ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
29 CFR Parts 1910 1915 1926

Printing date 02/19/2018 Version number 40 Reviewed on 02/19/2018

1 Identification

· **Product identifier**
· **Product number** LUR606F
· **Trade name: fin acr met alluminio grigio**
· **Application of the substance / the mixture** For professional use

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
IVM Chemicals srl
Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441

· **Information department:**
Environmental Health and safety office
hseoffice@ivmchemicals.com
· **Emergency telephone number:**
ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS02 Flame

Flam. Liq. 2	H225	Highly flammable liquid and vapor.


GHS08 Health hazard

Carc. 2	H351	Suspected of causing cancer.
Repr. 2	H361	Suspected of damaging fertility or the unborn child.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.


GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H336	May cause drowsiness or dizziness.

Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
toluene
ethylbenzene

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xylene
ethyl acetate
methyl methacrylate
2-hydroxyethyl methacrylate
Fatty acids, tallow, oleylamine compounds

· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**		
108-88-3	toluene Flam. Liq. 2, H225 Repr. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 Skin Irrit. 2, H315; STOT SE 3, H336 Aquatic Chronic 3, H412	20-24.9%
141-78-6	ethyl acetate Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336	12.5-15%

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110-19-0	isobutyl acetate Flam. Liq. 2, H225 STOT SE 3, H336	10-12.49%
1330-20-7	xylene Flam. Liq. 3, H226 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	5-9.99%
123-86-4	n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336	5-9.99%
108-65-6	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	2.5-4.99%
64742-48-9	Naphtha (petroleum), hydrotreated heavy Asp. Tox. 1, H304 Flam. Liq. 4, H227	2.5-4.99%
100-41-4	ethylbenzene Flam. Liq. 2, H225 Carc. 2, H351; STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H332	1-2.49%
67-63-0	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336	1-2.49%
64742-95-6	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Acute Tox. 4, H332; STOT SE 3, H335-H336	1-2.49%
80-62-6	methyl methacrylate Flam. Liq. 2, H225 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≥0.1-<0.5%
868-77-9	2-hydroxyethyl methacrylate Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	≥0.1-<0.5%
64-17-5	ethanol Flam. Liq. 2, H225 Eye Irrit. 2A, H319	≥0.1-<0.5%

4 First-aid measures

· **Description of first aid measures**

· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
personal protective equipment for first aid responders is recommended. (please see section 8)

· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.

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Take off immediately all contaminated clothing, include underwear and shoes (if necessary). Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.

· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist , consult a doctor.

· **After swallowing:** Do not induce vomiting; immediately call for medical help.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed**
For symptoms and effects caused by substances, refer to Section 11.

· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Alcohol resistant foam, CO, powder, water spray/mist.

· **For safety reasons unsuitable extinguishing agents:**
Do not use a jet water stream as it may scatter and spread fire.

· **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**
Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.

· **Protective equipment:**
Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources

· **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to Section 13.
Ensure adequate ventilation.

· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
108-88-3	toluene	67 ppm
141-78-6	ethyl acetate	1,200 ppm
110-19-0	isobutyl acetate	450 ppm
1330-20-7	xylene	130 ppm

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123-86-4	n-butyl acetate	5 ppm
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
64742-48-9	Naphtha (petroleum), hydrotreated heavy	350 mg/mį
100-41-4	ethylbenzene	33 ppm
67-63-0	propan-2-ol	400 ppm
9002-88-4	polyethylene	16 mg/mį
80-62-6	methyl methacrylate	17 ppm
868-77-9	2-hydroxyethyl methacrylate	1.9 mg/mį
64-17-5	ethanol	1,800 ppm

· **PAC-2:**

108-88-3	toluene	560 ppm
141-78-6	ethyl acetate	1,700 ppm
110-19-0	isobutyl acetate	1300* ppm
1330-20-7	xylene	920* ppm
123-86-4	n-butyl acetate	200 ppm
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
64742-48-9	Naphtha (petroleum), hydrotreated heavy	1,800 mg/mį
100-41-4	ethylbenzene	1100* ppm
67-63-0	propan-2-ol	2000* ppm
9002-88-4	polyethylene	170 mg/mį
80-62-6	methyl methacrylate	120 ppm
868-77-9	2-hydroxyethyl methacrylate	21 mg/mį
64-17-5	ethanol	3300* ppm

· **PAC-3:**

108-88-3	toluene	3700* ppm
141-78-6	ethyl acetate	10000** ppm
110-19-0	isobutyl acetate	7500** ppm
1330-20-7	xylene	2500* ppm
123-86-4	n-butyl acetate	3000* ppm
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
64742-48-9	Naphtha (petroleum), hydrotreated heavy	40,000 mg/mį
100-41-4	ethylbenzene	1800* ppm
67-63-0	propan-2-ol	12000** ppm
9002-88-4	polyethylene	1,000 mg/mį
80-62-6	methyl methacrylate	570 ppm
868-77-9	2-hydroxyethyl methacrylate	1,000 mg/mį
64-17-5	ethanol	15000* ppm

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Protect against electrostatic charges.
Use explosion-proof apparatus / fittings and spark-proof tools.

