

Issue date: 11 June 2012
Revision: 4
Supersedes/Cancel: 01 December 2010

SAFETY DATA SHEET



STENCIL CLEAN

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

1.1 Product identifier

Trade name: Stencil Clean (PN 3210, 3211, 4205, 4225, 6250)
REACH Registration Name: Hydrocarbons, C11-C13, isoalkanes, <2% aromatics.
REACH registration No: 01-2119456810-40
Substance

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

Use of the Substance

Removal of solder paste, inks, flux and other stencil print materials. Suitable for use in under-stencil cleaning mechanisms (vacuum and conventional) and in pre-saturated wipe form.

1.3 Details of the supplier of the safety data sheet Company

QTEK Manufacturing Ltd.,
Riverside Commercial Estate,
Galway,
Ireland.
Email: sales@qtek.com

Contact: SDS Contact: sales@qtek.com

1.4 Emergency telephone number

Telephone Number: + (353) 91 745160
Fax Number: + (353) 91 751299
Hours of business (Monday to Friday): 0830 – 1730 hrs.
Closed Bank Holidays and Public Holidays

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

| | Aspiration Toxicity 1 H304 - May be fatal if swallowed and enters airways

STENCIL CLEAN

Classification (67/548/EEC, 1999/45/EC)

Harmful

R65 - Harmful: may cause lung damage if swallowed

R66 - Repeated exposure may cause skin dryness or cracking

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : **Danger**

Hazard statements: H304 - May be fatal if swallowed and enters airways

Precautionary statements: Prevention:

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 - Do NOT induce vomiting

Supplemental Hazard Statements:

EUH066 - Repeated exposure may cause skin dryness or cracking

2.3 Other hazards

Physical-Chemical Properties/Vapours form explosive mixtures in air.

The material can accumulate static charge and therefore cause electrical ignition.

3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Chemical nature A complex and variable combination of isoparaffinic hydrocarbons having a carbon number predominantly of C11 to C13 and boiling in the range of approximately 170°C to 250°C. The aromatic content is < 2%.

Chemical Name	CAS-No. EINECS-No. / ELINCS No.	content [%]	Classification (67/548/EEC)	Classification (EC 1272/2008)
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	920-901-0	100%	Xn; R65, R66	Asp. Tox. 1 (H304)

Additional Information: Total aromatic content: 10 ppm

The Full Text for all Risk Phrases and Hazard Statements are displayed in Section 16.

STENCIL CLEAN

4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Skin contact	Remove contaminated clothing and shoes. Wash off with soap and water.
Inhalation	In case of exposure to intense concentrations of vapours, fumes or spray, transport the person away from the contaminated zone, keep warm and allow to rest.
Ingestion	Do not ingest. If swallowed then seek immediate medical assistance. Risk of product entering the lungs on vomiting after ingestion. In this case casualty should be sent immediately to hospital
Protection of First Aiders:	Use personal protective equipment

4.2 Most important symptoms and effects, both acute and delayed

Eye contact	Burning feeling and temporary redness.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Inhalation	Vapours inhaled in strong concentration have a narcotic effect on the central nervous system. The inhalation of vapours or aerosols may be irritating for the respiratory tract and for mucous membranes.
Ingestion	Harmful: If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea, abdominal pain.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician treat symptomatically.

5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:	Foam. Dry powder. Carbon dioxide (CO ²) Water spray
Unsuitable extinguishing: Media	Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance

Special hazards

Incomplete combustion or thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentrations.

STENCIL CLEAN

5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective suit. In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Other information

Cool containers / tanks with water spray.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

General Information:

Use personal protective equipment.

Evacuate non-essential personnel.

Ensure adequate ventilation, especially in confined areas.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

6.2 Environmental precautions

Prevent further leakage or spillage only if safe to do so

Dike to collect large liquid spills

The product should not be allowed to enter drains, water courses or the soil.

Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up:

Use non-sparking handtools and explosion-proof electrical equipment.

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Following product recovery, flush area with water.

6.4 Reference to other sections

Personal protective Equipment see section 8.

Waste treatment see section 13

Other information Remove all sources of ignition.
Stop all work that requires a naked flame, stop all vehicles, stop all machines and equipment that may cause sparks or flames.

7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling :

For personal protection see section 8.

Use only in well-ventilated areas.

Do not breathe vapors or spray mist.

Avoid contact with skin, eyes and clothing.

STENCIL CLEAN

Technical measures:

Ensure adequate ventilation.

Do not spray at high pressure (> 3 bar)

WHILE MOVING THE PRODUCT:.

To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Do not allow splash loading and ensure that the product is poured slowly, particularly at the beginning of the operation.

