

Safety Data Sheetaccording to Regulation (EU) 2015/830
SDS Ref.: LACO1512010

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**Product form : Mixture
Trade name : DURA-INK® 5, 15, 25, 55, 60, 200 Red**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Use of the substance/mixture : Marking.

1.2.2. Uses advised against

Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe S.A.S.

Parc Industriel de la Plaine de

l'Ain - Allée des Combes.

01150.BLYES.France.

Phone: +33 (0)4 74 46 23 23

Fax: +33 (0)4 74 46 23 29

E-mail: info@eu.laco.com

Web: http://www.markal.com

1.4. Emergency telephone numberEmergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887;
全国应急中心 0532 8388 9090

| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|--|-----------------------------------|------------------|---------|
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH Birmingham | 0344 892 0111 | |

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

| | |
|---------------|------|
| Flam. Liq. 2 | H225 |
| Skin Irrit. 2 | H315 |
| Eye Dam. 1 | H318 |
| STOT SE 3 | H336 |

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS02

GHS05

GHS07

Signal word (CLP) :

: Danger

Hazardous ingredients

: 1-Butanol; Isopropanol; 1-Methoxy-2-propanol; propan-1-ol

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P261 - Avoid breathing mist, vapours.
P264 - Wash hands thoroughly after handling.

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P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER/doctor.
P312 - Call a poison center or doctor if you feel unwell.
P321 - Specific treatment (see First aid measures on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use carbon dioxide (CO₂), Dry powder, foam to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to Collection point.

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|---|---------|--|
| ethanol | (CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 | 60 - 75 | Flam. Liq. 2, H225 |
| 1-Butanol | (CAS-No.) 71-36-3 (EC-No.) 200-751-6 (EC Index-No.) 603-004-00-6 | 5 - 10 | Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 |
| 1-Methoxy-2-propanol | (CAS-No.) 107-98-2 (EC-No.) 203-539-1 (EC Index-No.) 603-064-00-3 | 5 - 10 | Flam. Liq. 3, H226 STOT SE 3, H336 |
| Isopropanol | (CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 | 0 - 5 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 |
| propan-1-ol | (CAS-No.) 71-23-8 (EC-No.) 200-746-9 (EC Index-No.) 603-003-00-0 | 0 - 5 | Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3, H336 |
| 3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one | (CAS-No.) 509-34-2 (EC-No.) 208-096-8 | 0 - 1.5 | Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 |
| 4,4'-carbonimidoylbis[N,N-diethylaniline] monohydrochloride; Basic Yellow 37 | (CAS-No.) 6358-36-7 (EC-No.) 228-770-5 | 0 - 1 | Eye Dam. 1, H318 Aquatic Chronic 2, H411 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Never give anything by mouth to an unconscious person. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| First-aid measures after skin contact | : Rinse skin with water/shower. Take off immediately all contaminated clothing. Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. |
| First-aid measures after ingestion | : Call a POISON CENTER/doctor if you feel unwell. |

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

| | |
|-------------------------------------|--------------------------------------|
| Symptoms/effects after inhalation | : May cause drowsiness or dizziness. |
| Symptoms/effects after skin contact | : Causes skin irritation. |
| Symptoms/effects after eye contact | : Causes serious eye damage. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|-------------------------------------|
| Suitable extinguishing media | : Carbon dioxide. Foam. Dry powder. |
| Unsuitable extinguishing media | : None known. |

5.2. Special hazards arising from the substance or mixture

| | |
|------------------|--|
| Fire hazard | : Highly flammable liquid and vapour. |
| Explosion hazard | : May form flammable/explosive vapour-air mixture. |

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. |
| Protection during firefighting | : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. EN469. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|--|
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid all eye and skin contact and do not breathe vapour and mist. |
|------------------|--|

6.1.1. For non-emergency personnel

| | |
|----------------------|---|
| Protective equipment | : Chemical goggles or safety glasses. Wear suitable gloves. |
| Emergency procedures | : Evacuate unnecessary personnel. |

