

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) 57802

Product Name LPS® SAFE-MARK FOOD CONTACT SURFACE MARKER - BLACK

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

Recommended Use Solvent based marker

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Importer	Supplier
AlSCO Ltd	ITW Pro Brands
Unit 13 Hillmead Industrial Estate	805 E. Old 56 Highway
Swindon, Wiltshire	Olathe, KS 66061
United Kingdom SN5 5FZ	TEL: 1-800-443-9536

For further information, please contact

E-mail Address cservice@itwprobrands.com

1.4. Emergency telephone number

Emergency Telephone Number 800-535-5053 Infotrac

Europe	112
--------	-----

Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute Inhalation Toxicity - Dusts and Mists	Category 4
Serious Eye Damage/Eye Irritation	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3

Physical Hazards

Flammable liquids	Category 2
-------------------	------------

2.2. Label Elements



Signal Word

Danger

Hazard Statements

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H225 - Highly flammable liquid and vapor

EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P403 + P235 - Store in a well-ventilated place. Keep cool

Precautionary Statements

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P264 - Wash face, hands and any exposed skin thoroughly after handling

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P271 - Use only outdoors or in a well-ventilated area

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P233 - Keep container tightly closed

P240 - Ground/Bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

P370 + P378 - In case of fire: Use .? for extinction

P403 + P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container to .?

2.3. Other information

No information available.

Section 3. Composition/information on ingredients

3.1. Substances

3.2. Mixtures

Chemical Name	EC-No	CAS-No	Weight %	EU - GHS Substance Classification	REACH No.
Methyl isobutyl ketone	203-550-1	108-10-1	60-80	(EUH066) Flam. Liq. 2 (H225) STOT SE 3 (H335) Acute Tox. 4 (H332) Eye Irrit. 2 (H319)	No data available
Cyclohexanone	203-631-1	108-94-1	15-20	Flam. Liq. 3 (H226) Acute Tox. 4 (H332)	No data available

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First aid measures

4.1. Description of first-aid measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Protection of First-aiders	Remove all sources of ignition. Use personal protective equipment.

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

Most Important Symptoms/Effects Irritation.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Use: Carbon dioxide (CO₂). Dry chemical. Foam.

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Highly flammable. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may form explosive mixtures with air. Vapors may form explosive mixture with air. Use water spray to cool unopened containers.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wear protective gloves/clothing and eye/face protection.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

6.3. Methods and materials for containment and cleaning up

Dike far ahead of liquid spill for later disposal. A vapor suppressing foam may be used to reduce vapors.

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use personal protective equipment. Use non-sparking tools and equipment. Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

See Section 12 for additional information.

Section 7. Handling and storage

7.1. Precautions for Safe Handling

Handling

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Wear protective gloves/protective clothing/eye protection/face protection.

Hygiene Measures

Do not eat, drink or smoke when using this product. Provide regular cleaning of equipment, work area and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Store locked up.

7.3. Specific end use(s)

Exposure Scenario

No information available.

Other Guidelines

No information available.

Section 8. Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	EU	Austria	Belgium	Cyprus	Denmark
Methyl isobutyl ketone 108-10-1	TWA 20 ppm TWA 83 mg/m ³ STEL 50 ppm STEL 208 mg/m ³	STEL: 50 ppm STEL: 208 mg/m ³ TWA: 20 ppm TWA: 83 mg/m ³ Skin	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ Skin
Cyclohexanone 108-94-1	S* TWA 10 ppm	STEL: 20 ppm STEL: 80 mg/m ³	TWA: 10 ppm TWA: 40.8 mg/m ³	TWA: 10 ppm TWA: 40.8 mg/m ³	TWA: 10 ppm TWA: 41 mg/m ³

