SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
Print Date 01.10.2015

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

1.1 Product identifiers

Product name : Surgical Spirit

REACH No. : All components have been REACH registered.

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

Identified uses : Distribution of substance formulation and (re)packing of substances and mixtures Uses in cleaning agents Agrochemical uses.

Uses advised against : This product is not recommended for any industrial, professional or consumer uses other than those identified above.

1.3 Details of the supplier of the safety data sheet

Company : Vet-Way Ltd,
1 Harrier court
Airfield Business Park
Elvington
York
YO41 4EA
UNITED KINGDOM

Telephone : +44 (0)1904 607600

Fax : +44 (0)1904 607601

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Physical hazards

Flam. Liq. 2 - H225

Health Hazards

Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox 4 - H332 Eye Irrit. 2 - H319 STOT SE 2 - H371

Environmental hazards:

Not classified

Classification System (67/548/EEC or 1999/45EC)

Xn;R20/21/22, R68/20/21/22. F;R11

Human health

Irritating to eyes. May cause serious eye damage. Harmful in contact with skin. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Harmful by inhalation in high concentrations, vapours and spray mists are narcotiv and may cause headache, fatigue, dizziness and nausea. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. Harmful if swallowed, see Section 11 for additional information on health hazards.

Environmental

Not considered as an environmental hazard according to CLP criteria.

Physiochemical

This product is highly flammable. Vapours may form explosive mixtures with air. Vapours

are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the CLP regulation

Hazard Pictograms

Signal Word: Danger

Hazard Statements: H319 Causes serious eye irritation

H225 Highly flammable liquid and vapour

H371 May cause damage to organs

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled

Precautionary Statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P241 Use explosion-proof electrical equipment

P270 Do not eat, drink or smoke when using this product

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

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

P501 Dispose of contents/container in accordance with national regulations

Contains: Methanol

Supplementary precautionary Statements

P233 Keep container tightly closed

P240 Ground/bond container and receiving equipment

P242 Use only non spraking tools

P243 Take precautionary measures against static discharge

P260 Do not breathe vapour/spray

P261 Avoid breathing vapour/spray

P264 Wash contaminated skin thoroughly after handling

P271 Use only outdoors or in a well ventilated area

P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor

P302+P352 IF ON SKIN: Wash with plenty of water

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P311 If exposed or concerned: Call a POISON CENTRE or Doctor.

P312 Call a POISON CENTRE/doctor if you feel unwell.

P21 Specific treatment (see medical advice on this label)

` P330 Rinse mouth

P337+P313 If eye irritation persists: Get medical attention/advise.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370 +P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

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

P405 Store locked up.

Result of PBT and vPvB assessment

PBT: not applicable

vPvB: not applicable

SECTION 3: Composition/information on ingredients

3.1 Chemical Characterisation: Substances
Identification number(s) Not applicable

3.2 Chemical characterisation: Mixtures
Description:

ETHANOL: EINECS: 200-578-6
CAS: 64-17-5
REG. NR.: 2119457610-43-XXXX
CLP CLASSIFICATION: F;R11
Flam. Liq. 2 - H225, Eye Irrit. 2 - H319
PERCENT: 60-100%

METHANOL: EINECS: 200-659-6
CAS: 67-56-1
REG. NR.: 211943307-44-XXXX
CLP CLASSIFICATION: F;R11 T;R23/24/25,R39/23/24/25
Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE - H370; Flam. Liq. 2
PERCENT: 1-5%

CASTOR OIL: EINECS: 232-293-8
CAS: 8001-79-4
REG. NR.:
CLP CLASSIFICATION: Not classified
PERCENT: 1-5%

DIETHYL PUTHALATE:
EINECS: 201-550-6
CAS: 84-66-2
REG. NR.: 2119486682-27-XXXX
CLP CLASSIFICATION: Not classified
PERCENT: 1-5%

PYROLIGNEOUS ACIDS:

