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MATERIAL SAFETY DATA SHEET 2001/58/EC
AIRCOLOR ISOSPRAY
AIRCOLOR ISOFAST FX1 - FX2 - FX3

Revision date: 22.02.07
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SDS-821/EN

*1. IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Identification of the preparation: AIRCOLOR ISOSPRAY Code: 61446
 AIRCOLOR ISOFAST FX1 Code: 62694
 AIRCOLOR ISOFAST FX2 Code: 61445
 AIRCOLOR ISOFAST FX3 Code: 62695

1.2 Use of the preparation: Bodywork nitrosynthetic base 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 and/or environment hazard, and/or with a Communitarian workplace exposure limit:

25-50 %	Dimethyl ether F+:R12	EC 204-065-8 Index No. 603-019-00-8 CAS 115-10-6
10-25 %	n-butyl acetate R10 R66-R67	EC 204-658-1 Index No. 607-025-00-1 CAS 123-86-4
2,5-10 %	Ethyl acetate F:R11 Xi:R36 R66-R67	EC 205-500-4 Index No. 607-022-00-5 CAS 141-78-6
2,5-10 %	Toluene F:R11 Repr.Cat.3:R63 Xn:R48/20-65 Xi:R38 R67	EC 203-625-9 Index No. 601-021-00-3 CAS 108-88-3
2,5-10 %	Xylene (mixture of isomers) R10 Xn:R20/21 Xi:R38	EC 215-535-7 Index No. 601-022-00-9 CAS 1330-20-7
< 2,5 %	Isopropyl alcohol F:R11 Xi:R36 R67	EC 200-661-7 Index No. 603-117-00-0 CAS 67-63-0
< 2,5 %	Ethylbenzene F:R11 Xn:R20	EC 202-849-4 Index No. 601-023-00-4 CAS 100-41-4

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

3. IDENTIFICATION OF HAZARDS

Extremely flammable. Vapours may cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking.

4. FIRST AID MEASURES

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

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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 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.

4.3 By contact with eyes: Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, holding the eyelids apart, until the irritation is reduced. Call a physician 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, use water spray, alcohol-resistant foam, dry chemical powder, carbon dioxide, AFFF. 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..). Avoid use of solvents. 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

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

- Flash point: -41°C Setaflash
- Autoignition temperature: 170°C
- Flammability range: 2,8 – 15,5 % Volume 25°C
- Recommendations for the prevention of toxicological risks: Do not eat, drink or smoke in application and 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: 30°C.

- Incompatible materials: Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.
- Conditions to avoid: Heat: Keep away from sources of heat. Light: Avoid direct contact with sunlight. Humidity: Avoid extreme humidity conditions.
- Type of packaging: According to current legislation.

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

8.1 Occupational Exposure Limits (TLV) AGCIH 2004

	TWA		STEL		Year
	ppm	mg/m3	ppm	mg/m3	
Dimethyl ether	1000	1920			Recommended
n-butyl acetate	150	713	200	950	1998
Ethyl acetate	400	1440			1996
Toluene	50	188			A4 Dermal 1996
Xylene (mixture of isomers)	100	434	150	651	A4 1996
Isopropyl alcohol	200	491	400	982	A4 2003
Ethylbenzene	100	434	125	543	A3 2002

A3 - Carcinogenic in animals.

A4 - Non classified as carcinogenic in humans.

8.2 Occupational exposure controls, Directive 89/686/EEC: 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 particulates and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

- Protection of respiratory system: Avoid the inhalation of vapours. Mask: Suitable combined filter mask for gases, vapours and particles (EN141/EN143). In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers.
- Protection of eyes and face: Install emergency eye baths close to the working area. Goggles: Safety goggles with suitable lateral protection (EN166). Face shield: No.
- 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: Gloves resistant against chemicals (EN374). The gloves should be immediately replaced when any sign of degradation is noted. Boots: No. Apron: No. Clothing: Advisable.

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8.3 Environmental exposure controls: Avoid any spillage in the environment of the product, wastes, packages or spraybooth sewages. Avoid any release into the atmosphere above the legal limits allowed.