	TWA 40.8 mg/m ³ STEL 20 ppm STEL 81.6 mg/m ³	TWA: 5 ppm TWA: 20 mg/m ³ Skin	STEL: 20 ppm STEL: 81.6 mg/m ³ Skin	STEL: 20 ppm STEL: 81.6 mg/m ³	Skin
Chemical Name	Finland	France	Germany	Gibraltar	Greece
Methyl isobutyl ketone 108-10-1	TWA: 20 ppm TWA: 80 mg/m ³ STEL: 50 ppm STEL: 210 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ Ceiling / Peak: 40 ppm Ceiling / Peak: 166 mg/m ³ Skin Repr*	STEL: 50 ppm STEL: 208 mg/m ³ TWA: 20 ppm TWA: 83 mg/m ³	TWA: 100 ppm TWA: 410 mg/m ³ STEL: 100 ppm STEL: 410 mg/m ³ Skin
Cyclohexanone 108-94-1	TWA: 10 ppm TWA: 41 mg/m ³ STEL: 20 ppm STEL: 82 mg/m ³ Skin	TWA: 10 ppm TWA: 40.8 mg/m ³ STEL: 20 ppm STEL: 81.6 mg/m ³	TWA: 20 ppm TWA: 80 mg/m ³ Carc* Skin	STEL: 20 ppm STEL: 81.6 mg/m ³ TWA: 10 ppm TWA: 40.8 mg/m ³ Skin	TWA: 50 ppm TWA: 200 mg/m ³ STEL: 100 ppm STEL: 400 mg/m ³ Skin
Chemical Name	Ireland	Italy	Lithuania	Luxembourg	Malta
Methyl isobutyl ketone 108-10-1	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³ Skin	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³ TWA: 82 mg/m ³ STEL: 75 ppm STEL: 307 mg/m ³ Carc*	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³	
Cyclohexanone 108-94-1	TWA: 10 ppm TWA: 40.8 mg/m ³ STEL: 20 ppm STEL: 81.6 mg/m ³ Skin	TWA: 10 ppm TWA: 40.8 mg/m ³ STEL: 20 ppm STEL: 81.6 mg/m ³ Skin TWA: 20 ppm TWA: 80 mg/m ³ STEL: 50 ppm STEL: 201 mg/m ³ Carc*	TWA: 10 ppm TWA: 40.8 mg/m ³ STEL: 20 ppm STEL: 81.6 mg/m ³ Skin	TWA: 10 ppm TWA: 40.8 mg/m ³ STEL: 20 ppm STEL: 81.6 mg/m ³ Skin	
Chemical Name	The Netherlands	Norway	Poland	Portugal	Spain
Methyl isobutyl ketone 108-10-1	TWA: 104 mg/m ³ STEL: 208 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 20 ppm STEL: 83 mg/m ³ Skin	TWA: 83 mg/m ³ STEL: 200 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³	TWA: 20 ppm TWA: 83 mg/m ³ STEL: 50 ppm STEL: 208 mg/m ³
Cyclohexanone 108-94-1	STEL: 50 mg/m ³ Skin	TWA: 10 ppm TWA: 40 mg/m ³ STEL: 10 ppm STEL: 40 mg/m ³ Skin	TWA: 40 mg/m ³ STEL: 80 mg/m ³	TWA: 10 ppm TWA: 40.8 mg/m ³ STEL: 20 ppm STEL: 81.6 mg/m ³ Skin Carc*	TWA: 10 ppm TWA: 41 mg/m ³ STEL: 20 ppm STEL: 82 mg/m ³ Skin
Chemical Name	Switzerland		Sweden		The United Kingdom
Methyl isobutyl ketone 108-10-1	STEL: 40 ppm STEL: 164 mg/m ³ TWA: 20 ppm TWA: 82 mg/m ³ Skin		LLV: 50 ppm LLV: 200 mg/m ³ Binding STLV: 50 ppm Binding STLV: 200 mg/m ³		TWA: 50 ppm TWA: 208 mg/m ³ STEL: 100 ppm STEL: 416 mg/m ³ Skin
Cyclohexanone 108-94-1	STEL: 50 ppm STEL: 200 mg/m ³ TWA: 25 ppm TWA: 100 mg/m ³ Skin		LLV: 10 ppm LLV: 41 mg/m ³ Binding STLV: 20 ppm Binding STLV: 81 mg/m ³ Skin		TWA: 10 ppm TWA: 41 mg/m ³ STEL: 20 ppm STEL: 82 mg/m ³ Skin