EINECS: 232-450-0
CAS: 8030-97-5
REG. NR.:
CLP CLASSIFICATION: Xn;R22. Xi;R36/37/38; R10
Acute Tox. 4 - H302, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Actue Tox.4 - H312, STOT SE 3 - H335

METHYL SALICYLATE:

EINECS:
CAS: 119-36-8
REG. NR.:
CLP CLASSIFICATION: Xn;R22. Xi;R36/37/38
Acute Tox. 4 - H302, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, STOT SE 3 - H335

The full text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The date shown are in accordance with the latest EC Directives

---

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Keep affected person under observation. Effects may be delayed. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

If inhaled
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person under observation. Get medical attention if symptoms are severe or persist. Show this Safety Data Sheet to the medical personnel.

In case of skin contact
Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

In case of eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

If swallowed
Get medical attention immediately. Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not ever the lung. Keep affected person under observation. Show this Safety Data Sheet to the medical personnel.

First aid personnel should wear appropriate protective equipment during any rescue.

4.2 Most important symptoms and effects, both acute and delayed

General information
Get medical attention immediately. The casualty should be transferredto hospital as soon as possible.

Inhalation
Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Over exposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.

Ingestion
Gastrointestinal symptoms, including upset stomach. Diarrhoea. Nausea, vomiting.

Skin Contact
Prolonged contact may cause redness, irritation and dry sin. Product has a defatting effect on skin.

Eye Contact
Causes serious eye irritation. Immediate first aid is imperative. Vapour or spray in the eyes may cause irritation and smarting.

4.3 Indication of any immediate medical attention and special treatment needed
No specific recommendations

SECTION 5: Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media
Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Do not use water jet as an extinguisher, as this will spread the fire. Nonalcohol resistant foam.

5.2 Special hazards arising from the substance or mixture
Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Solvent vapours may form explosive mixtures with air. May ignite at high temperature. Highly flammable liquid and vapour. Vapours may accumulate on the floor in low-lying areas. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours may be ignited by a spark, a hot surface or an ember.
Hazardous combustion products: Oxides of carbon. Acrid fumes or smoke.

5.3 Advice for firefighters
Move containers from fire area it can be done without risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Withdraw immediately in case of rising sound from venting safety device or any discolouration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Control run-off water by containing and keeping it out ofsewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Wear positive-pressure self-contained breathing apparaus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. Use protective equipment appropriate for surrounding materials.

5.4 Further information
no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Take precautionary measures against static discharges. Take care as floors and other surfaces may become slippery. Follow precautions for safe handling described in this safety data sheet. For personal protection see Section 8.

6.2 Environmental precautions
Environmental manager must be informed of all major spillages. Do not discharge into drains or watercourses or onto the ground. Avoid discharge into the aquatic environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and cleaning up
Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid the spillage or runoff entering drains, sewers or watercourses. Take care as floors and other surfaces may become slippery. Contain spillage with sane, earth or other suitable non-combustible material. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage

must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with international regulations. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and pray/mists. Avoid spilling. Avoid release to the environment. Use xplosion-proof electrical, ventilating and lighting equipment. Use only in well-ventilated areas. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharge. Earth container and transferequipment to eliminate sparks for static electricity. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=10 m/sec). AVOID splash filling. Do not use compressed air for filling or discharging operations.

Advice on general occupational hygiene

Eye wash facilities and emercengy shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. Contaminated clothing should be placed in a closed container for disposal or decontamination.

7.1 Conditions for safe storage, including any incompatibilities

Storage:

Keep away from oxidizing materials, heat and flames. Store in tightly closed, original container in a well ventilated place. Bund storage facilities to prevent soil and water pollution in the event of spillage. Earth container and transfer equipment to eliminate sparks from static electricity. Storage tanks and other containers may be earthed. Keep away from food, drink and animal feeding stuffs. Only store in correctly labelled containers. Suitable container materials: Carbon steel. Mild steel. Stainless steel. Unsuitable containers: copper, zinc, aluminium, copper alloy, aluminium alloy. May attack some plastics, rubber and coatings.