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· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool, well-ventilated area, away from heat and sources of ignition
Provide solvent resistant, sealed floor.
Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.
In cases where there is no reported expiration date , it means that the product must be used within 8 months.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Specific end use(s)** Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

141-78-6 ethyl acetate	
PEL	Long-term value: 1400 mg/mį, 400 ppm
REL	Long-term value: 1400 mg/mį, 400 ppm
TLV	Long-term value: 1440 mg/mį, 400 ppm
110-19-0 isobutyl acetate	
PEL	Long-term value: 700 mg/mį, 150 ppm
REL	Long-term value: 700 mg/mį, 150 ppm
TLV	Short-term value: 172 mg/mį, 150 ppm Long-term value: 238 mg/mį, 50 ppm
123-86-4 n-butyl acetate	
PEL	Long-term value: 710 mg/mį, 150 ppm
REL	Long-term value: 950 mg/mį, 200 ppm
TLV	Short-term value: 712 mg/mį, 150 ppm Long-term value: 238 mg/mį, 50 ppm
108-65-6 2-methoxy-1-methylethyl acetate	
WEEL	Long-term value: 50 ppm
100-41-4 ethylbenzene	
PEL	Long-term value: 435 mg/mį, 100 ppm
REL	Short-term value: 545 mg/mį, 125 ppm Long-term value: 435 mg/mį, 100 ppm
TLV	Long-term value: 87 mg/mį, 20 ppm BEI

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67-63-0 propan-2-ol	
PEL	Long-term value: 980 mg/mį, 400 ppm
REL	Short-term value: 1225 mg/mį, 500 ppm Long-term value: 980 mg/mį, 400 ppm
TLV	Short-term value: 984 mg/mį, 400 ppm Long-term value: 492 mg/mį, 200 ppm BEI

80-62-6 methyl methacrylate	
PEL	Long-term value: 410 mg/mį, 100 ppm
REL	Long-term value: 410 mg/mį, 100 ppm
TLV	Short-term value: 410 mg/mį, 100 ppm Long-term value: 205 mg/mį, 50 ppm DSEN

· **Ingredients with biological limit values:**

108-88-3 toluene	
BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)

1330-20-7 xylene	
BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

100-41-4 ethylbenzene	
BEI	0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative) - Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative)

67-63-0 propan-2-ol	
BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

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· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Pregnant women should strictly avoid inhalation or skin contact.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**

Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
The glove material has to be impermeable and resistant to the product .
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
· **Form:**	Fluid
· **Color:**	According to product specification
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
· **Melting point/Melting range:**	Undetermined.
· **Boiling point/Boiling range:**	77 °C (170.6 °F)
· **Flash point:**	-4 °C (24.8 °F)
· **Flammability (solid, gaseous):**	Not applicable.

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Product number LUR606F
Trade name: fin acr met alluminio grigio

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· **Ignition temperature:**	240 °C (464 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
· **Lower:**	0.6 Vol %
· **Upper:**	12 Vol %
· **Vapor pressure at 20 °C (68 °F):**	97 hPa (72.8 mm Hg)
· **Density at 20 °C (68 °F):**	1.027 g/cmį (8.57 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
· **Water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
· **Dynamic:**	Not determined.
· **Kinematic at 20 °C (68 °F):**	70 s (ISO 4 mm)
· **Oxidising properties:**	N.A.
· **Solvent content:**	
· **Water:**	0.0 %
· **VOC content:**	73.52 % 755.0 g/l / 6.30 lb/gl
· **Solids content:**	26.5 %

· **Other information (HAPS)**

108-88-3	toluene	20-24.9%
1330-20-7	xylene	5-9.99%
100-41-4	ethylbenzene	1-2.49%
80-62-6	methyl methacrylate	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	<0.1%

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** typical of the product as indicated in the data sheet
· **Chemical stability** The product is stable in normal conditions of storage and use recommended
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
· **Possibility of hazardous reactions**
Reacts with strong acids and oxidizing agents.
Vapours may form explosive mixtures with air
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.