Biological occupational exposure limits

Chemical Name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Methyl isobutyl ketone 108-10-1				3.5 mg/L urine not critical	

Cyclohexanone 108-94-1				4-Methyl-pentan-2-on	0.049 µmol/mmol Creatinine urine end of shift at end of workweek 1,2-Cyclohexanediol after hydrolysis 50 mg/g Creatinine urine end of shift at end of workweek 1,2-Cyclohexanediol after hydrolysis
Chemical Name	Denmark	Finland	France	Germany	Gibraltar
Methyl isobutyl ketone 108-10-1			2 mg/L urine end of shift Methylisobutylketone	0.7 mg/L urine end of shift 4-Methylpentan-2-one	
Chemical Name	Hungary	Ireland	Italy	Latvia	Luxembourg
Methyl isobutyl ketone 108-10-1		1 mg/L urine end of shift Methyl isobutyl ketone	(ACGIH:) 1 mg/L urine end of shift MIBK		
Cyclohexanone 108-94-1		8 mg/L urine end of shift Cyclohexanol nonspecific, metabolite 80 mg/L urine end of shift 1,2-Cyclohexanediol nonspecific	(ACGIH:) 80 mg/L urine end of shift at end of workweek 1,2-Cyclohexanediol (with hydrolysis) Nonspecific, semi-quantitative (ACGIH:) 8 mg/L urine end of shift Cyclohexanol (with hydrolysis) Nonspecific, semi-quantitative		
Chemical Name	Slovakia	Spain	Switzerland	United Kingdom	
Methyl isobutyl ketone 108-10-1	3.5 mg/L urine end of exposure or work shift 4-Methyl-2-pentanone Hexone	1 mg/L urine end of shift Methyl isobutyl ketone 2	2 mg/L urine end of shift 4-Methylpentan-2-one		
Cyclohexanone 108-94-1		80 mg/L urine end of workweek 1,2-Cyclohexanodiol (with hydrolysis) 1;9;I;S 8 mg/L urine end of shift Cyclohexanol (with hydrolysis) 2;9;I;S	100 mg/L urine end of shift, and after several shifts (for long-term exposures) total 1,2-Cyclohexandiol 12 mg/L urine end of shift, and after several shifts (for long-term exposures) total-Cyclohexanol		

Derived No Effect Level No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal protective equipment

Eye Protection
Skin and Body Protection
Hand Protection
Respiratory Protection

Personal protection equipment should be chosen according to the CEN standards
Tightly fitting safety goggles.
Long sleeved clothing.
Protective gloves.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls No information available.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Black
Odor	Mild ketonic solvent		
<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>	
pH	No data available	None known	
Melting Point/Range	No data available	None known	
Boiling Point/Boiling Range	117 °C	None known	
Flash Point	15.6 °C	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air	No data available	None known	
Vapor Pressure	No data available.	None known	
Vapor Density	No data available.	None known	
Relative Density	<1 (@70 °F)	None known	
Water Solubility	No data available	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition Temperature	No data available	None known	
Decomposition Temperature	No data available	None known	
Viscosity	No data available	None known	
Explosive Properties	No information available		
Oxidizing Properties	No information available		

9.2. Other information

VOC Content (%) No information available

Section 10. Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Acids. Bases. Aldehydes. Halogens. Oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides

Section 11. Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation Harmful if inhaled. May cause respiratory irritation.
Eye Contact Causes serious eye irritation.
Skin Contact May be harmful in contact with skin.
Ingestion There is no data available for this product.