Further information about storage conditions:

Flammable liquid storage.

Specific end use(s)

The identified uses for this product are detailed in Section 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000ppm 1920mg/m^3

Short-term exposure limit (15 minute): WEL

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200ppm(Sk) 266mg/m^3(Sk)

Short-term exposure limit (15 minute): WEL 250ppm(Sk) 333mg/m^3(Sk)

CASTOR OIL

None esablished

DIETHYL PHTHALATE

Long-term exposure limit (8-hour TWA): WEL 5mg/m^3

Short-term exposure limit (15 minute): WEL 10mg/m^3

PYROLIGNEOUS ACIDS

Long-term exposure limit (8-hour TWA): No STD

Short-term exposure limit (15 minute): No STD

METHYL SALICYLATE

Long-term exposure limit (8-hour TWA): No STD

Short-term exposure limit (15 minute): No STD

WEL = Workplace Exposure Limit

Additional information: WEL = Workplace Exposure Limit

ETHANOL (CAS: 64-17-5)

Ingredient comments WEL = Workplace Exposure Limits

DNEL
- Industry - Inhalation; Short term local effects: 1900mg/m^3
- Industry - Dermal; Long term systemic effects: 343mg/kg/day
- Industry - Inhalation; Long term systemic effects: 950mg/m^3
- Consumer - Inhalation; Short term local effects: 950mg/m^3
- Consumer - Dermal; Long term systemic effects: 206mg/kg/day
- Consumer - Inhalation; Long term systemic effects: 114mg/m^3
- Consumer - Oral; Long term systemic effects 87mg/kg/day

PNEC
- Industry - Fresh water; Long term; Long term 0.96mg/l
- Industry - Marine water; Long term 0.79mg/l
- Industry - Intermittent release; Long term 1540mg/l
- Industry - STP; Long term 100mg/l
- Industry - Sediment (Freshwater); Long term mg/kg
- Industry (Marinewater); Long term mg/kg
- Industry - Soil; Long term mg/kg

CASTOR OIL (CAS:8001-79-4)

DNEL No DNEL values have been established

PNEC No PNEC values have been established

DIETHYL PHTHALATE (CAS:84-6-2)

Ingredient comments WEL = Workplace Exposure Limits

DNEL
- Industry - Inhalation; Short term local effects: 52.8mg/m^3
- Industry - Dermal; Long term systemic effects: 1.5mg/kg/day
- Industry - Inhalation; Long term systemic effects: 10.56mg/m^3
- Industry - Dermal; Short term systemic effects: 7.5mg/kd/day

Consumer - Inhalation; Short term local effects: 13mg/m^3

Consumer - Dermal; Long term systemic effects: 0.75mg/kg/day

Consumer - Inhalation; Long term systemic effects: 2.6mg/m^3

Consumer - Oral; Long term systemic effects 0.75mg/kg/day

Consumer - Dermal; Short term systemic effects:3.75mg/kg/day

PNEC Industry - Fresh water; Long term; Long term 0.012mg/l

Industry - Marine water; Long term 0.0012mg/l

Industry - STP; Long term 2mg/l

Industry - Sediment (Freshwater); Long term 0.137mg/kg

Industry (Marinewater); Long term 0.0137mg/kg

Industry - Soil; Long term 0.137 mg/kg

PYROLIGNEOUS ACIDS (CAS: 8030-97-5)

DNEL No DNEL values have been established

PNEC No PNEC values have been established

METHYL SALICYLATE (CAS: 119-36-8)

