SPECTRUM

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

1.1. Product identifier

Product Name	Tracing Pro
Product Inclusion	The document applies to all colour variants within the range of Tracing Pro Aerosol Line Marker.
Container Size	750ml

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

Identified Uses	No specific uses identified
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

MHL Group, (Trading name of Meon Ltd.)
Railside
Northarbour Spur
Portsmouth
PO6 3TU
+44 (0) 23 9220 0606
mail@meonuk.com

1.4. Emergency Telephone Number

Emergency telephone +44 (0) 808 118 1922

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)
Aerosol, Category 1 (Aerosol 1, H222 - H229).
Repeated exposure may cause skin dryness or cracking (EUH0666).
Eye irritation, Category 2 (Eye irrit. 2, H319).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.
The propellant gas is not taken into account when determining the health and environmental classification of the mixture.

2.2. Label Elements

Mixture for aerosol application
In compliance with EC regulation No. 1272/2008 and its amendments.
Hazard pictograms

Signal word	Danger
EC 203-603-9	2-METHOXY-1-METHYLETHYL ACETATE
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe sp mist.
H-statement(s)	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. EUH066 Repeated exposure may cause skin dryness or cracking.
P-statement(s)	P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50 oC/122°F

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table
The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Ingredient		Classification (EC) 1272/2008	Concentration
DIMETHYL ETHER	INDEX: 603-019-00-8 CAS: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37-xxxx	GHS02, GHS04 Dgr Flam. Gas. 3, H220 Press. Gas	25 <= x % < 50 **[1]** **[7]**
2-METHOXY-1-METHYLETHYL ACETATE	INDEX: 607-195-00-7 CAS: 108-65-6 EC: 203-603-9 REACH: 01-2110475791-29-xxxx	GHS02 Wng Flam. Liq. 3, H226	25 <= x % < 50 **[1]**
ACETONE	INDEX: 606-001-00-8 CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119471330-49-xxxx	GHS02, GH07 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH:066	10 <= x % < 25 **[1]**

TITANIUM DIOXIDE [IN POWDER FORM CONTAINING 1 % OR MORE OF PARTICLES WITH AERODYNAMIC DIAMETER <= 10 µM]	INDEX: 022-006-00-2 CAS: 13463-67-7 EC: 236-675-5	GHS08 Wng Carc. 2, H351	10 <= x % < 25 **[1]**

Information on ingredients:
(Full text of H-phrases: see section 16)
[7] Propellant gas
[1] Substance for which maximum workplace exposure limits are available.
Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter = 10 µm.

SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

4.1. Description of first aid measures

In case of eye contact Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

In case of skin contact In the event of an allergic reaction, seek medical attention.

In case of inhalation In the event of massive inhalation, remove the person exposed to fresh air.
Keep warm and at rest.
If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.
If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In case of ingestion In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.
Keep the person exposed at rest. Do not force vomiting.
Seek medical attention, showing the label.
If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available

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

No data available

SECTION 5: Firefighting measures

Flammable. Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable extinguishing media In the event of a fire, use:
- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO_2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Extinguishing media which must not be used for safety reasons	- water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke. In the event of a fire, the following may be formed: - carbon monoxide (CO) - carbon dioxide (CO2)

5.3. Advice for firefighters

Special protective equipment for firefighting.	Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non-first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.
Avoid inhaling the vapors.
Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: Handling and storage

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions on safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using.
Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention:

Handle in well-ventilated areas.
Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.
Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.
Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.
Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.
Keep packages tightly closed and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks. Do not smoke.
Prevent access by unauthorised personnel.

Recommended equipment and procedures:
For personal protection, see section 8.
Observe precautions stated on label and also industrial safety regulations.
Do not breathe in aerosols.
Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
Provide vapor extraction at the emission source and also general ventilation of the premises.
Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
In all cases, recover emissions at source.
Avoid skin and eye contact with this mixture.
Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:
No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities
No data available.

