Safety Data Sheet (SDS)

according to 1907/2006/EC, Article 31

Section 1 –Identification: Product identifier and chemical identity

·1.1 Product identifier
·Trade name: SURVEY MARKING PAINT (various colors)
·1.2 Relevant identified uses of the substance or mixture and uses advised against
·Application of the substance / the mixture Lacquer
·1.3 Details of the supplier of the safety data sheet
Supplier:
One Stop Sourcing & Supply Co
Homefield Road, Haverhill, Suffolk, CB9 8QP
Tel: 01440 712 060
E-mail: chunt@osssc.com
·1.4 Emergency telephone number:
NHS Direct: 111
National Poisons Information Service (NPIS): 0121 507 4123 (healthcare professionals only).
Ireland - National Poisons Information Centre: 01 837 9964 or 01 809 2566 (healthcare professionals only).

Section 2 –Hazard identification

·2.1 Classification of the substance or mixture
·Classification according to Regulation (EC) No 487/2013



GHS02 flame
Flam. Aerosol 1 H222 Extremely flammable aerosol.
Flam. Aerosol 1 H229: Pressurised container: May burst if heated



GHS07
Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
SKIN Sens.1 H317 May cause an allergic skin reaction
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.



GHS08
Muta. 1B H340 May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Carc.1A H350 May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

·Information concerning particular hazards for human and environment:
The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

·Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

·2.2 Label elements

·Labeling according to Regulation (EC) No 487/2013

The product is classified and labeled according to the CLP regulation.

·Hazard pictograms



GHS02 GHS07 GHS08

·Signal word Danger

·Hazard-determining components of labeling:

No Data Available

·Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated
H302 Harmful if swallowed
H312 Harmful in contact with skin
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H315 Causes skin irritation.
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H340 May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H350 May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

·Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
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.
P260 Do not breathe dust/fume/gas/mist/vapours/spray..
P264 Wash hand thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 If swallowed: Call a poison center or doctor/physician if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents / container in accordance with regional regulations.

·Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

·2.3 Other hazards

·Results of PBT and vPvB assessment
·PBT: Not applicable.
·vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

INGREDIENTS	Annex VI Index Number	CAS NO INDEX	ENIECS	Classification	WT(%)
Colophony Resin	650-015-00-7	73138-82-6	277-299-1	Skin Sens. 1: H317	4~11
Acrylic Resin	N/A	N/A	N/A	Not Classified	0.5~0.8
Calcium carbonate	N/A	471-34-1	207-439-9	Not Classified	7~11
Ethyl acetate	607-22-00-5	141-78-6	205-500-4	Flam. Liq. 3: H226; STOT SE 3:H336	20~25
Organic Pigment	N/A	BLEND	N/A	Not Classified	2~9
Acetone	606-001-00-8	67-64-1	200-662-2	Flam. Liq. 2: H225; Eye Irrit. 2:H319; STOT SE 3:H336	5~10.5
LPG	649-202-00-6	68476-85-7	270-704-2	Flam. Gas. 1: H220; Carc.1A: H350; Muta. 1B:H340	20~35
Butyl glycol	603-014-00-0	111-76-2	203-905-0	Acute Tox. 4: H302; Acute Tox. 4: H312; Skin Irrit. 2: H315; Eye Irrit. 2: H319; Acute Tox. 4: H332	1~2.5

· **Additional information:**
For the wording of the listed risk phrases refer to section 16.

Section 4 – First aid measures

·4.1 Description of first aid measures
· General information:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

Section 5 - Fire-fighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

Water spray (large fires only), foam, dry chemical or carbon dioxide.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters** :

· **Protective equipment:** Mouth respiratory protective device.

Section 6 - Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

· **6.3 Methods and material for containment and cleaning up:**

Do not flush with water or aqueous cleansing agents

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7 - Handling and Storages

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· **Storage class:** 2B

· **7.3 Specific end use(s)** No further relevant information available.

Section 8 - Exposure controls and personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
Butyl Acetate (CAS#123-86-4)	NOHSC-TWA: 713 mg/m^3 NOHSC-STEL: 950 mg/m^3
Acetone (CAS#67-64-1)	NOHSC-TWA: 1185 mg/m^3 NOHSC-STEL: 2375 mg/m^3

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Otherwise, filter class A / P2 or self contained.