Prevention of fire and explosion

OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION).

Handle away from any source of ignition (open flame and sparks) and heat (hot manifolds or casings).

Do not smoke.

Use explosion-proof electrical equipment.

Take precautionary measures against static discharges.

Do not use compressed air for filling, discharging or handling.

Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems).

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product.

When using, do not eat, drink or smoke.

Regular cleaning of equipment, work area and clothing is recommended.

Do not dry hands with rags that have been contaminated with product.

Do not use abrasives, solvents or fuels.

Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers :

Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts.

Storage installations should be designed with adequate bunds so as to prevent ground or water pollution in case of leaks or spills.

Use explosion-proof electrical equipment.

Keep in a bunded area.

Keep in a dry, cool and well-ventilated place.

Keep away from open flames, hot surfaces and sources of ignition.

Ground/bond containers, tanks and transfer/receiving equipment.

Store at room temperature.

Keep containers tightly closed and properly labelled.

STENCIL CLEAN

Materials to avoid: Strong acids, Oxidising agents

Packaging material: Keep only in the original container or in a suitable container for this kind of product steel.
Stainless steel.

7.3 Specific end uses

8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits	Ingredients with workplace control parameters
Advisory OEL	CEFIC-HSPA: 1200 mg/m ³

Derived No Effect Level (DNEL)

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified

8.2 Exposure Controls

Occupational Exposure Controls

Engineering Measures	When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment. Apply technical measures to comply with the occupational exposure limits.
Personal protective equipment	
General information	Protective engineering solutions should be implemented and in use before personal protective equipment is considered. These recommendations apply to the product as supplied. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.
Respiratory protection	When there is a likelihood of concentrations above the exposure limit the appropriate certified respirators Full face mask (EN136) and Filter: A2 (EN141) will be used. For rescue and maintenance work in storage tanks use self-contained breathing apparatus. In an emergency or for exceptional short-lasting jobs in an atmosphere polluted by the product, it is necessary to wear protective respiratory equipment. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.
Eye protection:	If splashes are likely to occur, wear double eye protection. Wear safety glasses or goggles EN 166 and a face shield/visor.
Skin and body protection	Wear suitable protective clothing EN 340. Protective shoes or boots EN345.
Hand Protection	Impervious gloves, aliphatic hydrocarbon resistant EN374/EN388. If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374 and provide employee skin care programmes

STENCIL CLEAN

Prolonged or repeated exposure – glove selection			
Glove material	Thickness	Break through times	Remarks
Nitrile rubber	>0.3 mm	>480 mins	EN 374
Fluorinated Rubber, Viron ®	>0.5 mm	>480 mins	EN 374
PVA	>1.5 mm	>480 mins	EN 374

Splash protection – glove selection			
Glove material	Thickness	Breakthrough times	Remarks
Neoprene, Chloroprene	>0.7 mm	>60 mins	EN 374
PVC	>1.3 mm	>30 mins	EN 374

Environmental exposure controls

General advice: Do not allow material to contaminate ground water system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear liquid		
Colour	colourless		
Odour	slight		
Property	Values	Remarks	Method
Boiling point/boiling range	187 - 206 °C (369 - 403 °F)		ISO 3405
Flash point	67 °C (153 °F)		ASTM D 93
Evaporation rate	200	EtEt=1	DIN 53170
Flammability Limits in Air			
Upper	6.5%		
Lower	0.6%		
Vapor Pressure	0.6hPa	@20°C	
Vapor density		No information available	
Density	764 kg/m ³	@15 °C	ISO 12185
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		Not applicable	
Autoignition temperature (AIT)	> 230 °C (> 446 °F)	This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials...)	ASTM E 659-78
Viscosity, kinematic	1.3 mm ² /s	@ 40 °C	ASTM D 445
Explosive properties	Not considered explosive based on chemical structure and oxygen balance considerations		
Oxidizing Properties	This product is not considered oxidising based on chemical structure considerations		
Possibility of hazardous Reactions	Not applicable		

STENCIL CLEAN

9.2 Other information

Surface tension	0.0222 N/m	@ 25 °C	EN 14370
Pour point	< -50 °C		ASTM D 97

10: STABILITY AND REACTIVITY

10.1 Reactivity no data available

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : None under normal processing.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Take precautionary measures against static discharges.

10.5 Incompatible materials

Materials to avoid : Strong acids. Oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact Not classified

Burning feeling and temporary redness.

Inhalation Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. The inhalation of vapours or aerosols may be irritating for the respiratory tract and for mucous membranes.

Ingestion Harmful: If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours).

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea, Abdominal pain.