Storage
Keep the container tightly closed in a dry, well-ventilated place.
Keep away from all sources of ignition - do not smoke.
Keep well away from all sources of ignition, heat and direct sunlight.
The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Packaging
Always keep in packaging made of an identical material to the original.

7.3. Specific and uses
No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3	VME-ppm	VLE-mg/m3	VLE-ppm	Notes
115-10-6	1920	1000	-	-	-
108-65-6	275	50	550	100	Peau
67-64-1	1210	500	-	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010)

CAS	TWA	STEL	Ceiling	Definition	Criteria
67-64-1	500 ppm	750 ppm	-	A4; BEI	-
13463-67-7	10 mg/m3	-	-	A4	-

- Denmark (2007)

CAS	TWA	VSTEL	Loftvaerdi	Anm
115-10-6	1000 ppm 1920 mg/m3			E
108-65-6	50 ppm 275 mg/m3			EH
67-64-1	250 ppm 600 mg/m3			E
13463-67-7	-ppm 6 mg/m3			

France (INRS - ED984 :2008)

CAS	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes	TMP No
115-10-6	1000	1920	-	-	-	-
108-65-6	50	275	100	550	-	-
67-64-1	500	1210	1000	1000	2420	84
13463-67-7	-	10	-	-	-	-

- Finland (HTP-värden 2018)

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	1000 ppm 2000 mg/m3				
108-65-6	50 ppm 270 mg/m3	100 ppm 550 mg/m3			
107-98-2	500 ppm 1200 mg/m3	630 ppm 1500 mg/m3			

- Italy (Decree, 26/02/2004)

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	1000 ppm 1920 mg/m3				
108-65-6	50 ppm 275 mg/m3	100 ppm 550 mg/m3		Pelle	
67-64-1	500 ppm 1210 mg/m3				

- Norway (Administrative norms for pollution of the atmosphere, May 2007)

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	200 ppm 384 mg/m3			E	
108-65-6	50 ppm 270 mg/m3			HE	
67-64-1	125 ppm 295 mg/m3			E	
13463-67-7	5 mg/m3				

- Netherlands / MAC-waarde (10 december 2014)

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	950 mg/m3	1500 mg/m3			
108-65-6	550 mg/m3				
67-64-1	1210 mg/m3	2420 mg/m3			
13463-67-7	10 mg/m3	-	-	-	-

- Switzerland (SUVAPRO 2019)

CAS	VME	VLE	Valeur plafond	Notations	
115-10-6	1000 ppm 1910 mg/m3				
108-65-6	50 ppm 550 mg/m3	50 ppm 275 mg/m3			
67-64-1	500 ppm 1200 mg/m3	1000 ppm 2400 mg/m3			
13463-67-7	3 a mg/m3	-	-		

- Sweden (AFS 2007:2)

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	500 ppm 950 mg/m3	800 ppm 1500 mg/m3		V	
107-98-2	50 ppm 275 mg/m3	100 ppm 550 mg/m3		H	
67-64-1	250 ppm 600 mg/m3	500 ppm 1200 mg/m3		V	
13463-67-7	5 mg/m3				

- UK / WEL (Workplace exposure limits, EH40/2005, 2007)

CAS	TWA	STEL	Ceiling	Definition	Criteria
115-10-6	400 ppm 766 mg/m3	500 ppm 958 mg/m3			
108-65-6	50 ppm 274 mg/m3	100 ppm 548 mg/m3		SK	
67-64-1	500 ppm 1210 mg/m3	150 ppm 560 mg/m3			
13463-67-7	ppm 4 mg/m3				

8.2. Exposure controls

Personal protection measures, Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

Hand Protection Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.
Gloves must be selected according to the application and duration of use at the workstation.
Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled,
necessary physical protections (cutting, pricking, heat protection), level of dexterity required.
Type of gloves recommended:
- PVA (Polyvinyl alcohol)
- Butyl Rubber (Isobutylene-isoprene copolymer)
Recommended properties:
- Impervious gloves in accordance with standard EN ISO 374-2

Eye Protection Avoid contact with eyes.
Use eye protectors designed to protect against liquid splashes
Before handling, wear safety goggles in accordance with standard EN166.