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· **Hazardous decomposition products:**

in case of possible formation of combustion:
Carbon monoxide and carbon dioxide

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
108-88-3 toluene		
Oral	LD50	5,000 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	12,124 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	25.7 mg/l (rat/szczur/mouse/souris/Maus/ratón)
141-78-6 ethyl acetate		
Oral	LD50	4,934 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Dermal	LD50	20,001 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	1,600 mg/l (rat/szczur/mouse/souris/Maus/ratón)
	LC0	22.6 ppm (mouse)
110-19-0 isobutyl acetate		
Oral	LD50	13,400 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	17,401 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	31 mg/l (rat/szczur/mouse/souris/Maus/ratón)
1330-20-7 xylene		
Oral	LD50.	3,523 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50.	12,126 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4h.	27.571 mg/l (rat/szczur/mouse/souris/Maus/ratón)
123-86-4 n-butyl acetate		
Oral	LD50	10,760 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	14,000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	21.1 mg/l (rat/szczur/mouse/souris/Maus/ratón)
108-65-6 2-methoxy-1-methylethyl acetate		
Oral	LD50	8,532 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	5,001 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	35.7 mg/l (rat/szczur/mouse/souris/Maus/ratón)
64742-48-9 Naphtha (petroleum), hydrotreated heavy		
Oral	LD50	>5,000 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	>3,000 mg/kg (rab)
100-41-4 ethylbenzene		
Oral	LD50	3,500 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	15,486 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	17.2 mg/l (rat/szczur/mouse/souris/Maus/ratón)
67-63-0 propan-2-ol		
Oral	LD50	4,710 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	12,800 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)

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Inhalative	LC50/4 h	72.6 mg/l (rat/szczur/mouse/souris/Maus/ratón)
64742-95-6 Solvent naphtha (petroleum), light arom.		
Oral	LD50	6,801 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	3,401 mg/kg (rab)
Inhalative	LC50/4 h	20.1 mg/l (rat/szczur/mouse/souris/Maus/ratón)
80-62-6 methyl methacrylate		
Oral	LD50	7,872 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	5,001 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	78 mg/l (rat/szczur/mouse/souris/Maus/ratón)
868-77-9 2-hydroxyethyl methacrylate		
Oral	LD50	5,050 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
64-17-5 ethanol		
Oral	LD50	10,470 mg/kg (rat/szczur/mouse/souris/Maus/ratón)
Dermal	LD50	20,000 mg/kg (rabbit/królik/Kaninchen/conejo/lapin)
Inhalative	LC50/4 h	124.7 mg/l (rat/szczur/mouse/souris/Maus/ratón)

· ***Primary irritant effect:***
· ***on the skin:*** *Irritant to skin and mucous membranes.*
· ***on the eye:*** *Irritating effect.*
· ***Sensitization:*** *Sensitization possible through skin contact.*
· ***Additional toxicological information:***
Irritant
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Contains methyl methacrylate, 2-hydroxyethyl methacrylate, Fatty acids, tallow, oleylamine compounds. May produce an allergic reaction.

· ***Carcinogenic categories***
Titanium dioxide
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
Carbon Black
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to carbon black but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to carbon black is thought to occur during the use of products in which carbon black is bound to other materials, such as paint."
Ethylbenzene
From IARC MONOGRAPHS VOLUME 77/2000
Human carcinogenicity data
Two studies of workers potentially exposed to ethylbenzene in a production plant and a styrene polymerization plant were available. In the first study, no excess of cancer incidence was found but the description of methods was insufficient to allow proper evaluation of this finding. In the second study, no cancer mortality excess was observed during the follow-up of 15 years.

Evaluation
There is inadequate evidence in humans for the carcinogenicity of ethylbenzene.There is

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sufficient evidence in experimental animals for the carcinogenicity ofethylbenzene.

· IARC (International Agency for Research on Cancer - Cl. 1 and 2)		
100-41-4	ethylbenzene	2B
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	2B - DUST
64-17-5	ethanol	1
1333-86-4	Carbon black	2B DUST
108-10-1	4-methylpentan-2-one	2B

· NTP (National Toxicology Program)
None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

· **Toxicity** Harmful to aquatic life with long lasting effects.

· Aquatic toxicity:	
108-88-3 toluene	
EC50	134 mg/l (algae) (96 h)
	3.78 mg/l (daphnia) (48 h)
LC50 (96h)	5.5 mg/l (Fish)
141-78-6 ethyl acetate	
EC50	165 mg/l (daphnia) (48 h)
LC50 (96h)	230 mg/l (Fish)
110-19-0 isobutyl acetate	
EC50	370 mg/l (algae) (72 h)
	25 mg/l (daphnia)
LC50 (96h)	17 mg/l (Fish)
123-86-4 n-butyl acetate	
EC50	648 mg/l (algae) (72 h)
	44 mg/l (daphnia) (48 h)
LC50 (96h)	18 mg/l (Fish)
108-65-6 2-methoxy-1-methylethyl acetate	
EC50	1,001 mg/l (algae) (72 h)
	501 mg/l (daphnia) (48 h)
LC50 (96h)	134 mg/l (Fish)
100-41-4 ethylbenzene	
EC50	75 mg/l (daphnia) (48 h)
67-63-0 propan-2-ol	
EC50	1,001 mg/l (algae) (72 h)
	10,000 mg/l (daphnia) (24 h)
LC50 (96h)	9,640 mg/l (Fish)
80-62-6 methyl methacrylate	
EC50	170 mg/l (algae) (72 h)
LC50 (96h)	191 mg/l (Fish)

