SAFETY DATA SHEET SS25 NF AEROSOL

According to EC Regulation 1907/2006/EC - revision 453/2010 (REACH)

Print Date 31/01/2014 **Creation Date** 27/05/2011 **Revision Date** 20/11/2013

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name	SS25 NF AEROSOL
Product Code	0369R3

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

Recommended use

Solvent degreaser.

1.3. Details of the supplier of the safety data sheet

CHEMSEARCH. A Division of NCH (UK) Ltd
NCH House
Springvale Avenue
Bilston WV14 0QL
Tel 01902 510334; Fax 01902 510341

E-mail address	technical_uk@nch.com
Website address	www.nch.com

1.4. Emergency telephone number

01902 510331 (available during Office Hours)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The preparation is classified as dangerous in accordance with Directive 1999/45/EC. In addition, Directive 2009/2/EC with the 31st Adaptation of Directive 67/548/EEC (Hazardous substances) has been taken into account.
Flammable. N - Dangerous for the environment.
R10 Flammable. R40 Limited evidence of a carcinogenic effect. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Contains TETRACHLOROETHYLENE



Flammable
N - Dangerous for the environment

R -phrase(s)

R10 Flammable
R40 Limited evidence of a carcinogenic effect
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S -phrase(s)

S 9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S23 Do not breathe spray.
S33 Take precautionary measures against static discharges.
S51 Use only in well ventilated areas
S61 Avoid release to the environment. Refer to special instructions/safety data sheets
S36/37 Wear suitable protective clothing and gloves.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material
S2 Keep out of reach of children
For Industrial and institutional use only
Please recycle - when empty

2.3. Other hazards

No additional hazards identified
The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2. Mixtures

Component	CAS-No.	EC No.	Weight percent	Classification	EU - GHS/CLP Classification	Notes
TETRACHLOROETHYLENE	127-18-4	204-825-9	50 - 100	Carc.Cat.3 Xn; R40 N; R51/53	Carc. 2 (H351) Aquatic Chronic 2 (H411)	
PROPANE	74-98-6	-	10 - < 25	F+; R12	Press. Gas Flam. Gas 1 (H220)	

For any R phrases mentioned in this section, see the full text in section 16

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures
General advice
Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Get medical attention immediately if symptoms occur.
Eye Contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin Contact
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion
Rinse mouth with water. Do NOT induce vomiting. Get medical attention immediately.
Inhalation
If exposed to high concentrations of the aerosol vapours, move to fresh air. If symptoms persist, call a physician.

4.2. Most important symptoms and effects, both acute and delayed
Sensitisation
No information available.
Eye contact
May cause irritation as itching and redness.
Skin contact
May cause irritation as itching or redness.
Inhalation
Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

4.3. Indication of any immediate medical attention and special treatment needed
Notes to physician
Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media
Suitable Extinguishing Media
Use:, Dry powder, Alcohol-resistant foam, Carbon dioxide (CO2), Water spray
Extinguishing media which must not be used for safety reasons
Water jet.

5.2. Special hazards arising from the substance or mixture
Material can create slippery conditions. Possibility of harm to the aquatic life. Avoid release into the environment. Pressurized container. Keep product and empty container away from heat and sources of ignition.

5.3. Advice for firefighters
Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent bursting.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes, and clothing. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Ventilate the area. Due to the nature of the aerosol packaging, a large spill is unlikely. For a small spill, wear appropriate protective clothing, ventilate the area, absorb with an inert material and transfer all material into a properly labeled container for disposal. Use care as spills may be slippery.

6.2. Environmental precautions
Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up
Methods for Containment
Contain spillage, soak up with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up
For the non volatile residues:. Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections
Refer to sections 7, 8 and 13

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities
For safety reasons in case of fire, cans should be stored separately in closed containments. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

7.3. Specific end use(s)
No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits
For substances

Component	European Union	The United Kingdom	France	Germany	Belgium
TETRACHLOROETHYLENE		STEL: 100 ppm STEL: 689 mg/m^3 TWA: 50 ppm TWA: 345 mg/m^3	TWA: 20 ppm TWA: 138 mg/m^3 STEL: 40 ppm STEL: 275 mg/m^3	AGW: 20ppm AGW: 138mg/m^3 Skin	100 ppm STEL; 695 mg/m^3 STEL 25 ppm TWA; 172 mg/m^3 TWA
PROPANE				AGW: 1000ppm AGW: 1800mg/m^3 Peak: 4000ppm Peak: 7200mg/m^3 TWA: 1000ppm TWA: 1800mg/m^3	1000 ppm TWA (gas, as Aliphatic hydrocarbons [alkanes C1-4])

