

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	Dykem® Brite-Mark® - All Colors
Registration number	-
Synonyms	FORMULA CODE(S): * A720M (Black), A788M (Blue) * A786M (Brown), A946M (Gold) * A789M (Green), A783M (Light Blue) * A790M (Orange), A787M (Pink) * A791M (Red), A945M (Silver) * A785M (Violet), A718M (White) * A719M (Yellow)
Part Number	Black (40003, 41003, 84002, 84202), Blue (40001, 41001, 84001, 84201), Brown (40007, 84010), Gold (84051), Green (40004, 41004, 84007, 84207), Light Blue (84008), Orange (40010, 41010, 84005, 84205), Pink (84009), Red (40002, 41002, 84006, 84206), Silver (40016, 84050), Violet (84019), White (40008, 41008, 84003, 84203), Yellow (40006, 41006, 84004, 84204)
Issue date	27-March-2018
Version number	02
Revision date	09-April-2018
Supersedes date	27-March-2018

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

Identified uses	Solvent based marker
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name	AlSCO Ltd
Address	Unite 13 Hillmead Industrial Estate Marshall Road Swindon, Wiltshire United Kingdom SN5 5FZ
Telephone	+ 44 1793 733900 (09.00-17.00)
In Case of Emergency	National Poisons Information Service +44 344 892 0111
E-mail	info@alscoltd.co.uk

Manufacturer

Company name	ITW Pro Brands
Address	805 E. Old 56 Highway Olathe, KS 66061
Country	(U.S.A.)
Telephone	+1 800-443-9536
In Case of Emergency	1-800-535-5053

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable liquids	Category 3	H226 - Flammable liquid and vapour.
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Health hazards

Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.
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Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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Hazard summary

May be ignited by heat, sparks or flames. May cause drowsiness and dizziness. Prolonged exposure may cause chronic effects. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements**Label according to Regulation (EC) No. 1272/2008 as amended**

Contains: 1,2,4-Trimethyl benzene, Aluminium hydroxide, Aluminum flake, Aromatic Solvent, Butyl acetate, C.I. Pigment Violet 1, Carbon Black, Copper, Copper Compounds, Isopropanol, Metallic Zinc, Propylene glycol monomethyl ether acetate, Silica, amorphous, Titanium dioxide

Hazard pictograms**Signal word**

Warning

Hazard statements

H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements**Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing mist or vapour.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTRE/doctor if you feel unwell.
P370 + P378 In case of fire: Use appropriate media to extinguish.
P391 Collect spillage.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information

EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

None known.

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

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Butyl acetate	50 - 60	123-86-4 204-658-1	-	607-025-00-1	
Classification:	Flam. Liq. 3;H226, STOT SE 3;H336				
Titanium dioxide	30 - 40	13463-67-7 236-675-5	-	-	
Classification:	-				
Propylene glycol monomethyl ether acetate	1 - 30	108-65-6 203-603-9	-	607-195-00-7	#
Classification:	Flam. Liq. 3;H226				
Aluminum flake	10 - 20	7429-90-5 231-072-3	-	013-002-00-1	
Classification:	Pyr. Sol. 1;H250, Water-React. 2;H261				
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Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Copper, Copper Compounds	10 - 20	7440-50-8 231-159-6	-	029-019-01-X	M=10
Classification:	-				
C.I. Pigment Violet 1	5 - 10	1326-03-0 215-413-3	-	-	
Classification:	-				
Carbon Black	5 - 10	1333-86-4 215-609-9	-	-	
Classification:	-				
Isopropanol	5 - 10	67-63-0 200-661-7	-	603-117-00-0	
Classification:	Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336				
Aluminium hydroxide	1 - 5	21645-51-2 244-492-7	-	-	
Classification:	-				
Metallic Zinc	1 - 5	7440-66-6 231-175-3	-	030-001-01-9	
Classification:	Pyr. Sol. 1;H250, Water-React. 1;H260, Aquatic Acute 1;H400, Aquatic Chronic 1;H410				T
Silica, amorphous	1 - 5	7631-86-9 231-545-4	-	-	
Classification:	-				
1,2,4-Trimethyl benzene	0,1 - 1	95-63-6 202-436-9	-	601-043-00-3	#
Classification:	Flam. Liq. 3;H226, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Acute Tox. 4;H332, STOT SE 3;H335, Aquatic Chronic 2;H411				
Aromatic Solvent	0,1 - 1	64742-95-6 265-199-0	-	649-356-00-4	Note P
Classification:	Asp. Tox. 1;H304, Muta. 1B;H340, Carc. 1B;H350				P

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information

Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

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

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation.