DNEL Industry - Inhalation; Short term local effects: 285mg/m^3

Industry - Dermal; Long term systemic effects: 6mg/kg/day

Industry - Inhalation; Long term systemic effects: 17.5mg/m^3

Consumer - Inhalation; Short term local effects: 213mg/m^3

Consumer - Dermal; Long term systemic effects: 3mg/kg/day

Consumer - Inhalation; Long term systemic effects: 4mg/m^3

Consumer - Oral; Long term systemic effects 1mg/kg/day

Consumer - Oral; Oral; Short term systemic effects: 5mg/kg/day

PNEC Industry - Fresh water; Long term; Long term 0.02mg/l

Industry - Marine water; Long term 0.002mg/l

Industry - Intermittent release; Long term 0.2mg/l

Industry - STP; Long term 140mg/l

Industry - Sediment (Freshwater); Long term 0.33mg/kg

Industry (Marinewater); Long term 0.033mg/kg

Industry - Soil; Long term 0.35mg/kg

8.2 Exposure controls

Appropriate engineering controls

As this products contains ingredients with exposure limits, process enclosures, local exhaust ventilation or any other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Ensure the ventilation system is regularly maintained

and tested. Use explosion-proof electrical, ventilating and lighting equipment. This product must not be handled in a confined space without adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Personal protective equipment

Eye/face protection

Wear eye protection. If risk of splashing, wear safety goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN 166(EU).

Skin protection

Wear protective gloves. The selected gloves should have a breakthrough time of at least 8 hours. It is recommended that gloves are made of the following material: Butyl rubber. Polythene. Viton rubber (fluoro rubber). For short-term/splash protection the following are recommended Neoprene. To protect hands from chemicals, gloves should comply with European Standard EN374. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer who can provide information about the breakthrough time of the glove material.

Body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated clothing should be places in a closed container for disposal or decontamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marker. Gas and combination filter cartridges should comply with European Standard EN14387. Change filter cartridge on respirator daily. Check that the respirator fits tightly and the filter is changed regularly. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. When spraying, wear a suitable supplied-air respirator.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Liquid Colour: colourless
b)	Odor	Alcoholic
c)	Odor Threshold	no data available
d)	pH	no data available
e)	Melting point/freezing point	Melting point/range: -114 °C
f)	Initial boiling point and boiling range	78 °C @1013hPa
g)	Flash point	12°C CC (Closed Cup)
h)	Evaporation rate	3.4 BuAc=1
i)	Flammability (solid, gas)	
j)	Upper/lower flammability or	explosive limits

Upper: 13.5%

Lower: 2.5% V

k)	Vapour pressure	5.8 kPa @ °C
l)	Vapour density	1.03
m)	Bulk density	0.79-0.81kg/l at 20 °C
n)	Water solubility	soluble in water. Miscible with organic solvents.
o)	Partition coefficient: n-octanol/water	Log Pow: -0.35 20
p)	Auto-ignition temperature	363°C
q)	Decomposition temperature	1.2mPa s @ 20 °C

9.2 Other safety information

Not available

Volatile organic compound

This product contains a maximum VOC content of 100%

SECTION 10: Stability and reactivity

10.1 Reactivity
May react with Strong acids and Strong oxidizing agents.

10.2 Chemical stability
Stable at normal ambient temperatures and when used as recommended.

10.3 Possibility of hazardous reactions
Reacts with strong acids. Reacts with strong oxidizing agents.

10.4 Conditions to avoid
Avoid heat, flames and other sources of ignition. Avoid heat. Avoid contact with the following materials: Strong oxidizing agents and acids.

