

Verona, 8<sup>th</sup> November 2012

## MATERIAL SAFETY DATA SHEET (revision nr.2 dtd 8<sup>th</sup> November 2012)

### 1) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING.

#### 1.1. Product identification.

**Code:** C70-08112012

**Product name:** C-70 SILICONE OIL ml.200 (Aerosol)

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

Lubricant.

#### Details of the supplier of the safety data sheet:

DUE-CI ELECTRONIC s.n.c.  
Strada del Casalino 11  
37127 Verona (ITALY)  
Tel.(+39) 045 91 62 51 - Fax (+39) 045 834 32 94  
e-mail: [info@ducielectronic.it](mailto:info@ducielectronic.it)

**E-mail address of the competent person  
responsible for the Safety Data Sheet:** [sds@ducielectronic.it](mailto:sds@ducielectronic.it)

**1.4. Emergency telephone number:** (+39) 045 916251 - only available during office hours

### 2) HAZARDS IDENTIFICATION

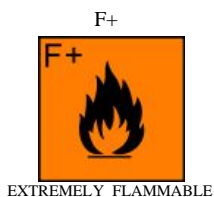
#### 2.1. Classification of the substance or mixture.

According to Directives 1999/45/EC and 67/548/EC and Regulation EC 1272/2008 (CLP) and subsequent amendments and updates the content is classified as dangerous. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### 2.2. Label elements.

Hazard labelling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.

**Danger symbols:** F+, Xi, N



Risk-phrases:

R12	Extremely flammable (directive 2008/47/EC)
R38	Irritant to skin
R50/53	Very toxic to aquatic organism, may cause long term adverse effects in the aquatic environment
R67	Vapours may cause drowsiness and dizziness

Safety phrases:

S2	Keep out of the reach of children
S16	Keep away from sources of ignition. No smoking
S23	Do not breathe spray
S35	This material and its container must be disposed of in a safe way.
S51	Use only in well-ventilated areas

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.

The risk phrase for swallowing (R65) it's not valid for aerosols (EU-Directive 67/548 Annex VI 9.4)

The container has been filled in accordance with Directive 75/324/EEC dated 20/05/1975 and subsequent amendments (Directive 2008/47/EC).

### 2.3. Other hazards.

The container is under pressure. Above 50° C compromises its ability to seal and can explode.

## 3) COMPOSITION/INFORMATION ON INGREDIENTS.

### 3.1. Substance:

Information not relevant.

### 3.2. Mixtures:

CONTAINS:

Ingredients	w/w %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
<b>HEPTANE</b> CAS. 142-82-5 CE. 205-563-8 INDEX. 601-008-00-2 Reg. No. 01-2119457603-38-XXXX	75-100	F R11,Xn R65,R67,Xi R38, N R50/53, Note C	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Acute 1 H400, Aquatic Chronic 1 H410, Nota C
<b>1,2-DICHLOROPROPANE</b> CAS. 78-87-5 CE.201-152-2 INDEX 602-020-00-0 Nr. Reg 01-2119557878-16-XXXX	5-10	F R11, Xn R20/22	Flam. Liq. 2 H225, Acute Tox. 4 H332, Acute Tox. 4 H302
<b>SILICONE OIL</b>	10-30	---	---
<b>CARBON DIOXIDE</b> CAS 000124-38-9 CE. 204-696-9 Indicated in the Annex IV/V of REACH; exempt from registration; Art.2 (7) (a) of Regulation REACH n.1907/2006.	1-5	---	Liq. Gas (H280)

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F)

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4) **FIRST AID MEASURES.**

**4.1. Descrizione delle misure di primo soccorso.**

**4.1. Description of first aid measures.**

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.

INHALATION: Remove to open air. If breathing is irregular, seek medical advice.

INGESTION: Unlikely occurs. In case obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

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

For symptoms and effects caused by the contained substances see chap. 11.

**4.3. Indication of any immediate medical attention and special treatment needed.**

Follow doctor's orders.

5) **FIREFIGHTING MEASURES.**

**5.1. Extinguishing media.**

**SUITABLE EXTINGUISHING MEDIA**

The extinction equipment should contain carbon dioxide, foam or chemical powders. For product leaks and spills that have not caught fire, nebulised water can be used to disperse flammable fumes and protect the individuals taking part in stemming the leak.

**EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture.**

**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

**5.3. Advice for firefighters.**

**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with ties around arms, legs and waist) work gloves (fireproof, cut proof and dielectric), self-respirator (self-protector).

6) **ACCIDENTAL RELEASE MEASURES.**

**6.1. Personal precautions, protective equipment and emergency procedures.**

Eliminate sources of ignition (cigarettes, flames, sparks, etc.) from the air in which the leak occurred. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is

no hazard. Do not handle damaged containers or leaked product before donning appropriate protective gear. Send away individuals who are not suitably equipped. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, refer to the other sections of this sheet.

## 6.2. Environmental precautions.

The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

## 6.3. Methods and material for containment and cleaning up.

For liquid products, suck into a suitable container (made of material not incompatible with the product) and soak up any leaked product with absorbent inert material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc). Collect the majority of the remaining material and deposit in containers for disposal. For solid products, use spark proof mechanical tools to collect the leaked product and place in plastic containers. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

## 6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

# 7) HANDLING AND STORAGE.

## 7.1 Precautions for safe handling.

Do not slam the container. Do not pierce or burn, even after use. Do not spray on naked flame or incandescent material. Avoid direct inhalation and spray in eyes. Avoid improper or excessive use of the product. Avoid contact with eyes and skin. Vapours may ignite with explosion: ensure adequate ventilation and keep far away from sources of heat, sparks and bright flames during use. Do not smoke, use matches or lighters.

