Safety Data Sheet NSurf 100

Date of Issue: 13.07.2024 Replaces: 12.07.2022 Valid no longer than: 14.07.2026

1. Chemical Product and Company Identification

Product identifier

Trade Name: NSurf 100

Identified Uses: Chemical for improving oil flow ability, oil recovery, hard surface

cleaning, wellbore cleaning, sludge treatment for oilfield applications. It is not sold directly to the public for general

consumer uses.

Uses Advised Agaist: This product must not be used in applications other than those

recommended in Section 1, without first seeking the advice of

the supplier.

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Well Engineering & Technology Sdn Bhd

6.07 Level 6, Menara Hap Seng

Jalan P. Ramlee 50250 Kuala Lumpur

Tel: +603 2026 6787 Fax: +603 2034 2199 Email: welltech@welltechengineering.com Website: www.welltechengineering.com

Emergency telephone number: +6019 3566035 / 24hours

2. Hazards Identification

Classification of substance or mixture:

Hazard classes / Hazard categories	Hazard Statement
Flammable liquids, Category 3	H226
Skin corrosion/irritation, Category 2	H315
Skin sensitization, Category 1	H317
Aspiration hazard, Category 1	H304
Acute aquatic toxicity, Category 1	H400
Chronic aquatic toxicity, Category 1	H410

Label Elements:

Pictogram:









Signal Words: Danger

Hazard Statement(s):

H226 : Flammable liquid and vapor.

H304 : May be fatal if swallowed and enters airways.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.H410 : Very toxic to aquatic life with long lasting

effects.

Precautionary Statement(s):

P273 : Avoid release to the environment.
P280 : Wear protective gloves/protective

clothing/eye

protection/face protection

P301 + P310 : IF SWALLOWED: Immediately call a POISON

CENTER or doctor/physician.

P331 : Do NOT induce vomiting.

P501 : Dispose of contents/ container to an approved

waste disposal plant.

Other Hazards:

None.

3. Composition / Information on Ingredients

Chemical name	CAS number	Percentage wt.	Hazard statement
Proprietary blend	N/A	100	H226, H304, H315, H317, H410

4. First Aid Measures

Description of First Aid Measures:

General Advice: Consult a physician. Show this safety data sheet to the doctor in

attendance.

Inhalation: If breathed in, move person into fresh air. If not breathing, give

artificial respiration. Consult a physician.

Skin contact: Wash off with soap and plenty of water. Consult a physician.

Eye contact : Flush eyes with water as a precaution.

Ingestion : Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. Rinse mouth with water. Consult a

physician.

Most Important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed No data available.

5. Fire Fighting Measures

Extinguishing media:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry

chemical or carbon dioxide.

Special hazards arising from substance/Mixture: Carbon Dioxide (CO₂)

Advice for Firefighters: Wear self-contained breathing apparatus for firefighting

if necessary.

Further Information: Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions, Protective Equipment and Emergency Procedure:

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

Methods and Materials for Containment and Cleaning up:

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Environmental Precautions:

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

Reference to other section:

For disposal see section 13.

7. Handling and Storage

Precaution for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Flammable liquids.

Specific End Use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure Controls / Personal Protection

Control Parameters:

Components with workplace control parameters No Data Available.

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.

Personal protection:

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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 applicable 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.

Body protection

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

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 backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure:

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

9. Physical & Chemical Properties

Information on basic physical and chemical properties:

a) Appearance : Brown to dark brown. Liquid.

Transparent.

: Hydrocarbon with faint citrus b) Odour

smell

c) Odour Threshold : No data available

: No data available d) pH

e) Melting point/freezing point : No data available

f) Initial boiling point and : 100 °C

boiling range

g) Flash point :>53 °C – closed cup – lit.

h) Evaporation rate : No data available

i) Flammability (solid, gas) : No data available

j) Upper/lower flammability or : No data available

explosive limits

k) Vapour pressure : No data available I) Vapour density : No data available

 $: 0.80 - 0.84 \text{ at } 25 \,^{\circ}\text{C}$ m) Relative density

n) Water solubility : No data available

: No data available

o) Partition coefficient: n-

octanol/water

: No data available p) Auto-ignition temperature

q) Decomposition temperature : No data available

: No data available r) Viscosity

: No data available s) Explosive properties

: No data available Oxidizing properties

Other Safety Information:

No date available.