10.5 Incompatible materials
Strong acids, Strong oxidizing agents

10.6 Hazardous decomposition products
Oxides of carbon. Acrid smoke or fumes

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral - 500mg/kg

Dermal - 1100mg/kg

Inhalation - 11.0(vapours mg/l)

Toxicological information on ingredients

ETHANOL

Acute toxicity - oral	LD50 10,470 mg/kg, Oral, Rat
Acute toxicity - dermal	LD50 17,100 mg/kg, Dermal, Rabbit
Acute toxicity - inhalation	LC50 124.7 mg/l/4hr/day, Inhalation, Rat
Aniaml data	Not classified as irritating to the skin
Serious eye damage/irritation	Classified as irritating to eyes
Respiratory sensitisation	Not classified as a skin sensitiser
Genotoxicity - in vitro	Does not contain any substances known to be mutagenic
Carcinogenicity	Does not contain any substances known to be carcinogenic
Reproductive toxicity - fertility	Based on available data the classification criteria are not met
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction
STOT - single exposure	Based on available data the classification criteria are not met
STOT- repeated exposure	Based on available data the classification criteria are not met

Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. Overexposure may depress the central nervous system, causing dizziness and intoxication. Extensive use of the product in area with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.
Ingestion	May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach. May cause nausea, headache, dizziness and intoxication. Diarrhoea.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Product has a defatting effect on the skin. May cause skin sensation or allergic reactions in sensitive individuals.
Eye contact	Causes serious eye irritation. Repeated exposure may cause chronic eye infection.
Acute and chronic health hazards	Irritating to eyes.
Route of entry	Inhalation, Ingestion, Skin and/or eye contact.
Target organs	Central nervous system. Eyes, Gastro-intestinal tract, Skin
Medical Symptoms	CNS depression. Confusion, agitation and/or excitation. Gastrointestinal symptoms, including upset stomach. Diarrhoea. Dizziness. Intoxication. Nausea, vomiting. Irritation of eyes and mucous membranes.
Medical Considerations	History of alcoholism. Central nervous system depression. Splash in eye requires examination by specialist. Persons with rash are directed to skin expert for examination of allergic eczema.

METHANOL

This product is classified as toxic.

Acute toxicity - oral	LD50 1187-2769 mg/kg, Oral, Rat. Classified as toxic. There is a marked difference in accurate oral toxicity between animals and man, man being more susceptible than animals. The estimated fatal dose for man is 100ml ATE Oral - 100.0 mg/kg
Acute toxicity - dermal	LD50 17,100 mg/kg, Dermal, Rabbit. Classified as toxic. ATE - 300 mg/kg
Acute toxicity - inhalation	LC50 128.2 mg/l Inhalation, Rat. Classified as toxic. High concentrations may cause CNS depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death ATE inhalation 3.0
Aniaml data	Not classified as irritating to the skin
Serious eye damage/irritation	Classified as irritating to eyes
Respiratory sensitisation	Not classified as a respiratory sensitiser
Genotoxicity - in vitro	Does not contain any substances known to be mutagenic
Carcinogenicity	Does not contain any substances known to be carcinogenic
Reproductive toxicity - fertility	Based on available data the classification criteria are not met
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction
STOT - single exposure	LOAEL 2000 mg/kg, Oral, Rat Target organs - Eyes
STOT- repeated exposure	NOAEC 0.13 mg/l/6hr/day, Inhalation, Rat Target organs - Heart and cardiovascular system, brain, liver
Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Toxic if inhaled. Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. When working extensively on big surfaces in small and badly ventilated rooms, vapours may develop in concentrations which may cause headache and irritation to the eyes and the respiratory system.
Ingestion	Toxic: Danger of very serious irreversible effects if swallowed. Gastrointestinal symptoms, including upset stomach. May cause nausea, headache, dizziness and intoxication. Diarrhoea.

Skin contact	Toxic: danger of serious damage to health by prolonged exposure in contact with skin. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Product has a defatting effect on the skin. May cause skin sensation or allergic reactions in sensitive individuals.
Eye contact	May be slightly irritating to eyes. May cause discomfort. Vapour or spray in the eyes may cause irritation and smarting.
Route of entry	Inhalation, Ingestion, Skin and/or eye contact.
Target organs	Central nervous system. Eyes, Gastro-intestinal tract, Skin
Medical Symptoms	Drowsiness, dizziness, disorientation, vertigo. Intoxication. Symptoms following over exposure to dust may include the following: Irritability. Headache. Nausea, vomiting. CNS depression. Irritation of eyes and mucous membrane.
Medical Considerations	In humans, over-exposure to methanol can result in blindness and metabolic acidosis. There is a marked difference in acute oral toxicity between animals and man, man being more susceptible than animals. The estimate mean fatal does = 300mg/kg for an adult.