Acute Toxicity Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	LD50 > 5000 mg/kg bw (rat -OECD 401)	LD50 (24h) > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (8h) > 5000 mg/m3 (vapour) (rat - OECD 403)

Sensitizer

Not classified as a sensitizer.

Specific Effect

This product is not classified carcinogenic.

Germ Cell Mutagenicity

The mutagenic potential of the substance has been extensively studied in a range of in-vivo and in-vitro assays. Genetic toxicity : negative.

STENCIL CLEAN

Reproductive Toxicity
Developmental Toxicity

No information available.

Results of guideline developmental toxicity studies on the substance and OECD developmental toxicity screening studies showed no evidence of developmental toxicity in rats.

Repeated Dose Toxicity

Target Organ Effects (STOT)

Specific target organ systemic toxicity (single exposure)

No known effect based on information supplied.

Specific target organ systemic toxicity (repeated exposure)

No known effect based on information supplied.

Aspiration toxicity

The fluid can enter the lungs and cause damage (chemical pneumonitis, potentially fatal).

Other information

Other adverse effects

Frequent or prolonged skin contact destroys the lipoid cutaneous layer and may cause dermatitis.

12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute aquatic toxicity Product Information

Acute aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	ErL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) EbL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - biomass - OECD 201) NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - growth rate - OECD 201)	EL50 (48h) > 1000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 1000 mg/l (Oncorhynchus mykiss - OECD 203)	

STENCIL CLEAN

Chronic aquatic toxicity Product Information

Chronic aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics			NOELR (28d) = 0,32 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	

Effects on terrestrial organisms

No information available

12.2. Persistence and degradability

General Information

Biodegradation

Product is not biodegradable.

OECD 301 F, 28, days, 31%, Not readily biodegradable

12.4. Mobility in soil

Substance is a UVCB. Standard tests for this endpoint are not appropriate.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

This substance is considered not to be PBT and vPvB.

12.6. Other adverse effects

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Dispose of in accordance with the European Directives on waste and hazardous waste and in accordance with government environmental control regulations.

Contaminated packaging

Empty containers may contain flammable or explosive vapors. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: TRANSPORT INFORMATION

14.1 The product is not classified as dangerous for carriage.

ADR/RID

not regulated

IMDG/IMO

not regulated

ICAO/IATA

not regulated

STENCIL CLEAN

ADN	
UN/ID No	UN9003
Proper shipping name	Substances with a flash-point above 60 degrees C and not more than 100 degrees C
Proper shipping name	SUBSTANCES WITH A FLASH POINT ABOVE 60°C AND NOT MORE THAN 100°C
Hazard Class	9
Description	UN9003, SUBSTANCES WITH A FLASH-POINT ABOVE 60 DEGREES C AND NOTMORE THAN 100 DEGREES C (Hydrocarbons, C11-C13, isoalkanes, <2% aromatics) 9

15: REGULATORY INFORMATION

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

European Union

REACH

The EC substance definition is included in the CAS related number description for global inventory entries

Other regulations

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

International Inventories

Related CAS

90622-58-5

64742-48-9

68551-17-7

EINECS/ELINCS

TSCA Complies

DSL Complies

ENCS Complies

IECSC Complies

KECL Complies

PICCS Complies

AICS Complies

NZIoC Complies

SECTION 16: OTHER INFORMATION

This revision was updated from previous revision to incorporate requirements of REACH Regulation 1907/2006, CLP Regulation 1272/2008 and Safety Data Sheet format changes as per Annex II of REACH EU No 453/2010.

This revision:	No: 04
First issue:	08 October 1999
Revised:	11 June 2012

STENCIL CLEAN

Full text of R-phrases referred to under sections 2 and 3

Harmful R65 - Harmful: may cause lung damage if swallowed
R66 - Repeated exposure may cause skin dryness or cracking

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

H304 - May be fatal if swallowed and enters airways

Further information

Other information: || Indicates updated section.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

The data contained herein is based on information currently available to QTEK Manufacturing Ltd. and is believed to be factual. As a blender, and compounder, QTEK does not manufacture the raw materials used in this product and correspondingly relies on information provided to QTEK Manufacturing Ltd. from material safety data sheets on the specific raw materials in the construction of this material safety data sheet. Such information is, to the best of QTEK Manufacturing Ltd's knowledge and belief, accurate and reliable as of the date of this MSDS. **HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS.** It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular application. This information is not intended to be all-inclusive as of the manner and conditions of use, handling and storage. Other factors may involve other or additional safety or performance considerations. This data is not to be taken as a warranty or representation of which QTEK Manufacturing Ltd. assumes legal responsibility.