*9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state: Aerosol
- Colour: Green / Light grey / Neutral grey / Dark grey
- Odour: Characteristic
- Specific gravity: 0,92 g/cc at 20°C (Isospray)
0,85 g/cc at 20°C (Isofast)
- Solubility in water: 328 g/l
- Flash point: -41°C

10. STABILITY AND REACTIVITY

10.1 Stability: Stable under recommended storage and handling conditions.

10.2 Dangerous reactions: Possible dangerous reaction with oxidizing agents, acids, alkalis, amines, peroxides.

10.3 Thermal decomposition: As consequence of thermal decomposition, hazardous products may be produced: nitrogen oxides.

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:

	DL50 Oral mg/kg		DL50 Cutaneous mg/kg		CL50 Inhalation mg/l.4hours	
n-butyl acetate	10768	Rat	17600	Rabbit	9,7	Rat
Ethyl acetate	5620	Rat	20000	Rabbit	200	Rat
Toluene	636	Rat	12124	Rabbit	49	Rat
Xylene (mixture of isomers)	4300	Rat	1700	Rabbit	22	Rat
Isopropyl alcohol	5045	Rat	12800	Rabbit		
Ethylbenzene	3500	Rat	17800	Rabbit		

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

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*12. ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available.

12.1 Spills on the soil: Prevent contamination of soil.

12.2 Spills in water: Do not allow to escape into drains, sewers or water courses.

12.3 Emissions to the atmosphere: When possible, avoid solvent release to the atmosphere; do not pulverize more than is strictly necessary.

- VOC: 678 g/l ASTM D-3960 (Isospray)
692 g/l ASTM D-3960 (Isofast)
- Aromatic hydrocarbons: 12,5 % Weight (Isospray)
12,3 % Weight (Isofast)

12.4 Ecotoxicological data for individual ingredients:

	CL50 mg/l.96hours	CE50 mg/l.48hours	CI50 mg/l.72hours	
Dimethyl ether	>4000	Fishes	>4000	Daphnia
n-butyl acetate	18	Fishes		
Toluene	24	Fishes	12	Daphnia >400 Algae
Xylene (mixture of isomers)	75	Fishes	16	Daphnia
Ethylbenzene	12	Fishes		33 Algae

*13. CONSIDERATIONS FOR DISPOSAL

13.1 Handling of waste, Directive 75/442/EEC~91/156/EC: 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, Directive 94/62/EC: 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 Transport by road, Directive 94/55/EC (ADR):

Transport by rail, Directive 96/49/EC (RID):

Class: 2.5F Packaging group: - UN n°1950

Transport document: Consignment paper

Written instructions.

14.2 Transport by sea (IMDG):

Class: 2.1 UN n°1950 Marine pollutant: no Packaging group: -

Emergency Sheet (EmS): F-D,S-U

First Aid Guide (MFAG): 620*

Transport document: Shipping Bill of Lading

14.3 Transport by air (ICAO/IATA):

Class: 2.1 UN n°1950 Packaging group: -

Transport document: Air Bill of Lading

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***15. INFORMATION ON REGULATIONS**

15.1 EC Labelling F+

This product is EXTREMELY FLAMMABLE in accordance with Guideline 67/548/EEC and 1999/45/EC.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

S23 Do not breathe vapour, spray.

S24/25 Avoid contact with skin and eyes.

S43 In case of fire, use water spray, alcohol-resistant foam, dry chemical powder, carbon dioxide, AFFF.

S51 Use only in well-ventilated areas.

P96 Pressurised container. Protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use.

P97 Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of reach of children.

Dangerous ingredients: None in a percentage equal to or higher than the limit for the name.

- It is applicable the Directive 2004/42/EC, Annex I.2): Emission subcategory E). VOC (product ready for use): 678-692 g/l, VOC max: 840 g/l starting from 01.01.2007

15.2 Restrictions to the marketing and use in accordance with Directive 76/769/EEC: For professional users only.

15.3 Other regulations: It is applicable the Directive 75/324/EEC~94/1/EC, relating to aerosol dispensers and the Directive 87/404/EEC, concerning simple pressure packages.

***16. OTHER INFORMATION**

Text of R-phrases listed in section 2:

R10 Flammable.

R11 Highly flammable.

R12 Extremely flammable.

R20 Harmful by inhalation.

R36 Irritating to eyes.

R38 Irritating to skin.

R63 Possible risk of harm to the unborn child.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

R20/21 Harmful by inhalation and in contact with skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Material Safety Data Sheet regulations: Material Safety Data Sheet in accordance with Directive 91/155/EEC~2001/58/EC.

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.
