

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

**Product code** : KU200SSG10  
**Product name** : SILICONE SPRAY  
**Manufacturer / Distributor** : Flint Group,  
 Print Media Europe,  
 Varn House,  
 Northbank Industrial Park,  
 Irlam,  
 Greater Manchester,  
 M44 5BL  
 England.  
**e-mail address of person responsible for this SDS** : compliance.centre@flintgrp.com  
**Telephone no.** : +44 (0) 161 775 5412  
**Product use** : Printing ink or Additive  
**History**  
**Date of printing** : 22.06.2011.  
**Date of issue/ Date of revision** : 06.10.2010.  
**Date of previous issue** : No previous validation.  
**Version** : 2

**2. HAZARDS IDENTIFICATION****Classification and labeling according to Regulation (EC) 1907/2006 (REACH)**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : F+; R12  
 Xi; R38  
 R67  
 N; R51/53  
**Physical/chemical hazards** : Extremely flammable.  
**Human health hazards** : Irritating to skin. Vapors may cause drowsiness and dizziness.  
**Environmental hazards** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**Additional warning phrases and Additional information** : Pressurized 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. Keep away from sources of ignition - No smoking. Keep out of the reach of children.  
**Hazard symbol or symbols** :



Extremely flammable, Irritant, Dangerous for the environment

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**SILICONE SPRAY****2. HAZARDS IDENTIFICATION**

- Risk phrases** : R12- Extremely flammable.  
R38- Irritating to skin.  
R67- Vapors may cause drowsiness and dizziness.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases** : S16- Keep away from sources of ignition - No smoking.  
S23- Do not breathe gas, vapor or spray.  
S36/37- Wear suitable protective clothing and gloves.  
S51- Use only in well-ventilated areas.
- Contains** :

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	%	REACH Registration number	CAS number	EC number	Classification
naphtha (petroleum), hydrotreated light	35-50		64742-49-0	265-151-9	F; R11 Xn; R22, R65 Xi; R38 R67 N; R51/53 [1]
butane	20-25		106-97-8		F+; R12 [2]
propane	20-25		74-98-6		F+; R12 [2]
isobutane	5-10		75-28-5		F+; R12 [2]
methylcyclohexane	5-10		108-87-2	203-624-3	F; R11 Xn; R65 Xi; R38 R67 N; R51/53 [1] [2]
cyclopentane	2.5-25		287-92-3		F; R11 R52/53 [1] [2]
n-hexane	0.5-1		110-54-3	203-777-6	F; R11 Repr. Cat. 3; R62 Xn; R48/20, R65 Xi; R38 R67 N; R51/53 [1] [2]
pentane	0.25-2.5		109-66-0		F+; R12 Xn; R65 R66, R67 N; R51/53 [1] [2]

See section 16 for the full text of the R-phrases declared above

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

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**SILICONE SPRAY****3. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous ingredients / Classification according to Regulation (EC) 1272/2008 (CLP)**

Chemical name	CAS number	Classification
naphtha (petroleum), hydrotreated light	64742-49-0	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY: ORAL - Category 4 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
butane	106-97-8	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas
propane	74-98-6	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas
Isobutane	75-28-5	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas
methylcyclohexane	108-87-2	FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
cyclopentane	287-92-3	FLAMMABLE LIQUIDS - Category 2 AQUATIC TOXICITY (CHRONIC) - Category 3
n-hexane	110-54-3	FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 TOXIC TO REPRODUCTION [Fertility] - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
pentane	109-66-0	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2

**4. FIRST AID MEASURES****First aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Give nothing by mouth. Do NOT induce vomiting.

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**5. FIRE-FIGHTING MEASURES**

- Extinguishing media** : Recommended:, alcohol-resistant foam, CO<sub>2</sub>, powders, water spray
- Extinguishing media not to be used** : Do not use water jet.
- Recommendations** : Fire will produce dense black smoke., Exposure to decomposition products may cause a health hazard., Appropriate breathing apparatus may be required., Cool closed containers exposed to fire with water., Do not release runoff from fire to drains or watercourses.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or spray. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
- Methods for cleaning up** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent. Avoid using solvents.

**Note: see section 8 for personal protective equipment and section 13 for waste disposal.**

**7. HANDLING AND STORAGE**

- Handling** : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.
- Storage** : Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. Keep away from: oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not empty into drains.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Ingredient name	Occupational exposure limits
butane	<p><b>EH40-WEL (United Kingdom (UK)).</b> STEL: 1780 mg/m<sup>3</sup> 10 minute(s).</p> <p><b>EH40-MEL (United Kingdom (UK)).</b> PEAK: 1780 mg/m<sup>3</sup></p> <p><b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> STEL: 1810 mg/m<sup>3</sup> 15 minute(s). STEL: 750 ppm 15 minute(s). TWA: 1450 mg/m<sup>3</sup> 8 hour(s). TWA: 600 ppm 8 hour(s).</p>

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

n-hexane	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> TWA: 72 mg/m <sup>3</sup> 8 hour(s). TWA: 20 ppm 8 hour(s).
pentane	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> TWA: 1800 mg/m <sup>3</sup> 8 hour(s). TWA: 600 ppm 8 hour(s).