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868-77-9 2-hydroxyethyl methacrylate	
LC50 (96h)	240 mg/l (Fish)
64-17-5 ethanol	
EC50	5,012 mg/l (daphnia) (48 h)
LC50 (96h)	15.3 mg/l (Fish)

· **Persistence and degradability**
Data refers to the substance Toluene CAS No. 108-88-3
Readily biodegradable (according to OECD criteria and/or EU RAR)

· **Substances Easily biodegradable**		
108-88-3	toluene	.
141-78-6	ethyl acetate	.
110-19-0	isobutyl acetate	.
1330-20-7	xylene	.
123-86-4	n-butyl acetate	.
108-65-6	2-methoxy-1-methylethyl acetate	.
100-41-4	ethylbenzene	.
67-63-0	propan-2-ol	.
64-17-5	ethanol	.

· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
Dispose of contents and container in accordance with local state and federal regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**
· **DOT** NA1263
· **IMDG, IATA** UN1263

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· **UN proper shipping name**
· **DOT** Paint
· **IMDG, IATA** PAINT

· **Transport hazard class(es)**

· **DOT**

· **Class** 3 Flammable liquids
· **Label** 3
· **Class** 3 Flammable liquids
· **Label** 3

· **IMDG, IATA**

· **Class** 3 Flammable liquids
· **Label** 3

· **Packing group**
· **DOT, IMDG, IATA** II

· **Environmental hazards:**
· **Marine pollutant:** No

· **Special precautions for user** Warning: Flammable liquids
· **Danger code (Kemler):** 33
· **EMS Number:** F-E,S-E
· **Stowage Category** B

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **IMDG**
· **Limited quantities (LQ)** 5L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1263 PAINT, SPECIAL PROVISION 640D, 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
Requirements of Federal Register

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· **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings) :**

108-88-3	toluene	20-24.9%
1330-20-7	xylene	5-9.99%
7429-90-5	aluminium powder (stabilised)	5-9.99%
100-41-4	ethylbenzene	1-2.49%
67-63-0	propan-2-ol	1-2.49%
80-62-6	methyl methacrylate	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	<0.1%
78-93-3	butanone	<0.01%

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

Titanium dioxide only in bound form
Carbon black only in bound form

100-41-4	ethylbenzene	*	1-2.49%
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	only for Dust	1-2.49%
1333-86-4	Carbon black	*	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	*	<0.1%

· **Chemicals known to cause reproductive toxicity for females:**

70657-70-4	2-methoxypropyl acetate	<0.01%

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

108-88-3	toluene	20-24.9%
64-17-5	ethanol	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	<0.1%

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

108-88-3	toluene	II	20-24.9%
1330-20-7	xylene	I	5-9.99%
100-41-4	ethylbenzene	D	1-2.49%
80-62-6	methyl methacrylate	E, NL	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	I	<0.1%
78-93-3	butanone	I	<0.01%

· **TLV (Threshold Limit Value established by ACGIH)**

108-88-3	toluene	A4
1330-20-7	xylene	A4
7429-90-5	aluminium powder (stabilised)	A4
100-41-4	ethylbenzene	A3
67-63-0	propan-2-ol	A4

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13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	A4
80-62-6	methyl methacrylate	A4
64-17-5	ethanol	A3
1333-86-4	Carbon black	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	1-2.49%
1333-86-4	Carbon black	≥0.1-<0.5%

· **National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** IVM Chemicals Srl
· **Contact:** See emergency phone
· **Date of preparation / last revision** 02/19/2018 / 39
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flam. Liq. 2: Flammable liquids ï Category 2
Flam. Liq. 3: Flammable liquids ï Category 3
Flam. Liq. 4: Flammable liquids ï Category 4
Acute Tox. 4: Acute toxicity ï Category 4
Skin Irrit. 2: Skin corrosion/irritation ï Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation ï Category 2A
Skin Sens. 1: Skin sensitisation ï Category 1
Carc. 2: Carcinogenicity ï Category 2
Carc. 2: Carcinogenicity ï Category 2
Repr. 2: Reproductive toxicity ï Category 2
STOT SE 3: Specific target organ toxicity (single exposure) ï Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) ï Category 2
Asp. Tox. 1: Aspiration hazard ï Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard ï Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard ï Category 3
· **Sources**
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments

Agency ECHA web site
INRS Fiche Toxicologique
IARC International agency for research on cancer