10. Stability & Reactivity

Reactivity: No data available.

Stability: Stable under recommended storage conditions.

Condition to avoid: Heat, flames and sparks.

Incompatible material: Strong oxidising agents, Strong acids.

Hazardous Decomposition Products:

Other decomposition products - No data available

In the event of fire: see section 5.

Possibility of Hazardous Reactions: No data available

11. Toxicological Information

Information on toxicological effects:

Basis for assessment

Information given is based on product data, knowledge of the components and the toxicology of similar products.

Acute toxicity:

Ingestion - LD50 > 4400 mg/kg, rat

Skin - LD50 > 5000 mg/kg, rabbit

Skin corrosion/irritation - No data available.

Serious eye damage/eye irritation - Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

Respiratory / skin sensitization - Mouse

Result: May cause sensitization by skin contact.

(OECD Test Guideline 429)

Germ cell mutagenicity - Mouse - mouse lymphoma cells

Result: negative

rat - male

Result: negative

Carcinogenicity - Carcinogenicity - rat – Oral

Tumorigenic: Carcinogenic by RTECS criteria.

Kidney, Ureter, Bladder: Kidney tumors. Tumorigenic Effects:

Testicular tumors.

Carcinogenicity - mouse - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Gastrointestinal: Tumors.

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity - No data available.

Specific target organ toxicity - single exposure - No data available.

Specific target organ toxicity - repeated exposure - No data available.

Aspiration hazard - No data available.

Additional Information - Repeated dose toxicity - mouse - male and female

No observed adverse effect level - 1.650 mg/kg

Lowest observed adverse effect level - 3.300 mg/kg

RTECS: GW6360000

Liver - Irregularities - Based on Human Evidence.

12. Ecological Information

Toxicity:

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 0,72 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - 0,36 mg/l - 48 h
	(OECD Test Guideline 202)
Toxicity to bacteria	EC50 - Sludge Treatment - 3,94 mg/l
	(OECD Test Guideline 209).

Persistence and Degradability:

Biodegradability Result: 71 % - Readily biodegradable. (OECD Test Guideline 301B).

Bio accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Results of PBT and vPvB Assessment:

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

Other Adverse Effects:

Very toxic to aquatic life with long lasting effects.

13. Disposal Considerations

Waste treatment method:

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. Transport Information

UN- Number:

ADR/RID	IMDG	IATA
2052	2052	2052

UN proper shipping name:

ADR/RID	IMDG	IATA
DIPENTENE	DIPENTENE	DIPENTENE

Transport hazard class(es):

ADR/RID	IMDG	IATA
3	3	3

Packing group:

ADR/RID	IMDG	IATA
III	III	III

Environment Hazards:

ADR/RID	IMDG	IATA
yes	Marine pollutant: yes	no

Special Precaution for User:

No data available.

15. Regulatory Information

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

No data available.

Chemical Safety Assessment:

For this product a chemical safety assessment was not carried out.

16. Other Information

Full Text of H-Statements Referred to under Sections 2 and 3:

Hazard- Abbreviation		Hazard statement		
Class	Category	Appreviation	Code	Text
Flammable	Category	Flam. Liq. 3	H226	Flammable liquid
liquid	3			and vapor.
Aspiration	Category	Asp. Tox. 1	H304	May be fatal if
toxicity	1			swallowed and enters airways.
Skin irritation	Category 2	Skin Irr. 2	H315	Causes skin irritation.
Skin sensitizer	Category 1	Skin Sens. 1	H317	May cause an allergic skin reaction.
Hazardous to	Category	Aquatic Acute	H400	Very toxic to aquatic
the aquatic environment	1	1		life.
Hazardous to	Category	Aquatic Chronic	H410	Very toxic to aquatic
the aquatic environment	1	1		life with long lasting effects.

GENERAL INFORMATION

HMIS® Health Hazard 2 HMIS® Flammability 2 HMIS® Physical Hazard 1 HMIS® Reactivity 0

See the appropriate HMIS® Implementation Manual for complete descriptions of the rating criteria for each of the various categories.

INFORMATION SOURCES:

Material Safety Data Sheet, Misc. Manufacturers, Product Information provided by the commercial vendors.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.