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***1. IDENTIFICATION OF THE PRODUCT AND COMPANY**

1.1 Identification of the preparation: AIRCOLOR COBRE Code: 36000040

1.2 Use of the preparation: Copper paint in aerosol.

1.3 Company:

ROBERLO, S.A.

Carretera N-II, Km. 706,5 - E-17457 - Riudellots de la Selva (Girona) - SPAIN

Phone: +34 972 478060 - Fax: +34 972 477394 - info@roberlo.com – www.roberlo.com

1.4 Emergency phone number: +34 91 5620420 (National Institute of Toxicology)

***2. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances taking part in a percentage higher than the exemption limit and presenting a health or environment hazard, and/or with a recognised exposure limit value:

25-50 % Toluene	R11 R20	F Xn	CAS: 108-88-3 EC No. 203-625-9 SAX: TGK750 No.601-021-00-3
10-25 % Butane	R12	F+	CAS: 106-97-8 EC No. 203-448-7 SAXBOR500 No.601-004-00-0
10-25 % Propane	R12	F+	CAS: 74-98-6 EC No. 200-827-9 SAX: PMJ750 No.601-003-00-5
2.5-10 % Copper	R20/22	Xn	CAS: 7440-50-8 EC No. 231-159-6 SAX: CNI000

For more information on dangerous ingredients, see sections 8, 11, 12 and 16.

3. IDENTIFICATION OF HAZARDS

Extremely flammable. Harmful by inhalation.

4. FIRST AID MEASURES

When in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

4.1 By inhalation: Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives.

4.2 By contact with eyes: Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, until the irritation is reduced. Call a physician immediately.

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4.3 By contact with the skin: Remove contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser. Do not use solvents or thinners. In the case of skin reddening or rashes, contact a doctor immediately.

4.4 By ingestion: In case of accidental swallowing, seek immediate medical attention. Do not induce vomiting, due to the risk of aspiration. Keep the patient at rest.

***5. FIRE-FIGHTING MEASURES**

5.1 Means of Extinction: In case of fire, alcohol-resistant foam, dry chemical powder, carbon dioxide, sand. Do not use for extinguishing: direct water jet.

5.2 Specific risks: Fire can produce a dense black smoke. As consequence of combustion or thermal decomposition, hazardous decomposition products may be produced, such as: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products may be a hazard to health.

5.3 Fire-proof protective equipment: Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots.

5.4 Other recommendations: Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.

6. ACCIDENTAL SPILLAGE MEASURES

6.1 Personal precautions: Eliminate possible sources of ignition and when appropriate, ventilate the area. Do not smoke. Avoid direct contact with this product. Avoid breathing vapours. For exposure controls and personal protection measures, see section 8.

6.2 Environmental precautions: Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sews, inform the appropriate authorities in accordance with local regulations.

6.3 Cleaning-up methods: Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc..). Clean preferably with a detergent. Keep the remains in a closed container. For subsequent waste disposal, follow the recommendations in section 13.

***7. HANDLING AND STORAGE**

7.1 Handling precautions: Comply with the health and safety at work laws.

- General recommendations: Avoid any type of leakage or escape.

- Recommendations for the prevention of fire and explosion risks: Vapours are heavier than air and may spread along floors to a considerable distance. Vapours can form explosive mixtures with air and are able to reach distant ignition sources and flame up or explode. Due to its flammability, this material should only be used in areas from which all naked lights and other sources of ignition have been excluded and away from other heat or electrical sources. Do not smoke. Electrical equipment should be protected to the appropriate standard. No tools with a potential for sparks should be used. Use explosion protected equipment. Switch mobile phones off. Pressurised container. Protect from sunlight and do not expose to temperatures exceeding 50° C. Do not pierce or burn aerosol even after use. Do not spray on a naked flame or any incandescent material.

- Recommendations for the prevention of toxicological risks: Avoid applying the product directly to people, animals, plants or foodstuffs. Do not eat, drink or smoke in application and

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drying areas. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.

7.2 Storage conditions: Prevent unauthorized access. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area.

Class of store: According to current legislation.

Maximum storage period: 12. months. Temperature interval: min:5°C, max: 35°C.

7.3 Incompatible materials: Keep away from oxidizing agents, acids, alkalis.

7.4 Conditions to avoid: Heat: Keep away from sources of heat. Light: Avoid direct contact with sunlight. Humidity: Avoid extreme humidity conditions.

***8. EXPOSURE CONTROLS/PERSONAL PROTECTION 98/24/CE**

8.1 Occupational Exposure Limits (TLV) AGCIH 2001

	TWA		STEL		Year
	ppm	mg/m3	ppm	mg/m3	
Toluene	50	188	A4 Dermal		1996
Butane	800	1900			1981
Propane	2500	4508	Suffocating gas		1998
Copper	1.0		Powder and mist		1986

A4 - Non classified as carcinogenic in humans.

8.2 Engineering measures: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of particles and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

Ventilation requirement: 1424 m3/l (maximum) Air/Preparation

to keep below the Occupational Exposure Limit of the product. Special ventilation is required.

8.3 Protection of respiratory system: Avoid the inhalation of vapours.

Mask: Filter mask.