CASTOR OIL

Acute toxicity - oral	Low toxicity
Acute toxicity - dermal	Low toxicity
Acute toxicity - inhalation	Not available
Aniaml data	Not classified as irritating to the skin
Serious eye damage/irritation	Not classified as irritating to eyes
Respiratory sensitisation	Not classified as a respiratory sensitiser
Genotoxicity - in vitro	Does not contain any substances known to be mutagenic
Carcinogenicity	Does not contain any substances known to be carcinogenic
Reproductive toxicity - fertility	Based on available data the classification criteria are not met
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction
STOT - single exposure	Not classified as specific target organ toxicant after single exposure
STOT- repeated exposure	Not classified as specific target organ toxicant after repeated exposure
Aspiration hazard	Not considered an aspiration hazard
General information	Prolonged and repeated contact with solvents over a long period may lead to permenant health problems.
Inhalation	Vapours/aerosol spray may irritate the respiratory system. Vapours and spray/mists in high concentrations are narcotic.

Ingestion	Gastrointestinal symptoms, including upset stomach. Overexposure may cause nausea, headache, dizziness, disorientation, vertigo and intoxication. Diarrhoea.
Skin contact	Prolonged or repeated contact with skin may cause irritation and redness.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
Acute and chronic health hazards	This product has low toxicity. Only large volumes may have adverse impact on human health.
Route of entry	Inhalation, Ingestion, Skin and/or eye contact.
Target organs	No specific target organs
Medical Considerations	Skin disorders and allergies. Splash in the eye requires examination by eye specialist.

DIETHYL PHTHALATE

Acute toxicity - oral	LD50 8,600 mg/kg, Oral, Rat
Acute toxicity - dermal	LD50, 3000 mg/kg, Dermal, Guinea Pig
Acute toxicity - inhalation	Not available
Aniaml data	Not classified as irritating to the skin
Serious eye damage/irritation	Not classified as irritating to eyes
Respiratory sensitisation	Not classified as a respiratory sensitiser
Genotoxicity - in vitro	Does not contain any substances known to be mutagenic
Carcinogenicity	Does not contain any substances known to be carcinogenic
Reproductive toxicity - fertility	Based on available data the classification criteria are not met
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction
STOT - single exposure	Not classified as specific target organ toxicant after single exposure
STOT- repeated exposure	Not classified as specific target organ toxicant after repeated exposure
Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
General information	Prolonged and repeated contact with solvents over a long period may lead to permenant health problems.
Inhalation	Vapours/aerosol spray may irritate the respiratory system. Vapours and spray/mists in high concentrations are narcotic. Contains organic solvents which in case of overexposure may depress the CNS causing dizziness and intoxication.
Ingestion	Gastrointestinal symptoms, including upset stomach. Overexposure may cause nausea, headache, dizziness, disorientation, vertigo and intoxication. Diarrhoea.
Skin contact	Prolonged or repeated contact with skin may cause irritation and redness.

Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
Acute and chronic health hazards	This product has low toxicity. Only large volumes may have adverse impact on human health.
Route of entry	Inhalation, Ingestion,
Target organs	No specific target organs
Medical Considerations	Skin disorders and allergies. Splash in the eye requires examination by eye specialist.