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

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	Flammable liquid and vapour.
5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemical powder. Dry sand. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Water. Do not use water jet as an extinguisher, as this will spread the fire. Carbon dioxide (CO ₂).
5.2. Special hazards arising from the substance or mixture	Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

For emergency responders Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapour. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	MAK	100 mg/m ³	
	STEL	20 ppm 150 mg/m ³ 30 ppm	
Aluminium hydroxide (CAS 21645-51-2)	MAK	5 mg/m ³	Respirable fraction.
	STEL	10 mg/m ³ 20 mg/m ³	Inhalable fraction. Inhalable fraction.
Aluminum flake (CAS 7429-90-5)	MAK	10 mg/m ³ 5 mg/m ³	Respirable fraction. Respirable fraction.
	STEL	10 mg/m ³ 20 mg/m ³ 10 mg/m ³	Inhalable fraction. Inhalable fraction. Respirable fraction.
Butyl acetate (CAS 123-86-4)	Ceiling	480 mg/m ³	
	MAK	100 ppm 480 mg/m ³	
Copper, Copper Compounds (CAS 7440-50-8)	MAK	100 ppm 1 mg/m ³	Inhalable fraction.
	STEL	0,1 mg/m ³ 4 mg/m ³ 0,4 mg/m ³	Fume and respirable dust. Inhalable fraction. Fume and respirable dust.
Isopropanol (CAS 67-63-0)	MAK	500 mg/m ³ 200 ppm	
	STEL	2000 mg/m ³ 800 ppm	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	Ceiling	550 mg/m ³	
	MAK	100 ppm 275 mg/m ³ 50 ppm	
Silica, amorphous (CAS 7631-86-9)	MAK	4 mg/m ³	Inhalable fraction.
Titanium dioxide (CAS 13463-67-7)	MAK	5 mg/m ³	Respirable dust.
	STEL	10 mg/m ³	Respirable dust.

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Aluminum flake (CAS 7429-90-5)	TWA	1 mg/m ³	Respirable fraction.
Butyl acetate (CAS 123-86-4)	STEL	964 mg/m ³	
	TWA	200 ppm 723 mg/m ³ 150 ppm	
Carbon Black (CAS 1333-86-4)	TWA	3,5 mg/m ³	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	1 mg/m ³	Dust and mist.
	STEL	0,2 mg/m ³ 1000 mg/m ³ 400 ppm	Fume.
Isopropanol (CAS 67-63-0)	TWA	500 mg/m ³ 200 ppm	

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3	
	TWA	100 ppm 275 mg/m3 50 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm	Dust. Respirable fraction.
		2 mg/m3	
Butyl acetate (CAS 123-86-4)	STEL	10 mg/m3	Dust. Respirable fraction.
		1,5 mg/m3 950 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	710 mg/m3	
		0,1 mg/m3	
Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3	
		980 mg/m3	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3	
		TWA	
Silica, amorphous (CAS 7631-86-9)	TWA	10 mg/m3	Inhalable fraction. Respirable fraction. Respirable dust.
		0,07 mg/m3 10 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	MAC	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	MAC	20 ppm	Respirable dust. Total dust.
		4 mg/m3	
Butyl acetate (CAS 123-86-4)	MAC	10 mg/m3	Total dust.
		724 mg/m3	
Carbon Black (CAS 1333-86-4)	MAC	150 ppm	
		966 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	MAC	200 ppm	Dust and fume.
		3,5 mg/m3	
Isopropanol (CAS 67-63-0)	MAC	7 mg/m3	Dust and fume.
		0,21 mg/m3	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	MAC	2 mg/m3	Dust and fume.
		999 mg/m3	
	STEL	400 ppm	
		1250 mg/m3	
	MAC	500 ppm	
		275 mg/m3	
		50 ppm	

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value	Form
	STEL	550 mg/m3 100 ppm	
Silica, amorphous (CAS 7631-86-9)	MAC	6 mg/m3	Total dust.
Titanium dioxide (CAS 13463-67-7)	STEL	2,4 mg/m3 4 mg/m3	Respirable dust. Respirable dust.
		10 mg/m3	Total dust.