· **Protection of hands:**

Protective gloves

Solvent resistant gloves

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g. KCL Camatril, article no. 898 or similar products

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves** Butyl rubber, BR

· **Penetration time of glove material**

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

Acetone: 480 min

Butyl acetate: 60 min

· **Eye protection:** Safety glasses

Section 9 - Physical and chemical properties

Appearance:	Viscous liquid
Odour:	Solvent
Odour threshold:	Not determined
pH:	Not determined
Self-igniting	Product is not self-igniting.
Melting point/freezing point:	<-20˚C

Boiling point:	>60˚C
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	Flammable
Upper/lower flammability or explosive limits:	Not determined
Vapour pressure:	Not determined
Vapour density:	Not determined
Relative density:	0.93~0.95g/cm^3
Vapour density	Not determined
Solubility:	Not water soluble. Re-dispersible in aromatic solvents or ketones.
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not determined
Partition coefficient (n-octanol/water)	Not determined

Section 10 - Stability and reactivity

· **10.1 Reactivity:** Stable under recommended storage and handling conditions.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
· **10.4 Conditions to avoid:** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

Section 11 - Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**
No information.
· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful, Irritant, Vapours have narcotic effect.

Section 12 - Ecological information

· **12.1 Toxicity**

Ingredient:	Persistence - Water/Soil:	Persistence – Air:	Bioaccumulation:	Mobility:
Acetone	Low	High	Low	High

Butyl Acetate	Low	Medium	Low	High

· 12.2 Persistence and degradability

ACETONE

Fish LC50 (96hr.) (mg/l): 8300- 40000
Daphnia magna EC50 (48hr.) (mg/l): 10
log Kow (Prager 1995): - 0.24
log Kow (Sangster 1997): - 0.24
log Pow (Verschueren 1983): - 0.24
Half- life Soil - High (hours): 168
Half- life Soil - Low (hours): 24
Half- life Air - High (hours): 2790
Half- life Air - Low (hours): 279
Half- life Surface water - High (hours): 168
Half- life Surface water - Low (hours): 24
Half- life Ground water - High (hours): 336
Half- life Ground water - Low (hours): 48
Aqueous biodegradation - Aerobic - High (hours): 168
Aqueous biodegradation - Aerobic - Low (hours): 24
Aqueous biodegradation - Anaerobic - High (hours): 672
Aqueous biodegradation - Anaerobic - Low (hours): 96
Aqueous biodegradation - Removal secondary treatment - High (hours): 75%
Aqueous biodegradation - Removal secondary treatment - Low (hours): 54%
Aqueous photolysis half- life - High (hours): 270
Photooxidation half- life water - High (hours): 3.97E+06
Photooxidation half- life water - Low (hours): 9.92E+04
Photooxidation half- life air - High (hours): 2790
Photooxidation half- life air - Low (hours): 279
For Acetone:
Log Kow : -0.24;
Half-life (hr) air : 312-1896;
Half-life (hr) H2O surface water : 20;
Henry's atm m3 /mol : 3.67E-05
BOD 5: 0.31-1.76,46-55%
COD: 1.12-2.07
ThOD: 2.2BCF: 0.69.
Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.
Atmospheric Fate: Acetone preferentially locates in the air compartment when released to the environment. In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days. Air Quality Standards: none available.
Terrestrial Fate: Very little acetone is expected to reside in soil, biota, or suspended solids and has low propensity for soil absorption and a high preference for moving through the soil and into the ground water.
Acetone released to soil volatilizes although some may leach into the ground where it rapidly biodegrades.
Soil Guidelines: none available.
Aquatic Fate: A substantial amount of acetone can also be found in water. Acetone is highly soluble and slightly persistent in water, with a half-life of about 20 hours Drinking Water Standard: none available.
Ecotoxicity: Acetone does not concentrate in the food chain, is minimally toxic to aquatic life and is considered to be

