



## FLASH

Version 1.0

MSDS Number: H52054

Revision Date: 13.03.2015

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

#### 1.1 Product identifier

Trade name : FLASH

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

Use of the Sub-  
stance/Mixture : Paint additive

Recommended restrictions  
on use : For use in industrial installations or professional treatment  
only.

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

Company : Roberlo s.a.  
Ctra. Nacional II, Km. 706,5  
17457 Riudellots de la Selva  
Spain

Telephone : +34972478060

Telefax : +34972477394

E-mail address of person  
responsible for the SDS : msds@roberlo.com

#### 1.4 Emergency telephone number

+34 972 478060 (8:00-12:45 / 14:15-17:30 h) ROBERLO (Spain) (GMT + 1:00)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Reproductive toxicity, Category 2	H361d: Suspected of damaging the unborn child.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

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### Classification (67/548/EEC, 1999/45/EC)

Highly flammable	R11: Highly flammable.
Harmful	R20: Harmful by inhalation.  R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
Irritant	R36/37: Irritating to eyes and respiratory system.  R66: Repeated exposure may cause skin dryness or cracking.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	  
Signal word	:	Danger
Hazard statements	:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.
Supplemental Hazard Statements	:	EUH066 Repeated exposure may cause skin dryness or cracking.
Precautionary statements	:	<b>Prevention:</b> P201 Obtain special instructions before use. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P233 Keep container tightly closed. P260 Do not breathe vapours. P260 Do not breathe spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  <b>Response:</b> P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  <b>Disposal:</b> P501 Dispose of contents/ container to an approved waste disposal plant.



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Hazardous components which must be listed on the label:

isobutyl methyl ketone

dioctyltin dilaurate

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Paint

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
isobutyl methyl ketone	108-10-1 203-550-1 01- 2119473980-30	F; R11 Xn; R20 Xi; R36/37 R66	Flam. Liq.2; H225 Acute Tox.4; H332 Eye Irrit.2; H319 STOT SE3; H335	>= 90 - <= 100
dioctyltin dilaurate	3648-18-8 222-883-3 01- 2119979527-19	Repr.Cat.3; R63 T; R48/25	Repr.2; H361d STOT RE1; H372	>= 3 - < 5

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.  
Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.  
If symptoms persist, call a physician.



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- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Do NOT induce vomiting.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
Obtain medical attention.

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

- Symptoms : No information available.

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

- Treatment : No information available.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

- Unsuitable extinguishing media : High volume water jet

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

- Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.
- Hazardous combustion products : No hazardous combustion products are known

### 5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Use water spray to cool unopened containers.  
For safety reasons in case of fire, cans should be stored separately in closed containments.



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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.2 Environmental precautions

- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.

#### 6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

For contact information in case of emergency, see section 1. For information on safe handling, see section 7. For exposure controls and personal protection measures, see section 8. For subsequent waste disposal, follow the recommendations in section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

- Advice on safe handling : Avoid exceeding of the given occupational exposure limits (see section 8).  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Container may be opened only under exhaust ventilation hood.
- Advice on protection against fire and explosion : Avoid formation of aerosol. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.



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### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Store in cool place. Keep in a well-ventilated place. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Storage period : 12 Months

Other data : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : For the use of this product do not exist particular recommendations apart from that already indicated.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
isobutyl methyl ketone	108-10-1	TWA	20 ppm 83 mg/m <sup>3</sup>	2000/39/EC
Further information	Indicative			
isobutyl methyl ketone	108-10-1	STEL	50 ppm 208 mg/m <sup>3</sup>	2000/39/EC
Further information	Indicative			
isobutyl methyl ketone	108-10-1	TWA	50 ppm 208 mg/m <sup>3</sup>	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
isobutyl methyl ketone	108-10-1	STEL	100 ppm 416 mg/m <sup>3</sup>	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
dioctyltin dilaurate	3648-18-8	TWA	0.1 mg/m <sup>3</sup> (Tin)	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
dioctyltin dilaurate	3648-18-8	STEL	0.2 mg/m <sup>3</sup> (Tin)	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			

#### Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
	108-10-1	4-methylpentan-2-one: 20micromol	Post shift	GB EH40 BAT



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		per litre (Urine)		
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### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

dioctyltin dilaurate : Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 0.0035 mg/m3

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

Hand protection

Remarks : Solvent-resistant gloves The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.