Component	Austria	Switzerland	Spain	Portugal	Italy
TETRACHLOROETHYLENE	STEL: 200 ppm STEL: 1380 mg/m^3 TWA: 50 ppm TWA: 345 mg/m^3	Skin STEL: 100 ppm STEL: 690 mg/m^3 TWA: 50 ppm TWA: 345 mg/m^3	STEL: 100 ppm STEL: 689 mg/m^3 TWA: 25 ppm TWA: 172 mg/m^3	STEL: 100 ppm TWA: 25 ppm	
PROPANE	STEL: 2000 ppm STEL: 3600 mg/m^3 TWA: 1000 ppm TWA: 1800 mg/m^3	STEL: 4000 ppm STEL: 7200 mg/m^3 TWA: 1000 ppm TWA: 1800 mg/m^3	TVA: 1000 ppm	TWA: 1000 ppm	

Component	Denmark	Finland	Norway	Sweden	Estonia
TETRACHLOROETHYLENE	TWA: 10 ppm TWA: 70 mg/m^3 Skin		TWA: 6 ppm TWA: 40 mg/m^3 Skin	10ppm NGV 70mg/m^3 NGV	
PROPANE	TWA: 1000 ppm TWA: 1800 mg/m^3	TWA: 800 ppm TWA: 1500 mg/m^3 STEL: 1100 ppm STEL: 2000 mg/m^3	TWA: 500 ppm TWA: 900 mg/m^3		

Component	Hungary	Czech	Poland	Slovakia	Ireland
TETRACHLOROETHYLENE	CK-érték: 50 mg/m^3 ÁK-érték: 50 mg/m^3	PEL: 250mg/m^3 NPK-P: 750mg/m^3	NDSCh: 170 mg/m^3 NDS: 85 mg/m^3	hranicny 690mg/m^3 50ppm NPEL 345mg/m^3 NPEL	TWA: 25 ppm TWA: 170 mg/m^3 STEL: 100 ppm STEL: 678 mg/m^3
PROPANE			NDS: 1800 mg/m^3		TWA: 1000 ppm

Respiratory Protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 141 (organic vapours). In case of inadequate ventilation wear respiratory protection.

8.2. Exposure controls
Engineering Measures
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment
Use personal protection equipment as per Directive 89/686/EEC
Hand Protection
Wear suitable protective gloves conforming to EN 374. Type of gloves suggested :. Short term use eg occasional contact or splash protection ;. Nitrile rubber. Polyvinyl alcohol. Long term use eg continuous wear or immersion ;. Fluorinated rubber. For break through times, refer to glove manufacturers recommendations.
Eye Protection
Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.
General hygiene considerations
Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.
Environmental exposure controls
Local authorities should be advised if significant spillages cannot be contained.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties
Information below relates to typical values and does not constitute a specification

Appearance	Colorless	**Autoignition Temperature**	No information available.
Odour	Hydrocarbon	**Boiling Point/Range**	-40 °C
Physical State	Liquid	**Melting Point/Range**	No information available.
pH	Not applicable.	**Flammability Limits in Air %**	No information available.
Flash Point	No information available.	**Evaporation Rate**	No information available.
Specific Gravity	1.29 g/cm3	**Vapour Pressure**	No information available.
Viscosity	Fluid	**Vapor Density**	No information available.
Solubility	Insoluble in water	**Explosive properties**	No information available
		Oxidizing Properties	No information available.

9.2. Other information
No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity
Not considered as highly reactive. See further information below.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use
10.4. Conditions to avoid
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from open flames, hot surfaces, and sources of ignition.
10.5. Incompatible materials
No materials to be specially mentioned
10.6. Hazardous decomposition products
None under normal storage conditions and use

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Product Information
The product itself has not been tested.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
TETRACHLOROETHYLENE	= 2629 mg/kg (Rat)		= 4000 ppm (Rat) 4 h
PROPANE			= 658 mg/L (Rat) 4 h

Sensitisation
No information available.
Skin contact
May cause irritation as itching or redness.
Inhalation
Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.
Eye contact
May cause irritation as itching and redness.
Carcinogenicity
Contains substance(s) with limited evidence of carcinogenic effects.
Mutagenic Effects
There are no known mutagenic substances in this product.
Reproductive Effects

There are no known substances in this product with effects on reproduction

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Product Information

The product itself has not been tested.

Ecotoxicity effects

Contains substance(s) known to be hazardous to the aquatic environment.

Component	Toxicity to Fish	Water Flea	Toxicity to Algae
TETRACHLOROETHYLENE	LC50 12.4 - 14.4 mg/L Pimephales promelas 96 h LC50 8.6 - 13.5 mg/L Pimephales promelas 96 h LC50 11.0 - 15.0 mg/L Lepomis macrochirus 96 h LC50 4.73 - 5.27 mg/L Oncorhynchus mykiss 96 h	EC50 6.1 - 9.0 mg/L 48 h	EC50 > 500 mg/L Pseudokirchneriella subcapitata 96 h

12.2. Persistence and degradability

Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

12.3. Bioaccumulative potential

Bioaccumulation unlikely due to the high volatility of the product

Component information below

Component	log Pow
TETRACHLOROETHYLENE	2.53 - 2.88
PROPANE	2.3

12.4. Mobility in soil

This preparation is volatile and will readily evaporate to the air if released into the environment. The product is insoluble and sinks in water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Do not expose to heat, flames, sparks or other sources of ignition. Do not pierce or burn, even after use. Empty containers should be taken for local recycling, recovery or waste disposal.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable: 16 05 04* gases in pressure containers (including halons) containing dangerous substances 14 06 02* Halogenated solvents and solvent mixes

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDG/IMO

UN-No	UN1950
Proper Shipping Name	Aerosols, Toxic, Flammable
Hazard Class	2.1 + 6.1
EmS	F-D, S-U

ADR / RID

UN-No	UN1950
Hazard Class	2.1 + 6.1
Classification Code	5TF
Limited Quantity	120 ml
Transport Cat. (Tunnel Restriction Code)	1 (D)

IATA/ICAO

UN-No	UN1950
Hazard Class	2.1 + 6.1
ERG Code	10P

14.5. Environmental hazards
The mixture is environmentally hazardous for transport
Product is a marine pollutant according to the criteria set by IMDG/IMO
14.6. Special precautions for user
No special precautions
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Packaged product, not typically transported in IBC's
Additional information
The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
The preparation is classified as dangerous in accordance with Directive 1999/45/EC. In addition, Directive 2009/2/EC with the 31st Adaptation of Directive 67/548/EEC (Hazardous substances) has been taken into account.
Other regulatory information
Classified in accordance with Aerosol Directive 2008/47/EC.
WGK Classification
Highly water-endangering (WGK 3), Classification according VwVwS

15.2. Chemical safety assessment
No safety assessment has been created

SECTION 16. OTHER INFORMATION

Text of R phrases mentioned in Section 3
R12 - Extremely flammable. R40 - Limited evidence of a carcinogenic effect. R38 - Irritating to skin. R43 - May cause sensitisation by skin contact. R67 - Vapours may cause drowsiness and dizziness. R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Prepared By Michael Andrew
Creation Date 27/05/2011
Revision Date 20/11/2013
Revision Summary
Replaces SDS reference EP_0369 R2.
Revised classification
SDS sections updated 2, 3 9 16.
Abbreviations
REACH: Registration Evaluation Authorisation Restriction of Chemicals
EU: European Union
EC: European community
EEC: European Economic Community
UN: United Nations
CAS: Chemical Abstracts Service
PBT: Persistent Bioaccumulative Toxic
vPvB: very Persistent very Bioaccumulative
LC50: Lethal concentration, 50 percent
LD50 : Lethal dose, 50 percent
EC50: Effective concentration, 50 percent
LogPow: LogP octanol/water
VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Adminsitrative order relating to substances hazardous to water - Germany)
WGK: Wassergefahrdungsklasse (Water Hazard Class - Germany).
AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)
ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)
IMDG: International Maritime Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
RID: Reglement international concernant le transport des merchandises dangereuses par chemin der fer (Regulations concerning the International carriage of Dangerous goods by rail)
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
ERG: Emergency Response Guidebook
IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances
GHS: Globally Harmonised System of classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
VOC: Volatile Organic Chemical
w/w: weight for weight
DMSO: Dimethyl sulphoxide
OECD: Organization for Economic Cooperation and Development
STEL: Short Term Exposure Limit
TWA: Time Weighted Average

Further Information
It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations
Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

Disclaimer
The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet