

# Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

### 1.1. Product identifier

Code: Z350/ISA  
 Product name: SPRAYS - CINC CLARO 400 ml ISAVAL  
 UFI: N740-R0F8-Y00K-2S7P

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

Intended use: Zinc in aerosol.

Identified Uses	Industrial	Professional	Consumer
Consumer	-	-	✓
Industrial Use	✓	-	-
Professional Use	-	✓	-

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

Name: AMBRO-SOL S.R.L.  
 Full address: Via per Pavone del Mella n.21  
 District and Country: 25020 Cigole (BS)  
 Italia  
 Tel. +39 030 9959674  
 Fax +39 030 959265

e-mail address of the competent person responsible for the Safety Data Sheet

quality@ambro-sol.com

### 1.4. Emergency telephone number

For urgent inquiries refer to

Centro Antiveleni di Pavia: Tel. (+39) 0382-24444 (IRCCS Fondazione Maugeri - Pavia)  
 Centro Antiveleni di Bergamo: Tel. 800 883300 (Ospedale Papa Giovanni XXIII - Bergamo)  
 Centro Antiveleni di Firenze: Tel. 055 7947819 (Ospedale Careggi - Firenze)  
 Centro Antiveleni di Roma: Tel. 06 3054 343 (Policlinico Gemelli - Roma)  
 Centro Antiveleni di Napoli: Tel. 081 5453333 (Ospedale Cardarelli - Napoli)  
 Servicio de Información Toxicológica (SIT) España: Tel. 91 5620420 (Instituto Nacional de Toxicología y Ciencias Forenses - España)  
 Centro de Informação Antivenenos (CIAV): Tel. 800 250 250 (Instituto Nacional de Emergência Médica - Portugal)  
 Centre Antipoison de Paris: Tel. 01 40 05 48 48 (Centre Antipoison et de Toxicovigilance de Paris - France)  
 Pomorskie Centrum Toksykologii: Tel. (58) 682 04 04 (Zakład Toksykologii Klinicznej - Polska)  
 American Association of Poison Control Centers (USA): Tel. +1 (800) 222 1222  
 Giftnotrufzentralen (Berlin, Deutschland): Tel. +49 030 19 240

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

**2.2. Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:                      Danger

Hazard statements:

<b>H222</b>	Extremely flammable aerosol.
<b>H229</b>	Pressurised container: may burst if heated.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.

Precautionary statements:

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P251</b>	Do not pierce or burn, even after use.
<b>P410+P412</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
<b>P211</b>	Do not spray on an open flame or other ignition source.
<b>P273</b>	Avoid release to the environment.
<b>P391</b>	Collect spillage.
<b>P102</b>	Keep out of reach of children.

**Contains:**                      Hydrocarbons, C6, isoalkanes  
    Isobutyl acetate  
    Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Statements on the aspiration toxicity classification were not included in the label elements, based on

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

section 1.3.3. of Annex I  
to CLP.

VOC (Directive 2004/42/EC) :

Special finishes.

VOC given in g/litre of product in a ready-to-use condition :	550,00
Limit value:	840,00

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>Xylene (mixture of isomers)</b>		
CAS 1330-20-7	$23 \leq x < 27$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
<b>Propane</b>		
CAS 74-98-6	$19 \leq x < 23$	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U
EC 200-827-9		
INDEX 601-003-00-5		
Reg. no. 01-2119486944-21-0046		
<b>Hydrocarbons, C6, isoalkanes</b>		
CAS 64742-49-0	$15 \leq x < 19$	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: P
EC 265-151-9		
INDEX 649-328-00-1		
Reg. no. 012119484651-34-XXXX		
<b>Petroleum Resins</b>		
CAS 64742-16-1	$15 \leq x < 19$	Aquatic Chronic 4 H413
EC 265-116-8		
INDEX -		
<b>Butane</b>		
CAS 106-97-8	$9 \leq x < 11$	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C U
EC 203-448-7		
INDEX 601-004-00-0		
Reg. no. 01-2119474691-32-XXXX		

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL****Aluminium Powder (stabilised)**

CAS 7429-90-5  $1 \leq x < 3$  Flam. Sol. 1 H228, Water-react. 2 H261, Classification note according to Annex VI to the CLP Regulation: T

EC 231-072-3

INDEX 013-002-00-1

Reg. no. 01-2119529243-45-XXXX

**Isobutyl acetate**

CAS 110-19-0  $1 \leq x < 3$  Flam. Liq. 2 H225, STOT SE 3 H336, EUH066, Classification note according to Annex VI to the CLP Regulation: C

EC 203-745-1

INDEX 607-026-00-7

Reg. no. 01-2119488971-22-XXXX

**Isobutane**

CAS 75-28-5  $1 \leq x < 3$  Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

INDEX 601-004-00-0

Reg. no. 01-2119485395-27-XXXX

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics**

CAS -  $1 \leq x < 3$  Asp. Tox. 1 H304, EUH066

EC 918-481-9

INDEX -

Reg. no. 01-2119457273-39-XXXX

**Zinc Powder (stabilised)**

CAS 7440-66-6  $0,5 \leq x < 1$  Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1, Classification note according to Annex VI to the CLP Regulation: T

EC 231-175-3

INDEX 030-001-01-9

Reg. no. 01-2119467174-37-XXXX

**Quartz**

CAS 14808-60-7  $0 \leq x < 0,5$  STOT RE 2 H373

EC 238-878-4

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The full wording of hazard (H) phrases is given in section 16 of the sheet.

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 31,00 %

Hydrocarbons, C6, isoalkanes

Hydrocarbons, C6, isoalkanes, <5% n-hexane: a complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C4 through C11 and boiling in the range of approximately minus 20Å ° C to 190Å ° C (-4Å ° F to 374Å ° F).

**SECTION 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

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

Aluminium Powder (stabilised)

Dry sand; Special powder against metal combustion. Unsuitable extinguishing media: water, foam ABC powder, carbon dioxide (CO<sub>2</sub>).

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. 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.

#### 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).

## SECTION 6. Accidental release measures

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

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

### 6.2. Environmental precautions

Do not disperse in the environment.

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

Use inert absorbent material to soak up leaked product. 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.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

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

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
POL	Polska	ROZPORZADZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
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 2020

### Xylene (mixture of isomers)

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN

**AMBRO-SOL S.R.L.**

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**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

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Replaced revision:3 (Dated: 22/02/2019)

VLE	PRT	221	50	442	100	SKIN
NDS/NDSCh	POL	100		200		SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC						
Normal value in fresh water				327		µg/l
Normal value in marine water				327		µg/l
Normal value for fresh water sediment				12,46		mg/kg/d
Normal value for marine water sediment				12,46		mg/kg/d
Normal value of STP microorganisms				6,58		mg/l
Normal value for the terrestrial compartment				2,31		mg/kg/d

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,6 mg/kg bw/d				
Inhalation				14,8 mg/m3			289 mg/m3	77 mg/m3
Skin				108 mg/kg bw/d				180 mg/kg bw/d

**Propane Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1800	1000	7200	4000	
MAK	DEU	1800	1000	7200	4000	
VLA	ESP		1000			
NDS/NDSCh	POL	1800				

**Hydrocarbons, C6, isoalkanes**

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1301 mg/kg bw/d				
Inhalation				1137 mg/m3				5306 mg/m3
Skin				1377 mg/kg bw/d				13964 mg/kg bw/d

**Butane Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2400	1000	9600	4000	
MAK	DEU	2400	1000	9600	4000	
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			





**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

Oral	NPI		3,95 mg/kg bw/d
Inhalation	NPI	3,72 mg/m3	3,72 mg/m3

**Isobutyl acetate  
Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	300	62	600 (C)	124 (C)	
VLA	ESP	724	150			
VLEP	FRA	710	150	940	200	
NDS/NDSch	POL	240		720		
WEL	GBR	724	150	903	187	
OEL	EU	241	50	723	150	
TLV-ACGIH			50		150	

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	170	µg/l
Normal value in marine water	17	µg/l
Normal value for fresh water sediment	877	µg/kg/d
Normal value for marine water sediment	87,7	µg/kg/d
Normal value of STP microorganisms	200	mg/l
Normal value for the terrestrial compartment	75,5	µg/kg/d

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		5 mg/kg bw/d		5 mg/kg bw/d				
Inhalation	300 mg/m3		35,7 mg/m3	35,7 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	300 mg/m3
Skin	NPI	5 mg/kg bw/d	NPI	5 mg/kg bw/d	NPI	10 mg/kg bw/d	NPI	10 mg/kg bw/d

