

H225	Highly flammable liquid and vapour.
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.

ICRO COATINGS S.p.A.

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2. Hazards identification ... / >>

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.

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.
P242 Use only non-sparking tools.
P201 Obtain special instructions before use.
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash thoroughly with water after use.
P240 Ground / bond container and receiving equipment.
P243 Take precautionary measures against static discharge.
P241 Use explosion-proof electrical / ventilation / lighting systems.
P272 Contaminated work clothing should not be allowed out of the workplace.

Response:

P331 Do NOT induce vomiting.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P308+P313 IF exposed or concerned: Get medical advice / attention.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor / . . .
P312 If you feel unwell, contact a POISON CENTER or doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P337+P313 If eye irritation persists: Get medical advice / attention.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352 IN CASE OF CONTACT WITH SKIN: wash with plenty of water.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: use powder to extinguish.
P363 Wash contaminated clothing before reuse.

Storage:

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

Disposal:

P501 Dispose of the product / container in accordance with current legislation

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:
N-BUTYL ACETATE		
CAS	123-86-4	50 ≤ x < 55
EC	204-658-1	
INDEX	607-025-00-1	
TOLUENE		
CAS	108-88-3	20 ≤ x < 25
EC	203-625-9	
INDEX	601-021-00-3	
BENZENE, 1,3-DIISOCYANATOMETHYL-, HOMOPOLYMER		
CAS	9017-01-0	10 ≤ x < 12.5
EC	618-500-8	
INDEX		

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

BENZENE, 2,4-DIISOCYANATO-1-METHYL-, POLYMER WITH 1,6-DIISOCYANATOHEXANE

CAS 26426-91-5 $10 \leq x < 12.5$ Eye irritation, category 2 H319, Skin sensitization, category 1 H317

EC 642-372-2

INDEX

2,4-TOLUENDIISOCYANATE

CAS 584-84-9 $0 \leq x < 0.1$

Carcinogenicity, category 2 H351, Acute toxicity, category 2 H330, Eye irritation, category 2 H319, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335, Respiratory sensitization, category 1 H334, Skin sensitization, category 1 H317, Hazardous to the aquatic environment, chronic toxicity, category 3 H412

EC 209-544-5

INDEX 615-006-00-4

HEXAMETHYLENE-DI-ISOCYANATE

CAS 822-06-0 $0 \leq x < 0.1$

Acute toxicity, category 3 H331, Eye irritation, category 2 H319, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335, Respiratory sensitization, category 1 H334, Skin sensitization, category 1 H317

EC 212-485-8

INDEX 615-011-00-1

* 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.

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.
	TLV-ACGIH	ACGIH 2021

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

2,4-TOLUENDIISOCYANATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OSHA	USA			0.14 (C)	0.02 (C)	
CAL/OSHA	USA	0.04	0.005	0.15 (C)	0.02 (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	

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	

HEXAMETHYLENE-DI-ISOCYANATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	0.034	0.005			
CAL/OSHA	USA	0.034	0.005			
NIOSH	USA	0.035	0.005	0.14 (C)	0.02 (C)	

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 (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	characteristic	
Odour threshold	Not applicable	
pH	Not applicable	
Melting point / freezing point	-78 °C	
Initial boiling point	126 °C (258,8 °F)	
Boiling range	Not applicable	
Flash point	5 °C (41 °F)	
Evaporation rate	Not determined	
Flammability (solid, gas)	not applicable	
Lower inflammability limit	1.7 % (V/V) 20 °C	
Upper inflammability limit	7.6 % (V/V) 20 °C	
Lower explosive limit	1.7 % (V/V) 20 °C	Temperature: 20 °C
Upper explosive limit	7.6 % (V/V) 20 °C	Temperature: 20 °C
Vapour pressure	Not determined	
Vapour density	4	
Relative density	0.96 g/cm ³ @ 20°C	
Solubility	soluble in organic solvents	
Partition coefficient: n-octanol/water	Not applicable	
Auto-ignition temperature	440 °C	
Decomposition temperature	Not applicable	
Viscosity	Not available	
Explosive properties	not applicable	
Oxidising properties	not applicable	

9.2. Other information

Total solids 22,00 %

10. Stability and reactivity

10.1. Reactivity

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

TOLUENE

Avoid exposure to: light.