**Exposure controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

**Occupational exposure controls**

- Respiratory system** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.
- Skin and body** : Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
- Hands** : The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Gloves** : None available.
- Eyes** : Use safety eyewear designed to protect against splash of liquids.
- Environmental exposure controls** : Do not allow to enter drains or watercourses.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**General information**

**Appearance**

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Hydrocarbon.
- Odor threshold** : Not available.

**Important health, safety and environmental information**

- pH** : Not available.
- Boiling point** : >= 35 °C
- Melting point** : Not available.
- Flash point** : Closed cup: <-39°C [theoretical]
- Explosive properties** : Not available.
- Lower explosion limit** : 1 %Vol
- Oxidizing properties** : Not available.
- Vapor pressure** : <= 999 hPa
- Density** : ~ 1 g/cm<sup>3</sup>
- Solubility** : Not available.
- Octanol/water partition coefficient** : Not available.
- Viscosity** : Kinematic (20°C (68°F)): 0.073 cm<sup>2</sup>/s (7.3 cSt)
- Vapor density** : Not available.
- Evaporation rate** : Not available.
- Decomposition temperature** : Not available.
- Auto-ignition temperature** : ca 250 °C

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**10. STABILITY AND REACTIVITY**

- Conditions to avoid** : Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.
- Materials to avoid** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
- Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

**11. TOXICOLOGICAL INFORMATION**

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 3 and 15 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Ingestion may cause gastrointestinal irritation and diarrhea. If splashed in the eyes, the liquid may cause irritation and reversible damage.

**Toxicokinetics**

- Absorption** : Not available.
- Distribution** : Contains material which may cause damage to the following organs: the nervous system, upper respiratory tract, skin, eyes, central nervous system (CNS).
- Metabolism** : Not available.
- Elimination** : Not available.

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
butane	LC50 Inhalation Vapor	Rat	658 g/m <sup>3</sup>	4 hours
isobutane	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
methylcyclohexane	LD50 Oral	Rat	>3200 mg/kg	-
cyclopentane	LD50 Oral	Rat	11400 mg/kg	-
n-hexane	LC50 Inhalation Gas. LD50 Oral	Rat Rat	48000 ppm 25 g/kg	4 hours -
pentane	LC50 Inhalation Vapor LD50 Oral	Rat Rat	364 g/m <sup>3</sup> >2000 mg/kg	4 hours -

- Chronic toxicity** : Not available.
- Carcinogenicity** : Not available.
- Mutagenicity** : Not available.
- Teratogenicity** : Not available.
- Reproductive toxicity** : Not available.

Product name	List name	Name on list	Classification	Notes
butane	UK Occupational Exposure Limits EH40 - WEL	butane	Carc.	

**SILICONE SPRAY****12. ECOLOGICAL INFORMATION**

There is no data available on the preparation itself.  
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 3 and 15 for details.

**Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure
methylcyclohexane	Acute LC50 5800 ug/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 9.2 cm - 8.5 g	96 hours
n-hexane	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours

**Ecological information****Persistence/degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Not available.			

**Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Not available.			

**PBT** : Not applicable.

**vPvB** : Not applicable.

**13. DISPOSAL CONSIDERATIONS**

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**European waste catalogue (EWC)** : Not available.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**14. TRANSPORT INFORMATION****International transport regulations**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.



UN number	Proper shipping name	Classes	PG*	Label

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## 14. TRANSPORT INFORMATION

UN1950	AEROSOLS	2	-	 
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PG\* : Packing group

<b>Additional information ADR ADN/ADNR</b>	:	<b>Classification code</b>	5F	
		<b>Special provisions</b>	190 327 625	
		<b>Hazard identification number</b>	Not available.	
		<b>Limited quantity</b>	LQ2	
<b>Additional information IMDG</b>	:	<b>Emergency schedules (EmS)</b>	F-D, S-U	
		<b>Marine pollutant</b>	Yes.	
		<b>Marine pollutant substances</b>	Naphtha (petroleum), hydrotreated light, methylcyclohexane	
		<b>Limited quantity</b>	not available	
<b>Additional information IATA</b>	:		<b>Max. Qty</b>	<b>Packaging instruction</b>
		<b>Passenger and Cargo Aircraft</b>	75 L	203
		<b>Cargo Aircraft Only</b>	150 L	203
		<b>Limited quantity</b>	30 L	Y203

## 15. REGULATORY INFORMATION

<b>Chemical Safety Assessment</b>	:	This product contains substances for which Chemical Safety Assessments are still required.
<b>EU regulations</b>	:	The product is classified as dangerous according to Directive 1999/45/EC and its amendments. See sections 2 and 3 for details.
<b>VOC content</b>	:	~ 10.9 %      ~ 109 g/L
<b>Europe inventory</b>	:	All components are listed or exempted.
<b>Restrictions on the Marketing and Use Directive</b>	:	Restricted to professional users.
<b>Industrial use</b>	:	The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

## 16. OTHER INFORMATION

<b>CEPE MSDS Code</b>	:	1
<b>Full text of R-phrases referred to in sections 2 and 3 - Europe</b>	:	R12- Extremely flammable. R11- Highly flammable. R62- Possible risk of impaired fertility. R22- Harmful if swallowed. R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R66- Repeated exposure may cause skin dryness or cracking.

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## 16. OTHER INFORMATION

R67- Vapors may cause drowsiness and dizziness.

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

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

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Version : 2

Indicates information that has changed from previously issued version.

### Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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