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Chemical goggles or safety glasses. Wear suitable gloves. |
| Emergency procedures | : Stop leak if safe to do so. Ventilate area. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| For containment | : Stop leak if safe to do so. |
| Methods for cleaning up | : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like cermiculite, sand, or earth to soak up the product and place into a container for later disposal. |

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|--|
| Additional hazards when processed | : Handle empty containers with care because residual vapours are flammable. |
| Precautions for safe handling | : No open flames. No smoking. Use only non-sparking tools. Avoid breathing mist, vapours. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing. |
| Hygiene measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|---|
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment. |
| Storage conditions | : Keep in fireproof place. Keep container tightly closed. |
| Incompatible products | : Strong acids. Strong bases. Strong oxidizers. |
| Incompatible materials | : Heat sources. |
| Heat and ignition sources | : Keep away from heat, sparks and flame. |
| Prohibitions on mixed storage | : Incompatible materials. |
| Storage area | : Store in dry, cool, well-ventilated area. |

7.3. Specific end use(s)

Marking.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| ethanol (64-17-5) | | |
|-------------------|---|------------------------|
| Germany | TRGS 910 Acceptable concentration notes | |
| United Kingdom | WEL TWA (mg/m ³) | 1920 mg/m ³ |
| United Kingdom | WEL TWA (ppm) | 1000 ppm |

| 1-Butanol (71-36-3) | | |
|---------------------|---|-----------------------|
| EU | Local name | n-Butyl alcohol |
| Germany | TRGS 910 Acceptable concentration notes | |
| United Kingdom | WEL STEL (mg/m ³) | 154 mg/m ³ |
| United Kingdom | WEL STEL (ppm) | 50 ppm |
| United Kingdom | Remark (WEL) | (Sk) |

| 1-Methoxy-2-propanol (107-98-2) | | |
|---------------------------------|---|-----------------------|
| EU | Local name | 1-Methoxypropanol-2 |
| EU | IOELV TWA (mg/m ³) | 375 mg/m ³ |
| EU | IOELV TWA (ppm) | 100 ppm |
| EU | IOELV STEL (mg/m ³) | 568 mg/m ³ |
| EU | IOELV STEL (ppm) | 150 ppm |
| EU | Notes | Skin |
| Germany | TRGS 910 Acceptable concentration notes | |
| United Kingdom | WEL TWA (mg/m ³) | 375 mg/m ³ |
| United Kingdom | WEL TWA (ppm) | 100 ppm |
| United Kingdom | WEL STEL (mg/m ³) | 560 mg/m ³ |
| United Kingdom | WEL STEL (ppm) | 150 ppm |

| propan-1-ol (71-23-8) | | |
|-----------------------|---|-----------------------|
| Germany | TRGS 910 Acceptable concentration notes | |
| United Kingdom | WEL TWA (mg/m ³) | 500 mg/m ³ |
| United Kingdom | WEL TWA (ppm) | 200 ppm |
| United Kingdom | WEL STEL (mg/m ³) | 625 mg/m ³ |
| United Kingdom | WEL STEL (ppm) | 250 ppm |
| United Kingdom | Remark (WEL) | (Sk) |

| Isopropanol (67-63-0) | | |
|-----------------------|---|------------------------|
| Germany | TRGS 910 Acceptable concentration notes | |
| United Kingdom | WEL TWA (mg/m ³) | 999 mg/m ³ |
| United Kingdom | WEL TWA (ppm) | 400 ppm |
| United Kingdom | WEL STEL (mg/m ³) | 1250 mg/m ³ |
| United Kingdom | WEL STEL (ppm) | 500 ppm |

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Eyewash stations.

Personal protective equipment:

Avoid all unnecessary exposure.

