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 : Formal Saline 10%

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

Identified uses : Laboratory chemicals, Manufacture of substances

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

Classification under CLP:

Acute Tox. 4: H302; Skin Sens.1: H317; Carc. 1B: H350; Muta. 2: H341

Classification under CHIP:

This product has no classification under CHIP.

2.2 Label elements

Label elements under CLP:

Hazard Pictograms

GHS07: Exclamation Mark

GHS08: Health Hazard

Signal Word: Danger

Hazard-determining components of labelling: formaldehyde

Hazard Statements:

H302: Harmful if swallowed

H317: May cause allergic skin reaction

H341: Suspected of causing genetic defects

H350: Suspected of causing cancer

Precautionary statements:

P201: Obtain special instructions before use

P202: Do not handle until all safety precautions have been read and understood.

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

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P308+313: If exposed or concerned: Get medical advice or attention

P333+313: If skin irritation or rash occurs: Get medical advice/attention

Other hazards

Other hazards: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at leavels of 0.1% or higher.

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:

Formaldehyde: EINECS: 200-001-8
CAS: 50-00-0
REG. NR.: 01-2119488953-20
CLP CLASSIFICATION: T R23/24/25
C R34
Xn R40
Xi R43
CHIP CLASSIFICATION: Carc. 2: H351; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Carc. 2, H351; Skin Corr. 1B, H314; Skin Sens. 1, H317
PERCENT: 1-10%

Sodium Chloride: EINECS: 200-659-6
CAS:67-56-1
CLP CLASSIFICATION: F: R11; T: R23/24/25; T: R39/23/24/25
CHIP CLASSIFICATION: Flam. Liq. 2: H225; Acute Rox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370
PERCENT: <1%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

In case of skin contact
Immediately remove any clothing soiled by the product unless stuck to skin. Immediately wash with water and soap and rinse thoroughly. Transfer victim immediately to hospital. Consult a doctor.

In case of eye contact
Rinse open eye for several minutes under running water for at least 15 minutes. Consult a doctor.

If swallowed
Do not induce vomiting; call for emergency medical help immediately. Never give anything my mouth to an unconscious person. Wash out mouth with water. Consult a doctor. Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.
Eye Contact : There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Delayed/immediate effects: Immediate effects can be expected after short term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1 Extinguishing Media

Suitable extinguishing media
Water spray. Alcohol resistant foam. Carbon Dioxide. Dry chemical powder. Use water spray to cool containers.

5.2 Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

5.3 Advice for firefighters

Wear self-contained respiratory protective device.
Wear protective clothing to prevent contact with skin and eyes.
Use water spray to cool unopened containers.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not discharge into drains or rivers. Discharge into environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage , and then collect with an electrically protected vaccum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8. For waste disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid direct contact with the substance. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Keep away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are open must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Non-combustible, acute toxic Cat.3/toxic hazardous material or hazardous materials causing chronic effects.

Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the work place

50-00-0 formaldehyde WEL () Short-term value: 2.5mg/m^3

Long-term value: 2.5mg/ m^3

Methanol WEL () Short-term value: 266mg/m^3

Long-term value: 333mg/ m^3

Additional information: DNEL?PNEC No data available

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Ensure there is sufficient ventilation in the area.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with application laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the

specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Full contact - Material: Nitrile rubber. Minimum layer thickness: 0.11mm. Break through time: 8 hours. Splash contact - Material: Nitrile rubber. Minimum layer thickness: 0.11mm. Break through time: 8 Hours

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a back up to engineering controls. If the respirator is the sole means of protection, use a full-faced supplied air respirator. Use repirators and components tested and approved under appropriate government standards such as NIOSH (US) or CN (EU).

Environmental protection

Prevent avoided.further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Liquid Colour: colourless
b)	Odor	pungent
c)	Initial boiling point and boiling range	100 °C
d)	Flash point	85°C
e)	Evaporation rate	no data available
f)	Flammability (solid, gas)	no data available
g)	Upper/lower flammability or explosive limits	Lower 7%
h)	Vapour pressure	53 hPa at 39 °C
i)	Relative density	1.08 g/cm3 at 20 °C
j)	Water solubility	Soluble

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
Stable under recommended transport or storage conditions

10.2 Chemical stability
Stable under normal conditions

10.3 Possibility of hazardous reactions
Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid
Heat, flames and sparks

10.5 Incompatible materials
Materials to avoid: Strong bases. Acids. Oxidising agents. Alkali metals. Strong oxidizing agents. Amines. Strong Acids. Acid chlorides. Acid anhydrides. Reducing agents. Peroxides. Isocyanates. Phenol. Aniline.

10.6 Hazardous decomposition products
In combustion emits toxic fumes.
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Formaldehyde 100%

ORL	MUS	LD50	42	mg/kg
ORL	RAT	LD50	100	mg/kg
SCU	RAT	LD50	420	mg/kg

Methanol

IVN	RAT	LD50	2131	mg/kg
ORL	MUS	LD50	7300	mg/kg
ORL	RAT	LD50	5628	mg/kg

Skin corrosion/irritation
There may be irritation and redness at the site of contact.

Serious eye damage/eye irritation
There may be irritation and redness. The eyes may water profusely

Ingestion
There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.

Inhalation
There may be irritation of the throat with a feeling of tightness in the chest.

Delayed/immediate effects: Immediate effects can be expected after short term exposure.

Additional information:

TRTECS: Not available. Methyl alcohol may be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Effects due to ingestion may include: Nausea, Headache, Vomiting, Gastrointestinal disturbance, Dizziness, Weakness, Confusion, Drowsiness, Unconciousness, May cause convulsions, Liver - irregularities - based on human evidence.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity values: No data available

12.2 Persistence and degradability

Biodegradable

12.3 Bioaccumulative potential

No bioaccumulation potential

12.4 Mobility in soil

Readily absorbed into soil

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Incinerate according to applicable local, state and federal regulations. Offer surplus and non-recycalbe solutions to licensed disposal company.

Contaminated packaging

Dispose of as unused product. The users' attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

This product does not require a classification for transport.

SECTION 15: Regulatory information

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

Specific regulations: This safety datasheet does not require a classification for transport.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010
*indicated text in the SDS which has changed since the last revision.
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Relevant phrases
H225 Highly fammable liquid and vapour
H301 Toxic if swallowed
H302 Harmful if swallowed
H311 Toxic in contact with skin
H314 Causes severe burns and eye damage
H317 May cause an allergic skin reaction
H331 Toxic if inhaled
H341 Suspected of causing 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>
H351 Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>
H370: Causes damage to organs <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>
R11 Highly flammable
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed
R40 Limited evidence of a carcinogenic effect
R43 May cause sensitisation by skin contact

Emergency number 112