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value	Form
Butyl acetate (CAS 123-86-4)	TWA	710 mg/m3	
Carbon Black (CAS 1333-86-4)	TWA	150 ppm 3,5 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	0,2 mg/m3	Fume.
Isopropanol (CAS 67-63-0)	TWA	980 mg/m3 400 ppm	
Silica, amorphous (CAS 7631-86-9)	TWA	2 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	Ceiling	250 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA TWA	100 mg/m3 10 mg/m3	Dust.
Butyl acetate (CAS 123-86-4)	Ceiling	1200 mg/m3	
Carbon Black (CAS 1333-86-4)	TWA TWA	950 mg/m3 2 mg/m3	Dust.
Copper, Copper Compounds (CAS 7440-50-8)	Ceiling	2 mg/m3	Dust.
Isopropanol (CAS 67-63-0)	TWA	0,2 mg/m3 1 mg/m3 0,1 mg/m3	Fume. Dust. Fume.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	Ceiling TWA	1000 mg/m3 500 mg/m3 550 mg/m3	
	TWA	270 mg/m3	

Denmark. Exposure Limit Values

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TLV	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TLV	20 ppm 5 mg/m3	Dust and fume.
Butyl acetate (CAS 123-86-4)	TLV	5 mg/m3 2 mg/m3	Fume. Respirable dust and/or fume.
Carbon Black (CAS 1333-86-4)	TLV	710 mg/m3 150 ppm 3,5 mg/m3	

Denmark. Exposure Limit Values

Components	Type	Value	Form
Copper, Copper Compounds (CAS 7440-50-8)	TLV	1 mg/m3	Dust.
Isopropanol (CAS 67-63-0)	TLV	0,1 mg/m3 490 mg/m3 200 ppm	Fume.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TLV	275 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TLV	50 ppm 6 mg/m3	

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm 4 mg/m3	Respirable dust.
Copper, Copper Compounds (CAS 7440-50-8)	TWA	10 mg/m3 1 mg/m3	Total dust. Total dust.
Isopropanol (CAS 67-63-0)	STEL	0,2 mg/m3 600 mg/m3 250 ppm	Respirable dust.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	350 mg/m3 150 ppm	
	STEL	550 mg/m3	
Silica, amorphous (CAS 7631-86-9)	TWA	100 ppm 275 mg/m3 50 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	2 mg/m3	Respirable dust.

Finland. Workplace Exposure Limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm 1,5 mg/m3	Welding fume.
Butyl acetate (CAS 123-86-4)	STEL	960 mg/m3	
	TWA	200 ppm 720 mg/m3 150 ppm	
Carbon Black (CAS 1333-86-4)	STEL	7 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	3,5 mg/m3 0,1 mg/m3	Respirable dust and/or fume.
Isopropanol (CAS 67-63-0)	STEL	0,02 mg/m3 620 mg/m3 250 ppm	Respirable.
	TWA	500 mg/m3 200 ppm	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3	

**Finland. Workplace Exposure Limits
Components**

Components	Type	Value	Form
	TWA	100 ppm 270 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	50 ppm 10 mg/m3	Dust.

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984
Components**

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	VLE	250 mg/m3	
	VME	50 ppm 100 mg/m3	
Aluminum flake (CAS 7429-90-5)	VME	20 ppm 5 mg/m3	Dust.
		5 mg/m3	Welding fume.
Butyl acetate (CAS 123-86-4)	VLE	10 mg/m3 940 mg/m3	
	VME	200 ppm 710 mg/m3	
Carbon Black (CAS 1333-86-4)	VME	150 ppm 3,5 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	VLE	2 mg/m3	Dust.
	VME	1 mg/m3	Dust.
Isopropanol (CAS 67-63-0)	VLE	0,2 mg/m3 980 mg/m3	Fume.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	VLE	400 ppm 550 mg/m3	
	VME	100 ppm 275 mg/m3	
Titanium dioxide (CAS 13463-67-7)	VME	50 ppm 10 mg/m3	