Acute Toxicity 8.11% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 2,217.00 mg/kg
LD50 Dermal 2,314.00 mg/kg
Dust/Mist 1.70 mg/L
Vapor 13.00 mg/L

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl isobutyl ketone	= 2080 mg/kg (Rat)	> 16000 mg/kg (Rabbit)	= 8.2 mg/L (Rat) 4 h
Cyclohexanone	= 1544 mg/kg (Rat)	= 947 mg/kg (Rabbit)	= 8000 ppm (Rat) 4 h
Carbon black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenic Effects No information available.
Reproductive Toxicity No information available.
Developmental Toxicity No information available.
STOT - single exposure May cause respiratory irritation.
STOT - repeated exposure No information available.
Target Organ Effects Central nervous system (CNS). Eyes. Kidney. Liver. Lymphatic system. Respiratory system. Skin.
Aspiration Hazard No information available.

Section 12. Ecological information

12.1. Toxicity

Ecotoxicity Effects

Not classified

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyl isobutyl ketone	EC50 96 h: = 400 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: 496 - 514 mg/L flow-through (Pimephales promelas)	EC50 = 79.6 mg/L 5 min	EC50 48 h: = 170 mg/L (Daphnia magna)
Cyclohexanone	EC50 96 h: = 20 mg/L (Chlorella vulgaris)	LC50 96 h: 481 - 578 mg/L flow-through (Pimephales promelas) LC50 96 h: = 8.9 mg/L (Pimephales promelas)	EC50 = 18.5 mg/L 5 min EC50 = 21.3 mg/L 10 min EC50 = 25 mg/L 5 min	EC50 24 h: = 800 mg/L (Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical Name	Log Pow
Methyl isobutyl ketone	1.19
Cyclohexanone	0.86

12.4. Mobility in soil

Adsorbs on soil.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products	Dispose of in accordance with local regulations.
Contaminated Packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other Information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Section 14. Transport information

IMDG/IMO

14.1. UN-Number	UN1263
14.2. Proper Shipping Name	Paint
14.3. Hazard Class	3
14.4. Packing Group	II
Description	UN1263, PAINT, 3, II, (15.6°C C.C.)
14.5. Marine Pollutant	None
14.6. Special Provisions	None
EmS No.	F-E, S-E
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

RID

14.1. UN-Number	UN1263
14.2. Proper Shipping Name	PAINT
14.3. Hazard Class	3
14.4. Packing Group	II
Description	UN1263, PAINT, 3, II
14.5. Environmental hazard	None
14.6. Special Provisions	None
Classification Code	F1

ADR

14.1. UN-Number	UN1263
14.2. Proper Shipping Name	Paint
14.3. Hazard Class	3
ADR/RID-Labels	3

14.4. Packing Group	II
Description	UN1263, Paint, 3, II, (D/E)
14.5. Environmental hazard	None
14.6. Special Provisions	None
Classification Code	F1

ICAO

14.1. UN-Number	UN1263
14.2. Proper shipping name	Paint
14.3. Hazard Class	3
14.4. Packing Group	II
Description	UN1263, Paint, 3, II
14.5. Environmental hazard	None
14.6. Special Provisions	None

IATA

14.1. UN-Number	UN1263
14.2. Proper Shipping Name	Paint
14.3. Hazard Class	3
14.4. Packing Group	II
Description	UN1263, Paint, 3, II
14.5. Environmental hazard	None
14.6. Special Provisions	None
ERG Code	3L

Section 15. Regulatory information

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

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapor

H226 - Flammable liquid and vapor

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

Key literature references and sources for data

www.ChemADVISOR.com/

Issuing Date 16-May-2017

Revision Date 28-Sep-2017

Revision Note Initial Release.

This safety data sheet complies with the requirements of Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006

General Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet