

## Material Safety Data Sheet LIVELART5000

Safety Data Sheet dated 20/9/2017, version 3

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier  
Mixture identification:  
Trade name: LIVELART5000
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
Thinner for inks  
Uses advised against:  
all uses not listed in the recommended
- 1.3. Details of the supplier of the safety data sheet  
Company:  
ITW CER  
85 RUE CASTELLION  
01117 OYONNAX – France  
+33 (0)4 74 73 26 00
- 1.4. Emergency telephone number  
+33 (0)1 45 42 59 59  
Company/Organization : INRS / ORFILA <http://www.centres-antipoison.net>

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### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture  
EC regulation criteria 1272/2008 (CLP)  
⚠ Warning, Flam. Liq. 3, Flammable liquid and vapour.  
⚠ Warning, STOT SE 3, May cause drowsiness or dizziness.  
Adverse physicochemical, human health and environmental effects:  
No other hazards
- 2.2. Label elements  
Hazard pictograms:



- Warning
- Hazard statements:  
H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.
- Precautionary statements:  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P312 Call a POISON CENTER/ doctor/if you feel unwell.  
P370+P378 In case of fire: Use foam, powder, carbon dioxide, other gases, waterto extinguish.  
P501 Dispose of contents/container in accordance with applicable regulations.
- Special Provisions:  
None
- Contains

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2-ethoxy-1-methylethyl acetate

Special provisions according to Annex XVII of REACH and subsequent amendments:  
None

### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

N.A.

#### 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
60% - 70%	2-ethoxy-1-methylethyl acetate	Index number: CAS: EC: REACH No.: 603-177-00-8 54839-24-6 259-370-9 01- 2119475116 -39	 2.6/3 Flam. Liq. 3 H226  3.8/3 STOT SE 3 H336

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Contact with skin:

Wash with plenty of water and soap.

Contact with eyes:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Swallowing:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Recommended extinguishers:

In case of fire: Use foam, powder, carbon dioxide, other gases, water to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

Use suitable breathing apparatus .

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Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Move undamaged containers from immediate hazard area if it can be done safely.

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### SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
  - Wear personal protection equipment.
  - Remove all sources of ignition.
  - Remove persons to safety.
  - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
  - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
  - Retain contaminated washing water and dispose it.
  - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
  - Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
  - Wash with plenty of water.
- 6.4. Reference to other sections
  - See also section 8 and 13

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### SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
  - Avoid contact with skin and eyes, inhalation of vapours and mists.
  - Don't use empty container before they have been cleaned.
  - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
  - Contaminated clothing should be changed before entering eating areas.
  - Do not eat or drink while working.
  - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
  - Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
  - Keep away from food, drink and feed.
  - Incompatible materials:
    - None in particular.
  - Instructions as regards storage premises:
    - Cool and adequately ventilated.
- 7.3. Specific end use(s)
  - None in particular

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### SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
  - 2-ethoxy-1-methylethyl acetate - CAS: 54839-24-6
  - ACGIH - TWA: 597 mg/m<sup>3</sup>, 100 ppm
  - DNEL Exposure Limit Values
    - N.A.
  - PNEC Exposure Limit Values
    - N.A.
- 8.2. Exposure controls
  - Eye protection:
    - Not needed for normal use. Anyway, operate according good working practices.
  - Protection for skin:
    - No special precaution must be adopted for normal use.
  - Protection for hands:
    - Not needed for normal use.
  - Respiratory protection:
    - Use adequate protective respiratory equipment.

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Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

### SECTION 9: Physical and chemical properties

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

Properties	Value	Method:	Notes:
Appearance and colour:	liquido	--	--
Odour:	N.A.	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	> 23 - 55 ° C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	0.95 g/cm3	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

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### 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable under normal conditions

#### 10.2. Chemical stability

Stable under normal conditions

#### 10.3. Possibility of hazardous reactions

None

#### 10.4. Conditions to avoid

Stable under normal conditions.

#### 10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

#### 10.6. Hazardous decomposition products

None.

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

N.A.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

N.A.

#### 12.2. Persistence and degradability

N.A.

#### 12.3. Bioaccumulative potential

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- N.A.  
12.4. Mobility in soil  
N.A.  
12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None  
12.6. Other adverse effects  
None

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### SECTION 13: Disposal considerations

- 13.1. Waste treatment methods  
Recover if possible. In so doing, comply with the local and national regulations currently in force.

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### SECTION 14: Transport information

- 14.1. UN number  
ADR-UN Number: 1210  
IATA-UN Number: 1210  
IMDG-UN Number: 1210
- 14.2. UN proper shipping name  
ADR-Shipping Name: PRINTING INK, flammable  
IATA-Shipping Name: PRINTING INK, flammable  
IMDG-Shipping Name: PRINTING INK, flammable
- 14.3. Transport hazard class(es)  
ADR-Class: 3  
ADR - Hazard identification number: 30  
IATA-Class: 3  
IATA-Label: Flamm. Liquid  
IMDG-Class: 3
- 14.4. Packing group  
ADR-Packing Group: III  
IATA-Packing group: III  
IMDG-Packing group: III
- 14.5. Environmental hazards  
IMDG-Marine pollutant: No
- 14.6. Special precautions for user  
ADR-S.P.: 640E  
ADR-Transport category (Tunnel restriction code): (D/E)  
IATA-Passenger Aircraft: 355  
IATA-Cargo Aircraft: 366  
IATA-ERG: 3L  
IMDG-EmS: F-E , S-D  
IMDG-Stowage and handling: A
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
No

The product is transported in conditions that comply with exemption criteria for ADR transport.

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### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)

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Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Pronto all'Uso

Volatile Organic compounds - VOCs = 60.00 %

Volatile Organic compounds - VOCs = 600.00 g/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 34.51

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

### SECTION 16: Other information

Full text of phrases referred to in Section 3:

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

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<b>Classification according to Regulation (EC) Nr. 1272/2008</b>	<b>Classification procedure</b>
Flam. Liq. 3, H226	On basis of test data
STOT SE 3, H336	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.