**Isobutane  
Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH			800			

**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics**

Predicted no-effect concentration - PNEC						
Normal value for the atmosphere	NPI					

**Zinc Powder (stabilised)**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	2		4		INHAL
MAK	DEU	0,1		0,4		RESP

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	20,6	µg/l
Normal value in marine water	6,1	µg/l
Normal value for fresh water sediment	117,8	mg/kg/d
Normal value for marine water sediment	56,5	mg/kg/d
Normal value of STP microorganisms	100	µg/l
Normal value for the terrestrial compartment	35,6	mg/kg/d

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers			
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		830 µg/kg bw/d				
Inhalation	NPI	NPI	NPI	2,5 mg/m <sup>3</sup>	NPI	NPI	NPI	5 mg/m <sup>3</sup>
Skin	NPI	NPI	NPI	83 mg/kg/d	NPI	NPI	NPI	83 mg/kg bw/d

**Zinc oxide**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
MAK	DEU	2		4		INHAL
MAK	DEU	0,1		0,4		RESP
VLA	ESP	2		10		
VLEP	FRA	5				
NDS/NDSch	POL	5		10		INHAL
TLV-ACGIH		2		10		

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	20,6	µg/l
Normal value in marine water	6,1	µg/l
Normal value for fresh water sediment	117,8	mg/kg/d
Normal value for marine water sediment	56,5	mg/kg/d
Normal value of STP microorganisms	100	µg/l
Normal value for the terrestrial compartment	35,6	mg/kg/d

Normal value for the atmosphere

NPI

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers			
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	NPI	NPI	NPI	830 µg/kg bw/d				
Inhalation	NPI	NPI	NPI	2,5 mg/m <sup>3</sup>	NPI	NPI	500 µg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Skin	NPI	NPI	NPI	83 mg/kg bw/d	NPI	NPI	NPI	83 mg/kg bw/d

**Quartz**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
VLA	ESP		0,05			RESP

VLEP	FRA	0,1	RESP
VLEP	ITA	0,1	RESP
NDS/NDSch	POL	0,1	RESP
OEL	EU	0,1	RESP
TLV-ACGIH		0,025	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

### 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.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

None required.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

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.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

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

Appearance	aerosol
Colour	aluminum / light gray
Odour	characteristic of solvent
Odour threshold	Not available
pH	Not available

Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	< 0 °C
Evaporation Rate	Not available
Flammability of solids and gases	flammable gas
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,70 ÷ 0,74 g/ml a 20°C
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	not applicable
Oxidising properties	not applicable

## 9.2. Other information

VOC (Directive 2004/42/EC) : 76,50 % - 550,00 g/litre

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

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

Isobutyl acetate

Decomposes under the effect of heat. Attacks various types of plastic materials.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

Xylene (mixture of isomers)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

Aluminium Powder (stabilised)

Develops hydrogen on contact with: water.

Develops hydrogen on contact with: acids,alkalis,halogens,oxidising agents.

Isobutyl acetate

Risk of explosion on contact with: strong oxidising agents.May react violently with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.

Zinc Powder (stabilised)

Risk of explosion on contact with: ammonium nitrate,ammonium sulphide,barium peroxide,lead nitride,chlorates,chromium trioxide,sodium hydroxide,oxidising agents,performic acid,acids,tetrachloromethane,water.May react dangerously with: alkaline hydroxides,bromine pentafluoride,calcium chloride,fluorine,hexachloroethane,nitrobenzene,potassium dioxide,carbon disulphide,silver.Reacts with: strong acids,strong alkalis.May develop: hydrogen.

#### 10.4. Conditions to avoid

Avoid overheating.

Isobutyl acetate

Avoid exposure to: sources of heat,naked flames.

Zinc Powder (stabilised)

Avoid exposure to: heat,moisture.

#### 10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

Isobutyl acetate

Incompatible with: strong oxidants,nitrates,strong acids,strong bases.

Zinc Powder (stabilised)

Incompatible with: water,acids,strong alkalis.