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminium hydroxide (CAS 21645-51-2)	TWA	20 ppm 4 mg/m3	Inhalable fraction.
Aluminum flake (CAS 7429-90-5)	TWA	1,5 mg/m3 4 mg/m3	Respirable fraction. Inhalable fraction.
Butyl acetate (CAS 123-86-4)	TWA	1,5 mg/m3 480 mg/m3	Respirable fraction.
Copper, Copper Compounds (CAS 7440-50-8)	TWA	100 ppm 0,01 mg/m3	Respirable fraction.
Isopropanol (CAS 67-63-0)	TWA	500 mg/m3 200 ppm	
Metallic Zinc (CAS 7440-66-6)	TWA	2 mg/m3	Inhalable fraction.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	0,1 mg/m3 270 mg/m3	Respirable fraction.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Silica, amorphous (CAS 7631-86-9)	TWA	50 ppm 4 mg/m ³	Inhalable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	AGW	100 mg/m ³	
Butyl acetate (CAS 123-86-4)	AGW	20 ppm 300 mg/m ³	
Isopropanol (CAS 67-63-0)	AGW	62 ppm 500 mg/m ³	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	AGW	200 ppm 270 mg/m ³	
Silica, amorphous (CAS 7631-86-9)	AGW	50 ppm 4 mg/m ³	Inhalable fraction.

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	125 mg/m ³	
Aluminum flake (CAS 7429-90-5)	TWA	25 ppm 5 mg/m ³	Inhalable
Butyl acetate (CAS 123-86-4)	STEL	10 mg/m ³	Pyrophoric powder. Welding fume. Respirable.
		10 mg/m ³	
		10 mg/m ³	
Carbon Black (CAS 1333-86-4)	STEL	950 mg/m ³	
		200 ppm	
		710 mg/m ³	
Copper, Copper Compounds (CAS 7440-50-8)	STEL	150 ppm	Dust.
		7 mg/m ³	
Isopropanol (CAS 67-63-0)	TWA	3,5 mg/m ³	Dust. Fume.
		2 mg/m ³	
		1 mg/m ³	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	0,2 mg/m ³	
		1225 mg/m ³	
		500 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	980 mg/m ³	Respirable.
		400 ppm	
		550 mg/m ³	
	TWA	100 ppm	Inhalable
		275 mg/m ³	
		50 ppm	
		5 mg/m ³	

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³	
Aluminum flake (CAS 7429-90-5)	TWA	6 mg/m ³	Respirable.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Butyl acetate (CAS 123-86-4)	STEL	950 mg/m3	
	TWA	950 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	STEL	4 mg/m3	
	TWA	0,4 mg/m3 1 mg/m3	Smoke.
Isopropanol (CAS 67-63-0)	STEL	2000 mg/m3	
	TWA	500 mg/m3	Smoke.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3	
	TWA	275 mg/m3	

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm	Fume.
		5 mg/m3	
Butyl acetate (CAS 123-86-4)	TWA	10 mg/m3	Dust.
		700 mg/m3	
Carbon Black (CAS 1333-86-4)	TWA	150 ppm	Total dust.
		3,5 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	1 mg/m3	Respirable dust.
		0,1 mg/m3	
Isopropanol (CAS 67-63-0)	TWA	490 mg/m3	
		200 ppm	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3	
		100 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	275 mg/m3	
		50 ppm	
		6 mg/m3	

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm	Respirable dust.
		1 ppm	
Butyl acetate (CAS 123-86-4)	STEL	950 mg/m3	
		200 ppm	
Carbon Black (CAS 1333-86-4)	TWA	710 mg/m3	Inhalable fraction.
		150 ppm	
Copper, Copper Compounds (CAS 7440-50-8)	STEL	3 mg/m3	Dust and mist.
		2 mg/m3	
Isopropanol (CAS 67-63-0)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	
	STEL	400 ppm	Fume.
		200 ppm	

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m3	
	TWA	100 ppm 275 mg/m3 50 ppm	
	TWA	4 mg/m3	Respirable dust.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total inhalable dust.

Italy. Occupational Exposure Limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm 1 mg/m3	Respirable fraction.
	STEL	150 ppm	
Butyl acetate (CAS 123-86-4)	TWA	50 ppm	
	TWA	3 mg/m3	Inhalable fraction.
Carbon Black (CAS 1333-86-4)	TWA	1 mg/m3	Dust and mist.
	TWA	0,2 mg/m3	Fume.
Copper, Copper Compounds (CAS 7440-50-8)	STEL	400 ppm	
	TWA	200 ppm	
Isopropanol (CAS 67-63-0)	STEL	550 mg/m3	
	TWA	100 ppm 275 mg/m3 50 ppm	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	10 mg/m3	
	TWA	10 mg/m3	