Skin and body Protection	In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact. Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.
Respiratory protection	Avoid inhaling vapors. If the ventilation is insufficient, wear appropriate breathing apparatus. When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device. Type of FFP mask: Wear a disposable half-mask aerosol filter in accordance with standard EN149/A1. Category: - FFP1 Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387: - A1 (Brown) Particle filter according to standard EN143: - P1 (White)

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state	Viscous liquid / Spray
Colour	Not specified.
Odour	Not specified.
pH	Not applicable.
Boiling Point [°C]	No relevant.
Vapour pressure (50°C)	Not applicable.
Density	< 1
Water solubility	Insoluble
Melting point/melting range	Not specified
Self-ignition temperature	Not specified.
Decomposition point/decomposition range	Not specified
Chemical combustion heat	Not specified
Inflammation time	Not specified
Deflagration density	Not specified
Inflammation distance	Not specified
Flame height	Not specified
Flame duration	Not specified
Density	< 1

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions
When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid
Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.
Avoid:
- heating
- Heat

10.5. Incompatible materials
No data available

10.6. Hazardous decomposition products
The thermal decomposition may release/form:
- Carbon monoxide (CO)
- Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Exposure to vapours from solvents in the mixture 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 kidney, liver and central nervous system.
Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage.
Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

11.1.1 Substances
No toxicological data available for the mixture.

11.1.2. Mixture
No toxicological data available for the mixture.

11.2 Information on other hazards

SECTION 12: Ecological information

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste	Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste; do not dispose of waste into the environment.
Soiled packaging	Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

SECTION 14: Transport information

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 - ICAO/IATA 2021).

14.1. UN number or ID number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

14.3. Transport hazard class(es)

Classification

2.1

14.4. Packing group
14.5. Environmental hazards

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D

IMDG	Class	2°Label	Pack gr.	Label	Ident.	Provis.	Provis.	EQ	Stowage Handling	Segregation
	2	See SP63	-	See SP277	F-D. S-U	63 190 277 327 344 381 959		E0	-SW1 SW22	SG69

IATA	Class	2°Label	Pack gr.	Passenger	Passenger	Cargo	Cargo	Note	EQ
	2.1	-	-	203	75 kg	203	150 kg	A145 A167 A145 A167 A802	E0
	2.1	-	-	Y203	30 kg G	-	-	A145 A167 A802	E0

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.
For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of MARPOL3/78 and the IBC Code
No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Classification and labelling information included in section 2:
The following regulations have been used:
- Directive 75/324/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2020/217 (ATP 14)
- **Container information:**
No data available.
- Particular provisions:
No data available.
- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws):
WGK 1: Slightly hazardous for water.
- Swiss ordinance on the incentive tax on volatile organic compounds:
108-65-6 acétate de 1-méthoxy-2-propyle
78-93-3 butanone (méthyléthylcétone)
107-98-2 1-méthoxypropane-2-ol (éther 1-méthylique d'alpha-propylèneglycol)
115-10-6 éther diméthylique (oxyde de diméthyle)

15.2. Chemical safety assessment
No data available.

SECTION 16: Other information

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.
The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
EUH066	Repeated exposure may cause skin dryness or cracking.

REACH: Registration, Evaluation, Authorization and Restriction of Chemical Substances.
UFI: Unique formulation identifier.
STEL: Short-term exposure limit
TWA: Time Weighted Averages
TMP: French Occupational Illness table
TLV: Threshold Limit Value (exposure)
AEV: Average Exposure Value.
ADR: European agreement concerning the international carriage of dangerous goods by Road.
IMDG: International Maritime Dangerous Goods.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organisation
RID: Regulations concerning the international carriage of Dangerous goods by rail.
WGK: Wassergefahrdungsklasse (Water Hazard Class).
GHS02: Flame
PBT: Persistent, bioaccumulable and toxic.
vPvB: Very persistent, very bioaccumulable.
SVHC: Substances of very high concern.