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Hand protection:

Use rubber gloves. EN374

Eye protection:

Chemical goggles or safety glasses. EN166

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH. Approved respirator. EN 12083

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | : Liquid |
| Appearance | : Solid marker containing liquid colored paint. |
| Colour | : red. |
| Odour | : alcohols. |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : 78 °C |
| Flash point | : 17 °C |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Highly flammable liquid and vapour. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

VOC content : 70 - 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Open flame. Direct sunlight. Heat.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

May release flammable gases. Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

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Acute toxicity (inhalation) : Not classified

ethanol (64-17-5)

| | |
|----------------------------|---------------|
| LD50 oral rat | 10470 mg/kg |
| LD50 dermal rabbit | > 20000 mg/kg |
| LC50 inhalation rat (mg/l) | 133.8 mg/l/4h |

1-Methoxy-2-propanol (107-98-2)

| | |
|---------------------------|-------------------------|
| LD50 oral rat | 4016 mg/kg bodyweight |
| LD50 dermal rat | > 2000 mg/kg bodyweight |
| LC50 inhalation rat (ppm) | > 7000 ppm 6 hr |

propan-1-ol (71-23-8)

| | |
|----------------------------|----------------|
| LD50 oral rat | 5400 mg/kg |
| LD50 dermal rabbit | 4032 mg/kg |
| LC50 inhalation rat (mg/l) | > 33.8 mg/l/4h |

Isopropanol (67-63-0)

| | |
|---------------------------|----------------|
| LD50 oral rat | 5840 mg/kg |
| LD50 dermal rabbit | 16.4 ml/kg |
| LC50 inhalation rat (ppm) | > 10000 ppm/4h |

| | |
|-----------------------------------|------------------------------|
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye damage. |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |

ethanol (64-17-5)

| | |
|------------|----------------------------|
| IARC group | 1 - Carcinogenic to humans |
|------------|----------------------------|

Isopropanol (67-63-0)

| | |
|------------|----------------------|
| IARC group | 3 - Not classifiable |
|------------|----------------------|

| | |
|------------------------|--------------------------------------|
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : May cause drowsiness or dizziness. |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|------------------|
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

ethanol (64-17-5)

| | |
|----------------|------------|
| LC50 fish 1 | 14200 mg/l |
| EC50 Daphnia 1 | 5012 mg/l |

1-Methoxy-2-propanol (107-98-2)

| | |
|----------------|-------------|
| LC50 fish 1 | 20800 mg/l |
| EC50 Daphnia 1 | 23300 mg/l |
| ErC50 (algae) | > 1000 mg/l |

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propan-1-ol (71-23-8)

| | |
|----------------|----------------|
| LC50 fish 1 | 4555 mg/l 96 h |
| EC50 Daphnia 1 | 1000 mg/l 48 h |

Isopropanol (67-63-0)

| | |
|-------------|------------|
| LC50 fish 1 | 10000 mg/l |
|-------------|------------|

12.2. Persistence and degradability

ethanol (64-17-5)

| | |
|----------------|-------------|
| Biodegradation | > 96 % 28 d |
|----------------|-------------|

1-Methoxy-2-propanol (107-98-2)

| | |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | 96 % 28 d |

propan-1-ol (71-23-8)

| | |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | 75 % 20 d |

Isopropanol (67-63-0)

| | |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

12.3. Bioaccumulative potential

ethanol (64-17-5)

| | |
|---------------------------|--------------------------------|
| Bioaccumulative potential | Not expected to bioaccumulate. |
|---------------------------|--------------------------------|

1-Methoxy-2-propanol (107-98-2)

| | |
|---------------------------|--------------------------------|
| Bioaccumulative potential | Not expected to bioaccumulate. |
|---------------------------|--------------------------------|

propan-1-ol (71-23-8)

| | |
|------------|------|
| BCF fish 1 | 0.88 |
| Log Pow | 0.2 |

Isopropanol (67-63-0)

| | |
|---------------------------|--------------------------------|
| Bioaccumulative potential | Not expected to bioaccumulate. |
|---------------------------|--------------------------------|

