

Reviewed on 10/23/2013

1 Identification

- · Product identifier
 - · Product number LZC70
 - · Trade name: PU thinner
 - · Application of the substance / the mixture Professional uses
- · Details of the supplier of the safety data sheet
 - · Manufacturer/Supplier: IVM Chemicals srl Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441
 - · Information department: Environmental Health and safety office hseoffice@ivmchemicals.com
- · Emergency telephone number:
- ChemTel Expert Assistance Hotline/MSDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

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- 2 Hazard(s) identification
- · Classification of the substance or mixture

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

· Label elements

- · GHS label elements
 - The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms



· Signal word Danger

- · Hazard statements
- H225 Highly flammable liquid and vapour.
- H336 May cause drowsiness or dizziness.

· Precautionary statements

P303+P361+P353 IF ON SKIN : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Dispose of contents/container in accordance with local/regional/national/

P501

- international regulations.
- · Classification system: · NFPA ratings (scale 0 - 4)



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· HN	(Co (IS-ratings (scale 0 - 4)	ontd. of page ?
FI		
	$\frac{1}{10} Reactivity = 0$	
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3 Compo	sition/information on ingredients	
· Chemica	al characterization: Mixtures	
· Chemica · Descri	al characterization: Mixtures	
• Chemica • Descri Mixtul	al characterization: Mixtures ption: re: consisting of the following components.	
• Chemica • Descri Mixtul	al characterization: Mixtures	
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Chemica Descri Mixtu Solve Dange	al characterization: Mixtures ption: re: consisting of the following components. nt mixture prous components:	50 - 100%
Chemica Descri Mixtu Solve Dange	al characterization: Mixtures ption: re: consisting of the following components. nt mixture prous components: n-butyl acetate	50 - 100%
Chemica Descri Mixtu Solve Dange	al characterization: Mixtures ption: re: consisting of the following components. nt mixture rous components: n-butyl acetate Flam. Lig. 3, H226	50 - 100%
Chemica Descri Mixtur Solve Dange 123-86-4	al characterization: Mixtures ption: re: consisting of the following components. nt mixture prous components: n-butyl acetate \$\vec{Flam. Liq. 3, H226} \$\vec{STOT SE 3, H336}	
Chemica Descri Mixtur Solve Dange 123-86-4	al characterization: Mixtures ption: re: consisting of the following components. nt mixture rous components: n-butyl acetate Flam. Lig. 3, H226	50 - 100% 30-49.9%

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4 First-aid measures

· Description of first aid measures

- · General information:
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Do not induce vomiting; immediately call for medical help.
- \cdot Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by substances, refer to Section 11.

• Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents: Alcohol resistant foam, CO, powder, water spray/mist.
 - · For safety reasons unsuitable extinguishing agents:
 - Do not use a jet water stream as it may scatter and spread fire.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
 - Protective equipment:

Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

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6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section 13. Do not flush with water or aqueous cleansing agents
- Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

• **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- · Conditions for safe storage, including any incompatibilities
 - · Storage:
 - Requirements to be met by storerooms and receptacles:
 - Provide solvent resistant, sealed floor.

Observe the label precautions, the expiration date for the use, if indicated, is from delivery date of goods.

In cases where there is no reported expiration date , it means that the product must be used within 8 months.

· Information about storage in one common storage facility: Not required.

· Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s) Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Comp	· Components with limit values that require monitoring at the workplace:				
123-86-4	I n-butyl acetate				
PEL ()	Long-term value: 710 mg/m ³ , 150 ppm				
REL ()	Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm				
TLV ()	Short-term value: 950 mg/m³, 200 ppm Long-term value: 713 mg/m³, 150 ppm				
108-65-6	2-methoxy-1-methylethyl acetate				
WEEL ()	Long-term value: 50 ppm				
· Ad	<i>Iditional information:</i> The lists that were valid during the creation were used as basis. (Contd. on page 4)				



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· Exposure controls

- · Personal protective equipment:
 - General protective and hygienic measures: Wash hands before breaks and at the end of work. • Breathing equipment: Not required.
 - · Protection of hands:

Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The glove material has to be impermeable and resistant to the product .