#### 10.6. Hazardous decomposition products

Information not available

## SECTION 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

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Xylene (mixture of isomers)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

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

Xylene (mixture of isomers)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

Xylene (mixture of isomers)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

> 20 mg/l

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

>2000 mg/kg

Petroleum Resins

LD50 (Oral) 2000 mg/kg

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

LD50 (Oral) > 5000 mg/kg bw rat

LD50 (Dermal) 2000 mg/kg bw rat

LC50 (Inhalation) > 4 mg/l/4h rat

Aluminium Powder (stabilised)

LD50 (Oral) > 15000 mg/kg bw rat

LC50 (Inhalation) 888 mg/m<sup>3</sup>/4h rat

Zinc Powder (stabilised)

LD50 (Oral) > 2000 mg/kg bw rat

Xylene (mixture of isomers)

LD50 (Oral) > 3000 mg/kg rat

LD50 (Dermal) > 1700 mg/kg rabbit

LC50 (Inhalation) 5000 ppm/4h rat

Butane

LC50 (Inhalation) > 1442,738 mg/l/15min rat

Propane

LC50 (Inhalation) 800000 ppm 15 min

Isobutyl acetate

LD50 (Oral) 13413 mg/kg bw rat

LD50 (Dermal) 17400 mg/kg bw rabbit

LC50 (Inhalation) 30 mg/l/6h rat

Hydrocarbons, C6, isoalkanes

LD50 (Oral) > 2000 mg/kg bw rat

LD50 (Dermal) > 2000 mg/kg bw rabbit

LC50 (Inhalation) > 25 mg/l/4h air (rat)

Isobutane

LC50 (Inhalation) > 1442,738 mg/l/15min rat

SKIN CORROSION / IRRITATION

Causes skin irritation

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Xylene (mixture of isomers)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).  
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Toxic for aspiration

## SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

### 12.1. Toxicity

Petroleum Resins

EC50 - for Crustacea 100 mg/l/48h

EC50 - for Algae / Aquatic Plants 100 mg/l/72h

Hydrocarbons, C10-C13, n-alkanes,  
isoalkanes, cyclics, <2% aromatics



**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

Chronic NOEC for Algae / Aquatic Plants 1000 mg/l 72 hours

Aluminium Powder (stabilised)

LC50 - for Fish > 78 µg/l/96h

EC50 - for Crustacea 1,5 mg/l/48h

EC50 - for Algae / Aquatic Plants 16,9 µg/l

Chronic NOEC for Fish 25,1 µg/l 7 days

Chronic NOEC for Crustacea 5 µg/l 48 h

Chronic NOEC for Algae / Aquatic Plants 45,7 mg/l 4 days

Zinc Powder (stabilised)

LC50 - for Fish 112 µg/l/96h

EC50 - for Crustacea 155 µg/l/48h

Chronic NOEC for Fish 720 µg/l 84 days

Chronic NOEC for Crustacea 300 µg/l 3 months

Chronic NOEC for Algae / Aquatic Plants 20 µg/l 4 days

Xylene (mixture of isomers)

LC50 - for Fish 2,6 mg/l/96h

EC50 - for Algae / Aquatic Plants 4,6 mg/l/72h

EC10 for Crustacea 1,9 mg/l/21d

Chronic NOEC for Fish 1,3 mg/l 56 days

Chronic NOEC for Crustacea 960 µg/l 7 days

Chronic NOEC for Algae / Aquatic Plants 440 µg/l 73 h

Butane

LC50 - for Fish > 24,11 mg/l/96h

Propane

LC50 - for Fish 85,82 mg/l/96h

EC50 - for Crustacea 41,82 mg/l/48h

Isobutyl acetate

LC50 - for Fish 16,6 mg/l/96h

EC50 - for Crustacea 24,6 mg/l/48h

EC50 - for Algae / Aquatic Plants 321,5 mg/l/72h

Chronic NOEC for Crustacea 23,2 mg/l 21 days

Chronic NOEC for Algae / Aquatic Plants 1505 mg/l 72 h

Hydrocarbons, C6, isoalkanes

LC50 - for Fish 8,41 mg/l/96h

EC50 - for Crustacea 4,7 mg/l/48h

EC50 - for Algae / Aquatic Plants > 12 mg/l/72h

Chronic NOEC for Algae / Aquatic Plants 6,47 mg/l

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

Isobutane

LC50 - for Fish

&gt; 24,11 mg/l/96h

**12.2. Persistence and degradability**

Propane

Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.