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
Aluminium hydroxide (CAS 21645-51-2)	TWA	20 ppm 6 mg/m3
	TWA	2 mg/m3
Aluminum flake (CAS 7429-90-5)	TWA	200 mg/m3
	TWA	1 mg/m3
Butyl acetate (CAS 123-86-4)	STEL	1 mg/m3
	TWA	0,5 mg/m3
Copper, Copper Compounds (CAS 7440-50-8)	STEL	600 mg/m3
	TWA	350 mg/m3
Isopropanol (CAS 67-63-0)	STEL	550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	1 mg/m3
	TWA	10 mg/m3
Silica, amorphous (CAS 7631-86-9)	TWA	10 mg/m3
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	6 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	5 mg/m3	Inhalable fraction.
Copper, Copper Compounds (CAS 7440-50-8)	TWA	2 mg/m3	Respirable fraction.
		1 mg/m3	Inhalable fraction.
Isopropanol (CAS 67-63-0)	STEL	0,2 mg/m3 600 mg/m3	Respirable fraction.
	TWA	250 ppm 350 mg/m3	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	150 ppm 400 mg/m3	
	TWA	75 ppm 250 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	50 ppm 5 mg/m3	

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	20 ppm 550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	20 ppm 550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

Netherlands. OELs (binding)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	STEL	200 mg/m3	
	TWA	100 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	0,1 mg/m3	Inhalable fraction.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	550 mg/m3	

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TLV	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TLV	20 ppm 5 mg/m3	Pyrophoric powder.
		5 mg/m3	Welding fume.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TLV	3,5 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TLV	1 mg/m3	Dust.
Isopropanol (CAS 67-63-0)	TLV	0,1 mg/m3 245 mg/m3 100 ppm	Fume.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TLV	270 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TLV	50 ppm 5 mg/m3	

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	STEL	170 mg/m3	
Aluminium hydroxide (CAS 21645-51-2)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	2,5 mg/m3	Inhalable fraction.
Butyl acetate (CAS 123-86-4)	TWA	1,2 mg/m3 2,5 mg/m3	Respirable fraction. Inhalable fraction.
Carbon Black (CAS 1333-86-4)	STEL	1,2 mg/m3 950 mg/m3	Respirable fraction.
Copper, Copper Compounds (CAS 7440-50-8)	TWA	200 mg/m3	
Isopropanol (CAS 67-63-0)	TWA	4 mg/m3	Inhalable fraction.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	0,2 mg/m3	
Titanium dioxide (CAS 13463-67-7)	STEL	1200 mg/m3	
	TWA	900 mg/m3	
	STEL	520 mg/m3	
	TWA	260 mg/m3	
	TWA	10 mg/m3	Inhalable fraction.

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	20 ppm 550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Aluminum flake (CAS 7429-90-5)	TWA	10 mg/m3	Dust.
Butyl acetate (CAS 123-86-4)	STEL	200 ppm	
Carbon Black (CAS 1333-86-4)	TWA	150 ppm	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	3,5 mg/m3	Fume.
	TWA	1 mg/m3	Dust and mist.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Isopropanol (CAS 67-63-0)	STEL	0,2 mg/m3	Fume.
	TWA	400 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	200 ppm	
		10 mg/m3	

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminum flake (CAS 7429-90-5)	STEL	20 ppm	Fume.
		3 mg/m3	
Butyl acetate (CAS 123-86-4)	TWA	10 mg/m3	Dust.
		3 mg/m3	Dust.
	STEL	1 mg/m3	Fume.
Copper, Copper Compounds (CAS 7440-50-8)	TWA	950 mg/m3	
		200 ppm	
	STEL	715 mg/m3	
Isopropanol (CAS 67-63-0)	TWA	150 ppm	Dust.
		1,5 mg/m3	
	STEL	0,2 mg/m3	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	0,5 mg/m3	Dust.
		500 mg/m3	
	STEL	203 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	200 mg/m3	
		81 ppm	
	STEL	550 mg/m3	

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3	
Aluminium hydroxide (CAS 21645-51-2)	TWA	20 ppm	Inhalable fraction.
		4 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	1,5 mg/m3	Respirable fraction.
		4 mg/m3	Inhalable fraction.
Butyl acetate (CAS 123-86-4)	STEL	1,5 mg/m3	Respirable fraction.
		700 mg/m3	
Carbon Black (CAS 1333-86-4)	TWA	150 ppm	
		500 mg/m3	
		100 ppm	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	2 mg/m3	Inhalable fraction.
		1 mg/m3	
Isopropanol (CAS 67-63-0)	STEL	0,2 mg/m3	Respirable fume.
		1000 mg/m3	
	TWA	400 ppm	
		500 mg/m3	
	200 ppm		