Skin and body protection : impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

pH : not applicable

Melting point/range : not applicable

Boiling point/boiling range : No data available

Flash point : 14 °C  
Method: ISO 1523, closed cup  
Setaflash

Upper explosion limit : 7.7 %(V)  
( 25 °C)

Lower explosion limit : 1.4 %(V)



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	( 25 °C)
Vapour pressure	: No data available
Density	: 0.81 g/cm <sup>3</sup> (20 °C) Method: ISO 2811-1
Solubility(ies)	
Water solubility	: immiscible
Auto-ignition temperature	: 460 °C
Viscosity	
Viscosity, dynamic	: not determined
Viscosity, kinematic	: > 20 mm <sup>2</sup> /s (40 °C)

### 9.2 Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if used as directed.

Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

### 10.5 Incompatible materials

Materials to avoid : Oxidizing agents  
Strong acids and strong bases

### 10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon monoxide



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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

###### Product:

Acute inhalation toxicity : Acute toxicity estimate : 10 - 20 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Calculation method

###### Components:

###### **isobutyl methyl ketone:**

Acute oral toxicity : LD50 Oral (rat): 2,080 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (rat): 8.2 mg/l  
Exposure time: 4 h  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (rabbit): 20,000 mg/kg  
Method: OECD Test Guideline 402

###### **dioctyltin dilaurate:**

Acute oral toxicity : LD50 Oral (rat): 6,450 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402

##### Skin corrosion/irritation

###### Product:

Remarks: May cause skin irritation and/or dermatitis.

##### Serious eye damage/eye irritation

###### Product:

Result: Risk of serious damage to eyes.

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

##### Respiratory or skin sensitisation

###### Product:

Remarks: Based on available data, the classification criteria are not met.



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### Germ cell mutagenicity

**Product:**

Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.

### Carcinogenicity

**Product:**

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

### Reproductive toxicity

**Product:**

Reproductive toxicity - Assessment : Suspected of damaging the unborn child.

### STOT - single exposure

**Product:**

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

### STOT - repeated exposure

**Product:**

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

### Aspiration toxicity

**Product:**

Based on available data, the classification criteria are not met.

### Further information

**Product:**

Remarks: Solvents may degrease the skin.

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Components:**

**isobutyl methyl ketone:**

Toxicity to fish : LC50 (Fish): 505 mg/l



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Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 170 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Algae): 400 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

### **dioctyltin dilaurate:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

### **12.5 Results of PBT and vPvB assessment**

#### **Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **12.6 Other adverse effects**

#### **Product:**

Additional ecological information : There is no data available for this product.

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## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Offer surplus and non-recyclable solutions to a licensed disposal company.



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Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

## SECTION 14: Transport information

### 14.1 UN number

ADR : UN 1263

IMDG : UN 1263

IATA : UN 1263

### 14.2 UN proper shipping name

ADR : PAINT RELATED MATERIAL

IMDG : PAINT RELATED MATERIAL

IATA : Paint related material

### 14.3 Transport hazard class(es)

ADR : 3

IMDG : 3

IATA : 3

### 14.4 Packing group

#### ADR

Packing group : II

Classification Code : F1

Hazard Identification Number : 33

Labels : 3

#### IMDG

Packing group : II

Labels : 3

EmS Code : F-E, S-E

#### IATA

Packing instruction (cargo aircraft) : 364

Packing instruction (LQ) : Y341

Packing group : II

Labels : Flammable Liquids

### 14.5 Environmental hazards

#### ADR

Environmentally hazardous : no

#### IMDG



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Marine pollutant : no

### 14.6 Special precautions for user

not applicable

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P5c	FLAMMABLE LIQUIDS	5,000 t	50,000 t

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.

### 15.2 Chemical Safety Assessment

not applicable

## SECTION 16: Other information

### Full text of R-Phrases

R11	Highly flammable.
R20	Harmful by inhalation.
R36/37	Irritating to eyes and respiratory system.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R63	Possible risk of harm to the unborn child.
R66	Repeated exposure may cause skin dryness or cracking.

### Full text of H-Statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific mate-



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rial designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.