Hydrocarbons, C10-C13, n-alkanes,  
isoalkanes, cyclics, <2% aromatics

Rapidly degradable

But failing the 10-day window (100%).

Aluminium Powder (stabilised)

Solubility in water

0 mg/l

Degradability: information not available

Zinc Powder (stabilised)

Solubility in water

0,1 - 100 mg/l

Degradability: information not available

Xylene (mixture of isomers)

Solubility in water

146 - 208 mg/L @ 25 °C and pH 7 mg/l

Rapidly degradable

Butane

Solubility in water

0,1 - 100 mg/l

Rapidly degradable

Propane

Solubility in water

0,1 - 100 mg/l

Rapidly degradable

Isobutyl acetate

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

Hydrocarbons, C6, isoalkanes

Rapidly degradable

Isobutane

Rapidly degradable

**12.3. Bioaccumulative potential**

Xylene (mixture of isomers)

Partition coefficient: n-octanol/water

3,12

BCF

25,9

Butane	
Partition coefficient: n-octanol/water	1,09
Propane	
Partition coefficient: n-octanol/water	1,09
Isobutyl acetate	
Partition coefficient: n-octanol/water	2,3
BCF	15,3

#### 12.4. Mobility in soil

Xylene (mixture of isomers)	
Partition coefficient: soil/water	2,73
Hydrocarbons, C6, isoalkanes	
Partition coefficient: soil/water	1,78

#### 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

## SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

##### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Product residues are considered hazardous special waste. Do not dispose of in wastewater.

Empty cylinders, although completely emptied, should not be dispersed in the environment.

The overheated aerosol container at a temperature above 50 °C may burst even if it contains a small gas residue.

Waste transport may be subject to ADR.

Refer to applicable regulations.

European Waste Catalog (contaminated containers):

Aerosol as a household waste is excluded from the application of the above standard.

The exhausted commercial / industrial aerosol can be classified as: 15.01.10 \*: packaging containing residues of dangerous or contaminated substances.

## SECTION 14. Transport information

**Z350/ISA - SPRAYS - CINC CLARO 400 ml ISAVAL**

**14.1. UN number**

ADR / RID, IMDG, 1950  
IATA:

**14.2. UN proper shipping name**

ADR / RID: AEROSOLS  
IMDG: AEROSOLS (Hydrocarbons, C6, isoalkanes)  
IATA: AEROSOLS, FLAMMABLE

**14.3. Transport hazard class(es)**

ADR / RID: Class: 2 Label: 2.1



IMDG: Class: 2 Label: 2.1



IATA: Class: 2 Label: 2.1



**14.4. Packing group**

ADR / RID, IMDG, -  
IATA:

**14.5. Environmental hazards**

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

**14.6. Special precautions for user**

ADR / RID: HIN - Kemler: --

Limited Quantities: 1 L

Tunnel restriction code: (D)

Special Provision: -

IMDG: EMS: F-D, S-U

Limited Quantities: 1 L

IATA: Cargo:

Maximum quantity: 150 Kg

Packaging instructions: 203

Pass.:

Maximum quantity: 75 Kg

Packaging instructions: 203

Special Instructions:

A145, A167, A802

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

Information not relevant

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EC: P3a-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC) :

Special finishes.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Gas 1A</b>	Flammable gas, category 1A
<b>Aerosol 1</b>	Aerosol, category 1
<b>Aerosol 3</b>	Aerosol, category 3
<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Flam. Sol. 1</b>	Flammable solid, category 1
<b>Water-react. 2</b>	Substance or mixture which in contact with water emits flammable gas, category 2
<b>Press. Gas</b>	Pressurised gas
<b>Press. Gas (Liq.)</b>	Liquefied gas
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 4</b>	Hazardous to the aquatic environment, chronic toxicity, category 4
<b>H220</b>	Extremely flammable gas.
<b>H222</b>	Extremely flammable aerosol.
<b>H229</b>	Pressurised container: may burst if heated.
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H228</b>	Flammable solid.
<b>H261</b>	In contact with water releases flammable gases.
<b>H280</b>	Contains gas under pressure; may burst if heated.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H413</b>	May cause long lasting harmful effects to aquatic life.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number

- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- 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
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- 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.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
  16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

#### 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

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.