METHYL SALICYLATE

Acute toxicity - oral	LD50 887 mg/kg, Oral, Rat ATE - 500 mg/kg
Acute toxicity - dermal	LD50, 2500 mg/kg, Dermal, Rat
Acute toxicity - inhalation	Not available
Aniaml data	Slightly irritating to skin
Serious eye damage/irritation	Irritating
Skin sensitisation	Not sensitising to skin
Respiratory sensitisation	Not classified as a respiratory sensitiser
Genotoxicity - in vitro	Does not contain any substances known to be mutagenic
Carcinogenicity	Does not contain any substances known to be carcinogenic
Reproductive toxicity - fertility	Based on available data the classification criteria are not met
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction
General information	Vapours may irritate throat/respiratory system. Systems following over exposure may include the following: Headache, dizziness, drowsiness. Extensive use of the product in areas wirh inadequate ventilation may result in the accumulation of hazardous vapour concentrations. May cause eye and respiratory system irritation. Symptoms following over exposure may include the following: Headache.
Inhalation	Vapours/aerosol spray may irritate the respiratory system. Vapours and spray/mists in high concentrations are narcotic. Contains organic solvents which in case of overexposure may depress the CNS causing dizziness and intoxication.
Ingestion	Harmful if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms including upset stomach.
Skin contact	Slightly irritating . Product has defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema. Prolonged and frequent contact may cause redness and irritation.
Eye contact	Irritating to eyes. Symptoms following over exposure may include the following: Redness. Pain. Repeated exposure may cause chronic eye irritation.

Acute and chronic health hazards	Irritating to skin. Irritating to eyes. May cause respiratory system irritation. May cause stomach pain or vomiting.
Route of entry	Inhalation, Ingestion, skin and/or eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Toxicity:

ETHANOL

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Acute toxicity - Fish	LC50, 96 hours, 13,000 mg/l, Onchorhynchus mykiss (Rainbow Trout)
Acute toxicity - Aquatic invertebrates	LC50, 48 hours, 12,340 mg/l, Daphnia Magna
Acute toxicity - Aquatic plants	EC50, 48 hours: 12,900 mg/l, Selenastrum capricornutum
Acute toxicity -micoorganisms	EC50, 4 hours, 5,800 mg/l Activated sludge
Chronic toxicity - fish early life stage	NOEC, 24 days: >0.08 mg/l. Pimephales promelas (Fat-head minnow)
Chronic toxicity - Aquatic invertebrates	NOEC, 10 days: 9.6 mg/l, Daphnia Magna

METHANOL

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Acute toxicity - Fish	LC50, 96 hours, 15,400 mg/l, Lepomis macrochirus (Bluegill) Not considered dangerous to the environment.
Acute toxicity - Aquatic invertebrates	LC50, 48 hours: >1000 mg/l, Daphnia Magna Not considered dangerous to the environment.
Acute toxicity - Aquatic plants	EC50, 96 hours: 22000 mg/l, Selenastrum capricornutum

CASTOR OIL

Acute toxicity - Fish	Not available
Acute toxicity - Aquatic invertebrates	Not available.
Acute toxicity - Aquatic plants	Not available

DIETHYL PHTHALATE

Acute toxicity - Fish	LC50, 96 hours, 17 mg/l, Pimephales promelas (Fat-head minnow)
Acute toxicity - Aquatic invertebrates	LC50, 48 hours: 90 mg/l, Daphnia Magna Not considered dangerous to the environment.
Acute toxicity - Aquatic plants	EC50, 72 hours: 23 mg/l, Selenastrum capricornutum

METHYL SALICYLATE

Acute toxicity - Fish	LC50, 96 hours, 1370 mg/l, Pimephales promelas (Fat-head minnow)
Acute toxicity - Aquatic invertebrates	LC50, 48 hours: 870 mg/l, Daphnia Magna Not considered dangerous to the environment.
Acute toxicity - Aquatic plants	EC50, 72 hours: 27 mg/l, Selenastrum capricornutum

12.2 Persistence and degradability

Ethanol, Methanol, Castor Oil, Diethyl phyhalate and Methyl Salicylate are all readily biodegradeable.