N-BUTYL ACETATE

Decomposes on contact with: water.

HEXAMETHYLENE-DI-ISOCYANATE

Decomposes at 255°C/491°F. Polymerises at temperatures above 200°C/392°F.

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.

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.

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.

HEXAMETHYLENE-DI-ISOCYANATE

May form explosive mixtures with: alcohols, bases. May react violently with: alcohols, amines, strong bases, oxidising agents, strong acids, water.

10.4. Conditions to avoid

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

10. Stability and reactivity ... / >>

N-BUTYL ACETATE

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

HEXAMETHYLENE-DI-ISOCYANATE

Avoid exposure to: high temperatures, moisture.

10.5. Incompatible materials

N-BUTYL ACETATE

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

HEXAMETHYLENE-DI-ISOCYANATE

Incompatible with: alcohols, carboxylic acids, amines, strong bases.

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.

HEXAMETHYLENE-DI-ISOCYANATE

May develop: nitric oxide, hydrogen cyanide.

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

Information on likely routes of exposure

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.

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

TOLUENE

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

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

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

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

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

HEXAMETHYLENE-DI-ISOCYANATE
LC50 (Inhalation vapours): 0.124 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
26471-62-5 M-TOLYLIDENE DIISOCYANATE
IARC:2B
NTP: Reasonably Anticipated

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".

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

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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

2,4-TOLUENDIISOCYANATE

EC50 - for Algae / Aquatic Plants 4.3 g/l/72h

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

2,4-TOLUENDIISOCYANATE

Solubility in water @ 25 °C mg/l
NOT rapidly degradable

TOLUENE

Solubility in water 100 - 1000 mg/l
Rapidly degradable

N-BUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

HEXAMETHYLENE-DI-ISOCYANATE

NOT rapidly degradable

12.3. Bioaccumulative potential

2,4-TOLUENDIISOCYANATE

Partition coefficient: n-octanol/water 3.43 @ 22 °C

BCF 180

TOLUENE

Partition coefficient: n-octanol/water 2.73

BCF 90

N-BUTYL ACETATE

Partition coefficient: n-octanol/water 2.3

BCF 15.3

HEXAMETHYLENE-DI-ISOCYANATE

Partition coefficient: n-octanol/water 3.2

BCF 3.2

12.4. Mobility in soil

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12. Ecological information ... / >>

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

14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S. (TOLUENE; N-BUTYL ACETATE)

IMDG: FLAMMABLE LIQUID, N.O.S. (TOLUENE; N-BUTYL ACETATE)

IATA: FLAMMABLE LIQUID, N.O.S. (TOLUENE; N-BUTYL ACETATE)

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

Special provision: 274, 601, 640D

Tunnel restriction code: (D/E)

IMDG: EMS: F-E, S-E Limited Quantities: 1 L

IATA: Cargo: Maximum quantity: 60 L

Pass.: Maximum quantity: 5 L

Packaging instructions: 364

Special provision: A3

Packaging instructions: 353

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):

108-88-3 TOLUENE

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:

108-88-3 TOLUENE

Clean Water Act – Toxic Pollutants:

108-88-3 TOLUENE

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

108-88-3 TOLUENE

EPA List of Lists:

313 Category Code:

108-88-3 TOLUENE

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

108-88-3 TOLUENE
123-86-4 N-BUTYL ACETATE

EPCRA 313 TRI:

108-88-3 TOLUENE

RCRA Code:

108-88-3 TOLUENE

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations

Massachusetts:

108-88-3 TOLUENE
123-86-4 N-BUTYL ACETATE

Minnesota:

108-88-3 TOLUENE
123-86-4 N-BUTYL ACETATE

New Jersey:

15. Regulatory information ... / >>

108-88-3 TOLUENE
123-86-4 N-BUTYL ACETATE

New York:

108-88-3 TOLUENE
123-86-4 N-BUTYL ACETATE

Pennsylvania:

108-88-3 TOLUENE
123-86-4 N-BUTYL ACETATE

California:

108-88-3 TOLUENE
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

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

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:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H330	Fatal if inhaled.
H331	Toxic 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.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
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)

16. Other information ... / >>

- 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 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.