12.4. Mobility in soil

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| | |
|----------------|------------------|
| Ecology - soil | Not established. |
|----------------|------------------|

12.5. Results of PBT and vPvB assessment

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PBT: not yet assessed

vPvB: not yet assessed

12.6. Other adverse effects

Additional information : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-----------------------------------|--|
| Sewage disposal recommendations | : Do not dispose of waste into sewer. |
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Additional information | : Handle empty containers with care because residual vapours are flammable. |
| European List of Waste (LoW) code | : For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. |
| HP Code | : H3-A - 'Highly flammable' : — liquid substances and preparations having a flash point below 21 °C (including |

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extremely flammable liquids), or
— substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy, or
— solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition, or
— gaseous substances and preparations which are flammable in air at normal pressure, or
— substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.
H4 - 'Irritant': non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not regulated.
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not regulated.
UN-No. (RID) : Not regulated.

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated.
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not regulated.
Proper Shipping Name (RID) : Not regulated.

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated.

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not regulated.

RID

Transport hazard class(es) (RID) : Not regulated.

14.4. Packing group

Packing group (ADR) : Not regulated.
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not regulated.
Packing group (RID) : Not regulated.

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : Per ICAO/IATA Regulations 3.4.1.1.2; IMDG Regulations 2.4.2.2.2 Product testing according to the UN regulations for classification of readily combustible solids section 33.2.1.4.3.1 – Preliminary Screening Test.
Inner filter with absorbed ink is removed from marker body. Filter tested is 20 mm diameter. End of filter is ignited using 2000°C torch. After 2 minutes only 50 mm length of cylinder has burned.
Product is not readily combustible solid of Division 4.1

14.6. Special precautions for user

Overland transport

Not regulated.

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Transport by sea

Transport regulations (IMDG)

: Per ICAO/IATA Regulations 3.4.1.1.2; IMDG Regulations 2.4.2.2.2 Product testing according to the UN regulations for classification of readily combustible solids section 33.2.1.4.3.1 – Preliminary Screening Test.
Inner filter with absorbed ink is removed from marker body. Filter tested is 20 mm diameter. End of filter is ignited using 2000°C torch. After 2 minutes only 50 mm length of cylinder has burned.
Product is not readily combustible solid of Division 4.1

Air transport

Transport regulations (IATA)

: Per ICAO/IATA Regulations 3.4.1.1.2; IMDG Regulations 2.4.2.2.2 Product testing according to the UN regulations for classification of readily combustible solids section 33.2.1.4.3.1 – Preliminary Screening Test.
Inner filter with absorbed ink is removed from marker body. Filter tested is 20 mm diameter. End of filter is ignited using 2000°C torch. After 2 minutes only 50 mm length of cylinder has burned.
Product is not readily combustible solid of Division 4.1

Inland waterway transport

Not regulated.

Rail transport

Not regulated.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content : 70 - 100 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Transport information.

Abbreviations and acronyms:

| | |
|--|--|
| | ACGIH (American Conference of Government Industrial Hygienists) |
| | CAS (Chemical Abstracts Service) number |
| | CLP: Classification, Labelling, Packaging. |
| | GHS: Globally Harmonized System (of Classification and Labeling of Chemicals). |
| | OSHA: Occupational Safety & Health Administration |
| | PBT: Persistent, Bioaccumulative, Toxic |
| | TSCA: Toxic Substances Control Act |

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Data sources : ESIS (European chemical Substances Information System; accessed at: <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

| Full text of H- and EUH-statements: | |
|-------------------------------------|--|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |

| Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: | | |
|---|------|-----------------------|
| Flam. Liq. 2 | H225 | On basis of test data |
| Skin Irrit. 2 | H315 | Calculation method |
| Eye Dam. 1 | H318 | Calculation method |
| STOT SE 3 | H336 | Calculation method |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.