## 7.2. Conditions for safe storage, including any incompatibilities.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50° C. Keep out of reach of children.

## 7.3. Specific end uses.

Information not available.

# 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control parametrs.

Ingredient	Kind	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
HEPTANE	TLV-ACGIH			400		500	skin
	OEL	EU	2085				skin
	OEL	IRL		400			skin
	WEL	UK		500			skin
1,2-DICHLOROPROPANE	TLV-ACGIH			10			
	OEL	IRL		75		110	
CARBON DIOXIDE	TLV-ACGIH			5000			

## 8.2. Exposure controls.

Recomended a good ventilation of the workspace.

HAND PROTECTION: Provide a hand protection appropriate to the conditions of use.

EYE PROTECTION: Although eye contact is not expected under normal conditions of use reasonably foreseeable, it would be appropriate to use proper eye protection when handling this materia.

SKIN PROTECTION: Provide a skin protection appropriate to the conditions of use.

RESPIRATORY PROTECTION: We do not recommend the use of special equipment for respiratory protection under normal conditions of use with adequate ventilation.

**Do not breathe or inhale mist spray.**

9) PHYSICAL AND CHEMICAL PROPERTIES.

**9.1. Information on basic physical and chemical properties.**

Appearance::	Aerosol containing liquid gas and solvents
Colour:	not coloured
Odour:	ethereal
Boiling point:	78-98° C
Flash point:	< 21°C
Vapour density (air=1):	> 1
Liquid density:	0,76 g/cc at 20°C
Solubility in water[mg/l]:	not soluble

**9.2. Other information.**

None.

10) STABILITY AND REACTIVITY.

**10.1. Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability.**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions.**

Stable under normal temperature and pressure.

**10.4. Conditions to avoid.**

Do not expose the aerosol dispenser to temperatures above 50 °C.

**10.5. Incompatible materials.**

Alkali metals. Alkaline earth metal. Metal powder.

**10.6. Hazardous decomposition products.**

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

11) TOXICOLOGICAL INFORMATION.

**11.1. Information on toxicological effects.**

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory tract. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness. The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema. This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

12) ECOLOGICAL INFORMATION.

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it may even have negative effects on aquatic environment.

**12.1. Toxicity.**

HEPTANE

LC50 (96h): 375 mg/l/96h Tilapia mossambica

IC50 (72h): 1,5 mg/l/72h Algae

EC50 (48h): 82,5 mg/l/48h Daphnia magna

**12.2. Persistence and degradability.**

The paraffinic hydrocarbons fraction may be considered biodegradable in water and in air. They distribute mostly in the air. The small non biodegradable amount which spreads into water tends to accumulate in fish.

**12.3. Bioaccumulative potential.**

HEPTANE: moderate bioaccumulation potential (log Ko/w>3).

**12.4. Mobility in soil.**

HEPTANE: slightly mobile in soil.

**12.5. Results of PBT and vPvB assessment.**

Information not available.

**12.6. Other adverse effects.**

Information not available.

13) DISPOSAL CONSIDERATIONS.

**13.1. Waste treatment methods.**

Do not empty into drains. The container must be emptied completely. Disposal should be in place authorized under the relevant national or regional.

14) TRANSPORT INFORMATION.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road/Railway (ADR/RID), by Sea (IMO) and by AIR (IATA) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

**Road and rail transport:**

Class ADR/RID:	2
UN:	1950
PG:	NA
Classification code:	5F
Label:	2.1
Limited Quantity:	LQ2
Tunnel restriction code :	(D)
Proper Shipping Name:	AEROSOL

**Carriage by sea (shipping):**

Class IMO:	2.1
UN:	1950
PG:	NA
Label:	2.1
EmS:	F-D, S-U
Marine Pollutant:	YES
Proper Shipping Name:	AEROSOLS

**Carriage by air:**

Class IATA:	2.1
UN:	1950
Label:	RFG
PG:	NA
Packaging inst.:	LQ 203, PAX 203, CAO 203
Proper Shipping Name:	AEROSOLS FLAMMABLE

15) REGULATORY INFORMATION.

**15.1. Safety, health and environmental regulation/legislation specific for the substance/mixture.**  
Ensuring compliance with all relevant national and regional regulations.

**Seveso regulation 96/82/EC:** covered by Annex I of Directive Part 2

**Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006:** Point 3-40

**Substances in Candidate List (art.59 REACH):** none

**Substances subject to authorisation (Annex XIV REACH):** none

**Healthcare controls.**

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

The container has been filled in accordance with Directive 75/324/EEC dated 20/05/1975 and subsequent amendments (Directive 2008/47/EC).

**15.2. Chemical safety assessment.**

No chemical safety assessment has been processed for the mixture and the substances it contains.

16) REGULATORY INFORMATION.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

H280	Contains gas under pressure; may explode if heated.
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R11	HIGHLY FLAMMABLE.
R20/22	HARMFUL BY INHALATION AND IF SWALLOWED.
R38	IRRITATING TO SKIN.
R50/53	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R65	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

#### GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
7. Regulation (EC) 453/2010 of the European Parliament
8. Directive 75/324/EC dated 20/05/1975 and following amendments
9. Directive 2008/47/EC
10. NIOSH - Registry of Toxic Effects of Chemical Substances
11. The Merck Index. Ed. 10
12. Handling Chemical Safety
13. INRS - Fiche Toxicologique
14. Patty - Industrial Hygiene and Toxicology
15. N.I. Sax - Dangerous properties of Industrial Materials-7 Ed., 1989

This Safety Data Sheet has been compiled in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national legislation.

NOTE FOR USERS: The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes have been made to the following sections:

1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16

THIS SHEET REPLACES ANY PREVIOUS EDITION.