SAFETY DATA SHEET DS 266

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

Print Date 31/01/2014	Creation Date 16/05/2011	Revision Date 03/12/2013
SECTION 1. IDENTIFICATION OF	THE SUBSTANCE / MIXTURE AND OF THE COMPANY	/ UNDERTAKING

1.1. Product identifier	
Product Name	DS 266
Product Code	0382KV2

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

<u>Recommended use</u> Cleaner.

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.

F+ - Extremely flammable. N - Dangerous for the environment.

R12 Extremely flammable. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements





F+ - Extremely flammable

N - Dangerous for the environment

- R -phrase(s)
- R12 Extremely flammable

R66 Repeated exposure may cause skin dryness or cracking

R67 Vapours may cause drowsiness and dizziness

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S -phrase(s)

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe spray.

S51 Use only in well ventilated areas

S61 Avoid release to the environment. Refer to special instructions/safety data sheets

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

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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							
ſ	Component	CAS-No.	EC No.	Weight percent	Classification	EU - GHS/CLP	Notes	
						Classification		
ſ	HYDROCARBONS, C6-C7,	92062-15-2	295-529-9	50 - 100	F; R11	Asp. Tox. 1 (H304)	Р	

ISOALKANES, CYCLICS, < 5% N-HEXANE				Xn; R65 R66 R67 N; R51/53		
PENTANE	109-66-0	203-692-4	25 - < 50	F+; R12 N; R51-53 Xn; R65 R66 R67	(EUH066) Flam. Liq. 2 (H225) STOT SE 3 (H336) Asp. Tox. 1 (H304) 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 **EU Notes**

Note P - The classification as a carcinogen or mutagen does not apply as the substance contains less than 0.1% w/w benzene

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

If symptoms persist, call a physician. Avoid breathing vapours or mists.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician immediately.

<u>Skin Contact</u> Wash off immediately with soap and pley

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. If swallowed, do not induce vomiting - seek medical advice.

Inhalation

If symptoms persist, call a physician. If exposed to high concentrations of the aerosol vapours, move to fresh air.

4.2. Most important symptoms and effects, both acute and delayed

<u>Sensitisation</u> No information available. <u>Eye contact</u> May cause irritation as itching and redness. <u>Skin contact</u> Prolonged contact will dry and defat the skin and may cause irritation such as itching and redness. <u>Inhalation</u> 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

<u>Notes to physician</u> Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

Possibility of harm to the aquatic life. Avoid release into the environment. Pressurized container. Extremely flammable. 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. Prevent further leakage or spillage if safe to do so. See section 8. Remove all sources of ignition. Ventilate the area. Evacuate personnel to safe areas. 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

Prevent further leakage or spillage if safe to do so. Insoluble in water and hence will float on the surface. 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). Remove all sources of ignition.

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 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. Take precautionary measures against static discharges. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store in accordance with local regulations. 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

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level

RCP - TWA (8hrs): 400 mg/m³

Calculated in accordance with the EH40 2005 calculation procedure (reciprocal calculation procedure (RCP)) for mixtures of hydrocarbon solvents For substances

Component	European Union	The United Kingdom	France	Germany	Belgium
PENTANE	TWA: 1000 ppm	STEL: 1800 ppm	TWA: 1000 ppm	AGW: 1000ppm	750 ppm STEL; 2250
	TWA: 3000 mg/m ³	STEL: 5400 mg/m ³ TWA: 600 ppm	TWA: 3000 mg/m ³	AGW: 3000mg/m ³ Peak: 2000ppm	mg/m ³ STEL 600 ppm TWA; 1800
		TWA: 1800 mg/m ³		Peak: 6000mg/m ³ TWA: 1000ppm	mg/m ³ TWA
				TWA: 3000mg/m ³	
PROPANE				AGW: 1000ppm AGW: 1800mg/m ³ Peak: 4000ppm Peak: 7200mg/m ³	1000 ppm TWA (gas, as Aliphatic hydrocarbons [alkanes C1-4])
				TWA: 1000ppm TWA: 1800mg/m ³	

Component	Austria	Switzerland	Spain	Portugal	Italy
PENTANE	STEL: 1200 ppm	STEL: 1200 ppm	TWA: 1000 ppm	TWA: 600 ppm	TWA: 667 ppm
	STEL: 3600 mg/m ³ TWA: 600 ppm	STEL: 3600 mg/m ³ TWA: 600 ppm	TWA: 3000 mg/m ³		TWA: 2000 mg/m ³
	TWA: 1800 mg/m ³	TWA: 1800 mg/m ³			
PROPANE	STEL: 2000 ppm	STEL: 4000 ppm	TVA: 1000 ppm	TWA: 1000 ppm	
	STEL: 3600 mg/m ³	STEL: 7200 mg/m ³			
	TWA: 1000 ppm	TWA: 1000 ppm			
	TWA: 1800 mg/m ³	TWA: 1800 mg/m ³			

Component	Denmark	Finland	Norway	Sweden	Estonia
PENTANE	TWA: 500 ppm	TWA: 500 ppm	TWA: 40 ppm	600ppm NGV	
	TWA: 1500 mg/m ³	TWA: 1500 mg/m ³	TWA: 275 mg/m ³	1800mg/m ³ NGV	
		STEL: 630 ppm			
		STEL: 1900 mg/m ³			
PROPANE	TWA: 1000 ppm	TWA: 800 ppm	TWA: 500 ppm		
	TWA: 1800 mg/m ³	TWA: 1500 mg/m ³	TWA: 900 mg/m ³		
		STEL: 1100 ppm			
1		STEL: 2000 mg/m ³			

Component	Hungary	Czech	Poland	Slovakia	Ireland
PENTANE	ÁK-érték: 2950 mg/m ³	PEL: 2000mg/m ³ NPK-P: 4500mg/m ³	NDS: 3000 mg/m ³	1000ppm NPEL 3000mg/m ³ NPEL	TWA: 1000 ppm TWA: 3000 mg/m ³ STEL: 750 ppm STEL: 2250 ma/m ³
PROPANE			NDS: 1800 mg/m ³		TWA: 1000 ppm

Respiratory Protection

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

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 :. Solvent-resistant gloves (butyl-rubber). Fluorinated rubber. Polyvinyl alcohol. 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 Odour Physical State pH Flash Point Specific Gravity Viscosity Solubility Colorless Hydrocarbon Liquid Not applicable. <-50 °C 0.68 g/cm3 Fluid Insoluble in water Autoignition Temperature Boiling Point/Range Melting Point/Range Flammability Limits in Air % Evaporation Rate Vapour Pressure Vapor Density Explosive properties Oxidizing Properties No information available. -5 °C No information available. No information available. No information available. No information available. No information available 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

Heat, flames, and sparks. 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

Strong oxidising agents.

10.6. Hazardous decomposition products

None under normal storage conditions and use When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
HYDROCARBONS, C6-C7,	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 13.9 mg/L (Rat) 4 h
ISOALKANES, CYCLICS, < 5% N-			
HEXANE			

PENTANE	= 3000 mg/kg (Rabbit)	= 364 g/m ³ (Rat) 4 h
PROPANE		= 658 mg/L(Rat)4 h

Sensitisation

No information available.

Skin contact

Prolonged contact will dry and defat the skin and may cause irritation such as itching and 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

There are no known carcinogenic substances in this product.

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

<u>Product Information</u> 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
HYDROCARBONS, C6-C7,	LC50 = 84.6 mg/L Pimephales promelas	EC50= 3.78 mg/L 48 h	
ISOALKANES, CYCLICS, < 5% N-	96 h		
HEXANE			
PENTANE	LC50 = 9.87 mg/L Oncorhynchus mykiss	EC50= 9.74 mg/L 48 h	
	96 h	-	
	LC50 = 11.59 mg/L Pimephales promelas		
	96 h		
	LC50 = 9.99 mg/L Lepomis macrochirus		
	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

Not likely to bioaccumulate

Component	log Pow
HYDROCARBONS, C6-C7, ISOALKANES, CYCLICS, < 5% N-HEXANE	3.3 - 4.1
PENTANE	3.39
PROPANE	2.3

12.4. Mobility in soil

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

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

Empty containers should be taken for local recycling, recovery or waste disposal. Recycle according to official regulations. For empty containers -Do not weld, solder, braze, grind etc.. Do not expose to heat, flames, sparks or other sources of ignition. Do not pierce or burn, even after use. <u>EWC waste disposal No</u>

The following EWC/ AVV waste codes may be applicable: 16 05 04* gases in pressure containers (including halons) containing dangerous substances

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, Flammable
Hazard Class	2.1
EmS	F-D, S-U
ADR / RID	
UN-No	UN1950
Hazard Class	2.1
Classification Code	5F
Limited Quantity	1 L
Transport Cat. (Tunnel Restriction	2 (D)
Code)	
IATA/ICAO	
UN-No	UN1950
Hazard Class	2.1
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.

WGK Classification

Water-endangering (WGK 2), 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

R11 - Highly flammable. R12 - Extremely flammable. R65 - Harmful: may cause lung damage if swallowed. R66 - Repeated exposure may cause skin dryness or cracking. 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** Austen Pimm

Creation Date 16/05/2011 Revision Date 03/12/2013 **Revision Summary** Replaces SDS reference 103820V1, EP_0382K V1 SDS sections updated 3 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