

Verona, 12th April 2012

MATERIAL SAFETY DATA SHEET (revision nr.2 of 12th Aprile 2012)

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

1.1. Product identification.

Code: S35 152a 2012

Product name: S-35 ANTISTATIC CLEANING FOAM ml.200 (Aerosol)

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

Antistatic cleaning foam.

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

E-mail address of the competent person responsible for the Safety Data Sheet: 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 not classified as dangerous.

2.2. Label elements.

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

Danger symbols: none

Risk-phrases: none

Safety phrases: S2 Keep out of the reach of children
 S16 Keep away from sources of ignition. No smoking
 S23 Do not breathe spray
 S24/25 Avoid contact with skin and eyes

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 product contains 8% wt of flammable components.

Regulation nr.648/2004/CE: contains non ionic surfactants < 5%

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/CEE	Classification 1272/2008 (CLP)
2-PROPANOL CAS. 67-63-0 CE. 200-661-7 INDEX. 603-117-00-0 Nr. Reg. 01-2119457558-25-XXXX	1-5	R67, F R-11, Xi R36	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
BUTANOL CAS. 201-158-5 CE. 78-92-2 INDEX. 603-127-00-5 Nr. Reg. 01-2119475146-36-XXXX	0-1	R10, R67, Xi R36/37	Flam. Liq. 3 H226, Eye Irrit. 2 H319, STOT SE 3 H335, STOT SE 3 H336
SODIUM BENZOATE CAS. 208-534-8 CE. 532-32-1 INDEX. Nr. Reg.	0-1	---	---
N,N-dimethyldodecylamine N-oxide CAS. 216-700-6 CE. 1643-20-5 INDEX. Nr. Reg.	< 0.25	N R50, Xi R41, Xi R38	Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Acute 1, H400
1,1,1,2-TETRAFLUOROETHANE* CAS. 811-97-2 CE. 212-377-0	20-30	---	Liq. Gas (H280)
1,1-DIFLUOROETHANE CAS. 75-37-6 CE. 200-866-1 Nr. Reg. 05-2114321261-67-0000	1-5	F+ R12	Flam.Gas 1 (H220), 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)

*Present in Annex IV/V of REACH; exempt from the registration. Registration deadline is not exceeded.

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.

SKIN: Wash immediately with plenty of water. If irritation persists.

INHALATION: Remove to open air.

INGESTION: Unlikely occurs. In case obtain 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.

EYES: could be irritant.

SKIN: could be irritant.

INHALATION: health effects not probable.

INGESTION: gastrointestinal disorders.

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	Coun try	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	
PROPAN-2-OL	TLV-ACGIH		0	200	0	400	skin
	OEL	IRL		400		500	skin
	WEL	UK		400		500	skin

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:	---
Flash point:	non flammable
Vapour density (air=1):	> 1
Liquid density:	1,01 at 20°C
Solubility in water[mg/l]:	soluble

9.2. Other information.

Not available.

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.

Unlikely adverse health effects by inhalation. Prolonged contact with skin and eyes may cause irritation.

12) **ECOLOGICAL INFORMATION.**

12.1. Toxicity.

Not classified.

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Soluble in water.

12.5. Results of PBT and vPvB assessment.

Does not contains substance PBT and vPvB.

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:	5A
Label:	2.2
Limited Quantity:	LQ2
Tunnel restriction code :	(E)
Proper Shipping Name:	AEROSOL

Carriage by sea (shipping):

Class IMO:	2.2
UN:	1950
PG:	NA
Label:	2.2
EmS:	F-D, S-U
Marine Pollutant:	NO
Proper Shipping Name:	AEROSOLS

Carriage by air:

Class IATA:	2.2
UN:	1950
Label:	RNG
PG:	NA
Packaging inst.:	LQ 203, PAX 203, CAO 203
Proper Shipping Name:	AEROSOLS NON 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: not pertinent.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006: none

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

Substances subject to authorisation (Annex XIV REACH): none

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:

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour
H280	Contains gas under pressure; may explode if heated.
H318	Causes serious eye damage
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life

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

R10	FLAMMABLE
R11	HIGHLY FLAMMABLE
R12	EXTREMELY FLAMMABLE
R36	IRRITATING TO EYES
R36/37	IRRITATING TO EYES ANDI RESPIRATORY SYSTEM
R38	IRRITATING TO SKIN
R41	RISK OF SERIOUS DAMAGE TO EYES
R50	HIGLY TOXIC TO AQUATIC ORGANISMS
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. Regulation 648/2004/EC
9. Directive 75/324/EC dated 20/05/1975 and following amendments
10. Directive 2008/47/EC
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. The Merck Index. Ed. 10
13. Handling Chemical Safety
14. INRS - Fiche Toxicologique
15. Patty - Industrial Hygiene and Toxicology
16. 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:

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

THIS SHEET REPLACES ANY PREVIOUS EDITION.