8.4 Protection of eyes and face: Install emergency eye baths close to the working area.

Goggles: Safety goggles designed to protect against liquid splashes. Face shield: No.

8.5 Protection of hands and skin: Install emergency showers close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

Gloves: Protective gloves of a suitable material. Boots: No. Apron: No. Clothing: Suitable work clothes which avoid contact with the product should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state: Aerosol
 - Colour: Copper
 - Odour: Characteristic.
 - Specific gravity: 0.84 g/cc at 20°C
 - Flash point: -104°C Setflash
 - Autoignition temperature: 460°C
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***10. STABILITY AND REACTIVITY**

- 10.1 Stability: Stable under recommended storage and handling conditions.
- 10.2 Dangerous reactions: Possible dangerous reaction with water, oxidizing agents and acids.
- 10.3 Thermal decomposition: As consequence of thermal decomposition, hazardous products may be produced.

11. TOXICOLOGICAL INFORMATION

No experimental toxicological data on the preparation is available.

11.1 Toxicological effects: Exposure to solvent vapour concentrations in excess of the stated occupational exposure limit, may result in adverse health effects, such as mucous membrane and respiratory system irritation and adverse effects on kidneys, liver and central nervous system. Symptoms and signs include: headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness. Ingestion may result in the following effects: sore throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea; other effects may be as described for exposure to vapours. Repeated or prolonged contact with the solvents of the preparation, may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Liquid splashes in the eyes may cause irritation and reversible damage.

11.2 Dose and lethal concentrations for individual ingredients:

	<u>DL50 Oral</u> <u>mg/kg</u>	<u>DL50 Cutaneous</u> <u>mg/kg</u>	<u>CL50 Inhalation</u> <u>mg/l.4hours</u>
Toluene	5000 Rat	12124 Rabbit	15 Rat
Butane			1.6 Rat

For more information about ingredients dangerous to health, see sections 2 and 8.

***12. ECOLOGICAL INFORMATION**

Prevent contamination of soil. Do not allow to escape into drains, sewers or water courses. Emissions to the atmosphere: Avoid any solvent release into the atmosphere.

- VOC: 572 g/l ASTM D-3960
- Aliphatic hydrocarbons: 36.2 % Weight
- Aromatic hydrocarbons: 31.9 % Weight

12.1 Ecotoxicity: No experimental ecotoxicological data on the preparation as such is available. Ecotoxicological data for individual ingredients:

	<u>CL50</u> <u>mg/l.96hours</u>	<u>CE50</u> <u>mg/l.48hours</u>	<u>CI50</u> <u>mg/l.72hours</u>
Toluene	24 Fishes	12 Daphnia	400 Algae

- 12.2 Mobility : N/A
- 12.3 Persistence and degradability : In water : : t ½ life= 2.9 - 5.7 hours (Toluene)
 In air: t ½ life= 3 hours - 1 day (Toluene)
- 12.4 Bioaccumulative potential : log Pow = 2 .6 (Toluene)

N/A: Not available.

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13. CONSIDERATIONS FOR DISPOSAL

13.1 Handling of waste: Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local/national regulations. For exposure controls and personal protection measures, see section 8.

13.2 Disposal of empty containers: Emptied containers and packaging should be disposed of in accordance with currently local/national regulations. Ensure the container is completely empty before throwing it away.

13.3 Procedures for neutralising or destroying the product: In accordance with local regulations. Do not incinerate closed containers.

*14. TRANSPORT INFORMATION

AEROSOLS

14.1 Land: Transport by road: ADR-2001
Transport by rail: RID/TPF
Class: 2 Classification code: 5F UN n°1950
Transport document: Consignment paper
Written instructions.

14.2 Sea: Transport by ship: IMDG
Class: 2 UN n°1950 Marine pollutant: no Packaging group: II
Emergency Sheet (EmS): 2-13
First Aid Guide (MFAG): 620*
Transport document: Shipping Bill of Lading

14.3 Air: Transport by plane: IATA/ICAO
Class: 2 UN n°1950 Packaging group: II
Transport document: Air Bill of Lading

*15. INFORMATION ON REGULATIONS

15.1 EC Labelling F+, Xn

This product is extremely flammable and harmful in accordance with 67/548/EEC - 2001/59/EC and 1999/45/EC - 2001/60/EC directives.

R20 Harmful by inhalation.

S16 Keep away from sources of ignition- No smoking.

S23 Do not breathe vapour/spray.

S51 Use only in well-ventilated areas.

Pressurised container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn aerosol even after use. Do not spray on a naked flame or any incandescent material.

Dangerous ingredients: Toluene.

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15.2 Type of packaging: According to current legislation.

***16. OTHER INFORMATION**

Intended use
Only for professional use.

Text of R-phrases listed in section 2:

R11 Highly flammable.

R12 Extremely flammable.

R20 Harmful by inhalation.

R20/22 Harmful by inhalation and if swallowed.

Labelling regulations: The information provided in this Material Safety Data Sheet has been written in accordance with 67/548/EEC (Substances), 88/379/EEC (Preparations) and 91/155/EEC (Material Safety Data Sheet) directives. It has been updated to 2001/59/EC (Substances), 2001/60/EC (Preparations) and 2001/58/EC (Material Safety Data Sheet) directives.

The information of this Material Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Material Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.