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value	Form
Metallic Zinc (CAS 7440-66-6)	TWA	2 mg/m ³	Inhalable fraction.
		0,1 mg/m ³	Respirable fraction.
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	550 mg/m ³	
		100 ppm	
		275 mg/m ³	
Titanium dioxide (CAS 13463-67-7)	TWA	50 ppm	
		5 mg/m ³	

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³	
Butyl acetate (CAS 123-86-4)	TWA	20 ppm	
		480 mg/m ³	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	100 ppm	Inhalable fraction.
		1 mg/m ³	
Isopropanol (CAS 67-63-0)	TWA	0,1 mg/m ³	Respirable fume.
		500 mg/m ³	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	200 ppm	
		275 mg/m ³	
Silica, amorphous (CAS 7631-86-9)	TWA	50 ppm	Inhalable fraction.
		4 mg/m ³	

Spain. Occupational Exposure Limits

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m ³	
Aluminum flake (CAS 7429-90-5)	TWA	20 ppm	Welding fume.
		5 mg/m ³	
Butyl acetate (CAS 123-86-4)	STEL	10 mg/m ³	Dust.
		965 mg/m ³	
Carbon Black (CAS 1333-86-4)	TWA	200 ppm	
		724 mg/m ³	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	150 ppm	Dust and mist.
		3,5 mg/m ³	
Isopropanol (CAS 67-63-0)	STEL	0,2 mg/m ³	Fume.
		1000 mg/m ³	
		400 ppm	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	TWA	500 mg/m ³	
		200 ppm	
Titanium dioxide (CAS 13463-67-7)	STEL	550 mg/m ³	
		100 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	275 mg/m ³	
		50 ppm	
		10 mg/m ³	

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value	Form
1,2,4-Trimethyl benzene (CAS 95-63-6)	STEL	170 mg/m3	
	TWA	35 ppm 120 mg/m3	
Aluminum flake (CAS 7429-90-5)	TWA	25 ppm 5 mg/m3	Total dust.
		2 mg/m3	Respirable dust.
Butyl acetate (CAS 123-86-4)	STEL	700 mg/m3	
	TWA	150 ppm 500 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	100 ppm 1 mg/m3	Total dust.
		0,2 mg/m3	Respirable dust.
Isopropanol (CAS 67-63-0)	STEL	600 mg/m3	
	TWA	250 ppm 350 mg/m3	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	Ceiling	150 ppm 550 mg/m3	
	TWA	100 ppm 275 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	50 ppm 5 mg/m3	Total dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	3 mg/m3	Respirable dust.
Aluminum flake (CAS 7429-90-5)	TWA	3 mg/m3	Respirable dust.
Butyl acetate (CAS 123-86-4)	STEL	960 mg/m3	
	TWA	200 ppm 480 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	STEL	100 ppm 0,2 mg/m3	Inhalable dust.
	TWA	0,1 mg/m3	Inhalable dust.
Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3	
	TWA	400 ppm 500 mg/m3	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	200 ppm 275 mg/m3	
	TWA	50 ppm 275 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	50 ppm 3 mg/m3	Respirable dust.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Aluminum flake (CAS 7429-90-5)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Butyl acetate (CAS 123-86-4)	STEL	966 mg/m3	
		200 ppm	

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	724 mg/m3 150 ppm	
	STEL	7 mg/m3	
Copper, Copper Compounds (CAS 7440-50-8)	TWA	3,5 mg/m3	Inhalable dusts and mists.
	STEL	2 mg/m3	
Isopropanol (CAS 67-63-0)	TWA	1 mg/m3	Inhalable dusts and mists. Fume.
	STEL	0,2 mg/m3 1250 mg/m3 500 ppm	
	TWA	999 mg/m3 400 ppm	
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	548 mg/m3	
	TWA	100 ppm 274 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	50 ppm 4 mg/m3	Respirable.
		10 mg/m3	Inhalable

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
1,2,4-Trimethyl benzene (CAS 95-63-6)	TWA	100 mg/m3
Propylene glycol monomethyl ether acetate (CAS 108-65-6)	STEL	20 ppm 550 mg/m3
	TWA	100 ppm 275 mg/m3 50 ppm