12.3 Bioaccumulative potential

log Pow: - 0.35

Ethanol, Methanol, Castor Oil, Diethyl phyhalate and Methyl Salicylate do not bioaccumulate significantly.

12.4 Mobility in soil

Ethanol and Methanol are water-soluble and may spread in water systems. Large volumes may penetrate soil and could contaminate groundwater. The product is poorly absorbed onto soils or sediments. **Castor Oil** is insoluble in water and will spread on the water surface. If product enters soil it will be mobile and may contaminate ground water. **Diethyl phthalate** is insoluble in water and will sediment in water systems. The product contains substances which may accumulate in sediment. Large volumes may penetrate soil and could contaminate groundwater. **Methyl Salicylate** is partly miscible with water and may spread in aquatic environment. If product enters soil it will be mobile and may contaminate groundwater.

12.5 Results of PBT and vPvB assessment

13 **Ethanol, Methanol, Castor Oil, Diethyl phyhalate and Methyl Salicylate** are not classified as PBT or vPvB according to EU criteria.

13.1 Other adverse effects

Ethanol and Methanol contain volatile organic compounds which have a photochemical ozone creation potential. **Castor Oil** - no adverse effects are expected. **Diethyl Phthalate and Methyl Salicylate** contain substance or substances that will contribute to global warming.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Contaminated packages must be completely emptied before sending away for laundering and re-use. When handling waste, the safety precautions applying to handling of the product should be considered.

Contaminated packaging

Collect and place in suitable waste disposal containers and seal securely. Empty containers or liners may retain some product residues and hence be particularly hazardous. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Waste, residues, empty containers, discarded work clothes

and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Disposal of this product, process solutions, and residues and by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Confirm disposal procedures with environmental engineer and local regulation. Avoid the spillage or run-off entering drains, sewers or watercourses.

SECTION 14: Transport information

14.1 UN number
1170

14.2 UN proper shipping name

Ethanol (Ethyl Alcohol) or Ethanol Solution (Ethyl Alcohol Solution)

14.3 Transport hazard class(es)
3

14.4 Packaging group
II

14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

EmS F-E, S-D
Emergency Action Code 2YE
Hazard Identification Number 33
Tunnel restriction code (D/E)

14.7
Transporting in bulk according to Annex II of MARPOL73/78 and the IBC code.
Cat Z

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

Health and Safety at Work etc. Act 1974 (as amended).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

Dangerous Substances and Explosive Atmospheres Regulations 2002.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Descision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Guidance

Workplace Exposure Limits EH40.

Introdcution to Local Exhaust Ventialtion HS(G)37.

Safety Data Sheets for Substances and Preperations.

Authorisation (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

15.2 Chemical Safety Assessment

A chemical safety assessment has been carried out on the components.

SECTION 16: Other information

Further information

Key Literature references and sources for data
Dangerous Properties of Industrial Materials Report, N. Sax et. Al. Registry of Toxic Effects of Chemical Substances (RTECS). ECHA

Issued by	Director - Thechnical and Regulatory Affairs
Revision date	11/01/2016
Revision	3
SDS number	10145
SDS status	Approved

Risk phrases in full	Not classified R10 Flammable R11 Highly flammable R20/21/22 Harmful by inhalation, in contact with skin and if swallowed R21 Harmful in contact with skin R22 Harmful if swallowed R23/24/25 Toxic by inhalation, in contact with skin and if swallowed R36/37/38 Irritating to eyes, respiratory system and skin. R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
Hazard phrases in full	H225 Highly flammable liquid and vapour H226 Flammable liquid and vapour H301 Toxic if swallowed H302 Harmful if swallowed H311 Toxic in contact with skin H312 Harmful in contact with skin H315 Causes skin irritation H319 Causees serious eye irritation H331 Toxic if inhaled H332 Harmful if inhaled H335 May cause respiratory irritation H70 Causes damage to organs H371 May cause damage to organs

with any other materials or in any process. Such information is, to the best of the companys knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliablilty or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.