· Material of gloves

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

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

Information on basic physical and chemical properties General Information Appearance: Form: Form: Color: According to product specification

9 Physical and chemical properties

· Color:	According to product specification	
· Odor:	Characteristic	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
• Melting point/Melting range:	Undetermined.	
· Boiling point/Boiling range:	124 °C (255 °F)	
· Flash point:	22 °C (72 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	315 °C (599 °F)	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive. However, formatio of explosive air/vapor mixtures are possible.	
· Explosion limits:		
· Lower:	1.2 Vol %	
· Upper:	10.8 Vol %	
· Vapor pressure at 20 °C (68 °F):	10.7 hPa (8 mm Hg)	
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• Density at 20 •C (68 •F):	0.908 g/cm³ (7.577 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
• <i>Kinematic at 20 •C (68 •F):</i>	29 s (ISO 3 mm)
· Solvent content:	
· VOC content:	100.0 %
	907.6 g/l / 7.57 lb/gl
Other information (HAPS)	

10 Stability and reactivity

- · Reactivity typical of the product as indicated in the data sheet
- Chemical stability The product is stable in normal conditions of storage and use recommended • Thermal decomposition / conditions to be avoided:
 - No decomposition if used according to specifications.
- · Possibility of hazardous reactions Vapours may form explosive mixtures with air
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - Acute toxicity:

· LD/	LC50 value	es that are relevant for classification:
123-86-4	n-butyl ac	etate
Oral	LD50	10760 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	14000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	>21.0 mg/l (rat/szczur/mouse/souris/Maus/ratón)
108-65-6	2-methoxy	/-1-methylethyl acetate
Oral	LD50	8532 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Inhalative	LC50/4 h	35.7 mg/l (rat/szczur/mouse/souris/Maus/ratón)
· · · · · Sen · Additio No ado	on the eye: sitization: N nal toxicolo ditional toxi	No irritant effect. No irritating effect. No sensitizing effects known. ogical information: icological information know siness or dizziness.
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May cause drowsiness or dizziness.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients, in dangerous form, is listed.

· NTP (National Toxicology Program)

None of the ingredients, in dangerous form, is listed.

12 Ecological information

· Toxicity

EC50

• Aquatic toxicity:

123-86-4 n-butyl acetate

648 mg/l (algae) 72h 44 mg/l (daphnia) 48h

LC50 (96h) 18 mg/l (Fish)

· Persistence and degradability No further relevant information available.

· Bioaccumulative potential No further relevant information available.

- · Mobility in soil No further relevant information available.
 - · Additional ecological information:
 - · General notes:
 - Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

Dispose of contents and container in accordance with local state and federal regulations.

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

· UN-Number		
· DOT, IMDG, IATA	UN1263	
· UN proper shipping name		
·DOT	Paint	
· IMDG, IATA	PAINT	



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· Transport hazard class(es)	
·DOT	
RAMME DOR	
· Class	3 Flammable liquids.
· Label	3
· Class	3 Flammable liquids
· Label	3
· IMDG, IATA	
· Class	3 Flammable liquids.
· Label	3
· Packing group	
· DOT, IMDĞ, IATA	ll –
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E, <u>S-E</u>
 Transport in bulk according to Annex MARPOL73/78 and the IBC Code 	Il of Not applicable.
· UN "Model Regulation":	UN1263, Paint, special provision 640D, 3, II

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15 Regulatory information

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

Requirements of Federal Register

· SARA

• Section 355 (extremely hazardous substances):

None of the ingredients, in dangerous form, is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients, in dangerous form, is listed.

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• Chemicals known to cause reproductive toxicity for males:

None of the ingredients, in dangerous form, is listed.

• Chemicals known to cause developmental toxicity: None of the ingredients, in dangerous form, is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients, in dangerous form, is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients, in dangerous form, is listed.

·NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients, in dangerous form, is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients, in dangerous form, is listed.

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: IVM Chemicals Srl

· Contact: See emergency phone

· Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Sources Directive 1999/45/EC and following amendments Directive 67/548/EEC and following amendments and adjustments Agency ECHA web site INRS Fiche Toxicologique IARC International agency for research on cancer \cdot * Data compared to the previous version altered.

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