Biological limit values
Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling time
Aluminum flake (CAS 7429-90-5)	200 mg/l	Aluminium	Urine	*
Isopropanol (CAS 67-63-0)	50 mg/l	Acetone	Urine	*
	50 mg/l	Acetone	Blood	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time
1,2,4-Trimethyl benzene (CAS 95-63-6)	400 mg/g	Dimethylbenzo esäuren (Summe aller Isomeren nach Hydrolyse)	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	25 mg/l	Aceton	Urine	*
	25 mg/l	Aceton	Blood	*

* - For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling time
Aluminum flake (CAS 7429-90-5)	60 µg/g	Aluminium	Creatinine in urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling time
Isopropanol (CAS 67-63-0)	40 mg/l	Acetona	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling time
Aluminum flake (CAS 7429-90-5)	60 µg/g	Aluminium	Creatinine in urine	*
Isopropanol (CAS 67-63-0)	25 mg/l	Aceton	Urine	*
	25 mg/l	Aceton	Blood	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines**EU Exposure Limit Values: Skin designation**

Propylene glycol monomethyl ether acetate (CAS 108-65-6) Can be absorbed through the skin.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Propylene glycol monomethyl ether acetate (CAS 108-65-6) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

- Other Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

Physical state Liquid.

Form Liquid.

Colour Various.

Odour Sweet.

Odour threshold Not available.

pH Not available.

Melting point/freezing point	Not available.
Initial boiling point and boiling range	122,2 °C (251,96 °F)
Flash point	27,2 °C (81,0 °F) Tag closed cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1,7 %
Flammability limit - upper (%)	7,6 %
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

VOC

A719M Yellow: 68,20%, 716 g/L
A788M Blue: 68,83%, 694 g/L; A946M Gold: 59,75% , 689 g/L
A789M Green: 69,77%, 725 g/L; A787M Pink: 48,62% , 637 g/L
A783M Light Blue: 50,34%, 588 g/L; A790M Orange: 65,48% , 647 g/L
A791M Red: 66,17%, 671 g/L; A785M Violet: 76,57% , 771 g/L
A945M Silver: 71,68%, 714 g/L; A718M White: 47,85% , 627 g/L
A720M Black: 66,61%, 672 g/L; A786M Brown: 67,78% , 712 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Acids. Strong oxidising agents. Chlorine. Isocyanates. Nitrates.
10.6. Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms May cause drowsiness and dizziness. Headache. Nausea, vomiting.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test results
Aromatic Solvent (CAS 64742-95-6)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
<i>Vapour</i>		
LC50	Rat	> 4,96 mg/l, 4 Hours
Metallic Zinc (CAS 7440-66-6)		
Acute		
Oral		
LD50	Rat	630 mg/kg
Titanium dioxide (CAS 13463-67-7)		
Acute		
Inhalation		
LC50	Rat	> 2,28 mg/l, 4 Hours
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
ACGIH Carcinogens		
Aluminum flake (CAS 7429-90-5)	Not classifiable as a human carcinogen. A4	
Carbon Black (CAS 1333-86-4)	Confirmed animal carcinogen with unknown relevance to humans. A3	
Isopropanol (CAS 67-63-0)	Not classifiable as a human carcinogen. A4	
Titanium dioxide (CAS 13463-67-7)	Not classifiable as a human carcinogen. A4	
Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)		
Aromatic Solvent (CAS 64742-95-6)		
IARC Monographs. Overall Evaluation of Carcinogenicity		
Carbon Black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.	
Silica, amorphous (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.	
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Mixture versus substance information	No information available.	
Other information	Symptoms may be delayed.	

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life with long lasting effects. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, acute hazard, is not possible.

Components	Species	Test results
1,2,4-Trimethyl benzene (CAS 95-63-6)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 7,19 - 8,28 mg/l, 96 hours
Aluminum flake (CAS 7429-90-5)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 0,16 mg/l, 96 hours