readily biodegradable. Testing shows that acetone exhibits a low order of toxicity for brook trout, fathead minnow, Japanese quail, ring-neck pheasant and water fleas. Low toxicity for aquatic invertebrates. For aquatic plants, NOEC: 5400-7500 mg/L. Acetone vapours were shown to be relatively toxic to flour beetle and flour moths and their eggs. The direct application of acetone liquid to the body of the insects or surface of the eggs did not, however, cause any mortality. The ability of acetone to inhibit cell multiplication has been examined in a wide variety of microorganisms. Mild to moderate toxicity occurred in bacteria exposed to acetone for 6-4 days however, overall data indicates a low degree of toxicity for acetone. The only exception to these findings was the results obtained with the flagellated protozoa (Entosiphon sulcatum).
For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.
Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones. Reactions with water are reversible with no permanent change in the structure of the ketone substrate. Ketones are stable to water under ambient environmental conditions. When pH levels are greater than 10, condensation reactions can occur which produce higher molecular weight products. Under ambient conditions of temperature, pH, and low concentration, these condensation reactions are unfavourable. Based on its reactions in air, it seems likely that ketones undergo photolysis in water.
Terrestrial Fate: It is probable that ketones will be biodegraded by micro-organisms in soil and water.
Ecotoxicity: Ketones are unlikely to bioconcentrate or biomagnify.
N-BUTYL ACETATE:
Fish LC50 (96hr.) (mg/l): 18
Daphnia magna EC50 (48hr.) (mg/l): 44
log Kow (Prager 1995): 1.82
Fish LC50 (96hr.) (mg/l): 100- 185
Daphnia magna EC50 (48hr.) (mg/l): 44
Algae IC50 (72hr.) (mg/l): 280
log Kow (Sangster 1997): 1.78
COD: 78%
For n-Butyl Acetate:
Koc: ~200;
log Kow: 1.78;
Half-life (hr) air: 144;
Half-life (hr) H2O surface water: 178 - 27156;
Henry's atm: m3 /mol: 3.20E-04
BOD 5 if unstated: 0.15-1.02,7%;
COD: 78%;
ThOD: 2.207;
BCF : 4-14.
Environmental Fate: Terrestrial Fate - Butyl acetate is expected to have moderate mobility in soil. Volatilization of n-butyl acetate is expected from moist and dry soil surfaces. n-Butyl acetate may be biodegrade in soil. Aquatic Fate: n-Butyl acetate is not expected to adsorb to suspended solids and sediment in water. Butyl acetate is expected to volatilize from water surfaces. Estimated half-lives for a model river and model lake are 7 and 127 hours respectively. Hydrolysis may be an important environmental fate for this compound. Atmospheric Fate: n-Butyl acetate is expected to exist solely as a vapour in the ambient atmosphere. Vapour-phase n-butyl acetate is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals; the half-life for this reaction in air is estimated to be about 4 days.
Ecotoxicity: It is expected that bioconcentration in aquatic organisms is low. n-Butyl acetate is not acutely toxic to fish specifically, island silverside, bluegill sunfish, fathead minnow, and water fleas and has low toxicity to algae.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

Section 13 - Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
15 01 04	metallic packaging
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

· Uncleaned packaging:

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

Section 14 - Transport information

· 14.1 UN-Number **· ADR, IMDG, IATA**	 UN1950
· 14.2 UN proper shipping name **· ADR** **· IMDG**	 UN1950 AEROSOLS AEROSOLS
· IATA	AEROSOLS, flammable
· 14.3 Transport hazard class(es) **· ADR**  **· Class** **·Lable**	 2 5F Gases. 2.1
· IMDG, IATA  **· Class** **·Lable**	 2.1 2.1
· 14.4 Packing group **· ADR, IMDG, IATA**	 Void
· 14.5 Environmental hazards: **· Marine pollutant:**	 No
· 14.6 Special precautions for user **· Danger code (Kemler): -** **· EMS Number:**	Warning: Gases. - F-D,S-U
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	 Not applicable.

· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

Section 15 - Regulatory information

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

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

Section 16 - Other information

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

· **Relevant phrases**

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated
H302 Harmful if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction
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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.
P260 Do not breathe dust/fume/gas/mist/vapours/spray..
P264 Wash … thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 If swallowed: Call a poison center or doctor/physician if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents / container in accordance with regional regulations.
· **Contact:** Dipl.-Chem. G. Heller oder Dipl.-Ing. U. Voetter
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the
International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International
Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
STOT RE 3: Specific target organ toxicity - Repeated exposure, Hazard Category 3
Skin Sens.1: Sensitisation – Skin, Hazard Category
Muta. 1B: Germ Cell Mutagenicity, Hazard Category 1B
Carc.1A: Carcinogenicity, Hazard Category 1A