Components	Species	Test results
Butyl acetate (CAS 123-86-4)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 17 - 19 mg/l, 96 hours
Copper, Copper Compounds (CAS 7440-50-8)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 0,036 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 0,0319 - 0,0544 mg/l, 96 hours
Isopropanol (CAS 67-63-0)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours
Metallic Zinc (CAS 7440-66-6)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 2,8 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 0,56 mg/l, 96 hours
Titanium dioxide (CAS 13463-67-7)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus) > 1000 mg/l, 96 hours
12.2. Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
12.3. Bioaccumulative potential		
Partition coefficient n-octanol/water (log Kow)		
Butyl acetate	1,78	
Isopropanol	0,05	
Bioconcentration factor (BCF)	Not available.	
12.4. Mobility in soil	No data available.	
12.5. Results of PBT and vPvB assessment	Not available.	
12.6. Other adverse effects	None known.	
12.7. Additional information		
Estonia Dangerous substances in groundwater Data		
Copper, Copper Compounds (CAS 7440-50-8)	Copper (Cu) 1000 ug/l Copper (Cu) 15 ug/l	
Metallic Zinc (CAS 7440-66-6)	Zinc (Zn) 50 ug/l Zinc (Zn) 5000 ug/l	
Estonia Dangerous substances in soil Data		
Copper, Copper Compounds (CAS 7440-50-8)	Copper (Cu) 100 mg/kg Copper (Cu) 150 mg/kg Copper (Cu) 500 mg/kg	
Metallic Zinc (CAS 7440-66-6)	Zinc (Zn) 1000 mg/kg Zinc (Zn) 200 mg/kg Zinc (Zn) 500 mg/kg	

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN1263
14.2. UN proper shipping name Paint
14.3. Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Hazard No. (ADR) 30
Tunnel restriction code D/E
14.4. Packing group III
14.5. Environmental hazards Yes
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number UN1263
14.2. UN proper shipping name Paint
14.3. Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
14.4. Packing group III
14.5. Environmental hazards Yes
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number UN1263
14.2. UN proper shipping name Paint
14.3. Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
14.4. Packing group III
14.5. Environmental hazards Yes
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN1263
14.2. UN proper shipping name Paint
14.3. Transport hazard class(es)
Class 3
Subsidiary risk -
14.4. Packing group III
14.5. Environmental hazards Yes
ERG Code 3L
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN1263
14.2. UN proper shipping name PAINT, MARINE POLLUTANT

14.3. Transport hazard class(es)

Class 3

Subsidiary risk -

14.4. Packing group III

14.5. Environmental hazards

Marine pollutant Yes

EmS F-E, S-E

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Copper, Copper Compounds

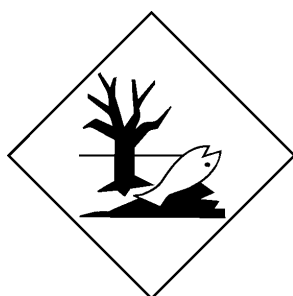
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

Code

ADN; ADR; IATA; IMDG; RID



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Copper, Copper Compounds (CAS 7440-50-8)

Metallic Zinc (CAS 7440-66-6)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Material name: Dykem® Brite-Mark® - All Colors - Dykem AlSCO EU

Black (40003, 41003, 84002, 84202), Blue (40001, 41001, 84001, 84201), Brown (40007, 84010), Gold (84051), Green (40004, 41004, 84007, 84207), Red (40002, 41002, 84001, 84201), Silver (40005, 41005, 84005, 84205), White (40001, 41001, 84001, 84201)

SDS EU

04/2025

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Aromatic Solvent (CAS 64742-95-6)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Aromatic Solvent (CAS 64742-95-6)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

1,2,4-Trimethyl benzene (CAS 95-63-6)

Aluminum flake (CAS 7429-90-5)

Butyl acetate (CAS 123-86-4)

Copper, Copper Compounds (CAS 7440-50-8)

Isopropanol (CAS 67-63-0)

Metallic Zinc (CAS 7440-66-6)

Propylene glycol monomethyl ether acetate (CAS 108-65-6)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H261 In contact with water releases flammable gases.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H340 May cause genetic defects.
H350 May cause cancer.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Revision information

SECTION 2: Hazards identification: Hazard summary
SECTION 2: Hazards identification: Hazard statements
SECTION 2: Hazards identification: Response
SECTION 2: Hazards identification: GHS Signal Words
SECTION 2: Hazards identification: GHS Symbols
SECTION 2: Hazards identification: Specific hazards
Composition / Information on Ingredients: Component Summary
SECTION 4: First aid measures: General information
SECTION 7: Handling and storage: 7,1. Precautions for safe handling
SECTION 11: Toxicological information: Carcinogenicity
SECTION 11: Toxicological information: Mutagenicity
Regulatory Information: Risk Phrases - Labeling
GHS: Classification

Training information

Follow training instructions when handling this material.

Disclaimer

ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.