Safety Data Sheet according to Regulation (EC) No1907/2006

SDS No. : 153925
V003.3

SPOT-ON SOLDER RESIST

Revision: 06.05.2014
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
SPOT-ON SOLDER RESIST

Contains:
Rubber, natural
Zinc diethyldithiocarbamate

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

1.3. Details of the supplier of the safety data sheet
Henkel Limited
2 Bishop Square Business Park
AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933
Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number
24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

Classification (DPD):
Sensitizing
R43 May cause sensitisation by skin contact.
Dangerous for the environment
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Warning
Hazard statement:	H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement: Prevention	P273 Avoid release to the environment. P280 Wear protective gloves.
Precautionary statement: Response	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Label elements (DPD):

Xi - Irritant

Risk phrases:

R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S24 Avoid contact with skin.
S37 Wear suitable gloves.

Contains:

Rubber, natural

SECTION 3: Composition/information on ingredients

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Rubber, natural 9006-04-6	232-689-0	30- 40 %	Skin sensitizer 1; Dermal H317
Zinc diethyldithiocarbamate 14324-55-1	238-270-9	>= 0,25- < 1 %	Acute toxicity 4; Oral H302 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315 Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 1 H410 Acute hazards to the aquatic environment 1 H400
Ammonia 7664-41-7	231-635-3	0,1- 1 %	Gases under pressure Skin corrosion 1B H314 Flammable gases 2 H221 Acute toxicity 3; Inhalation H331 Acute hazards to the aquatic environment 1 H400

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Rubber, natural 9006-04-6	232-689-0	30 - 40 %	Xi - Irritant; R43
Zinc diethyldithiocarbamate 14324-55-1	238-270-9	>= 0,25 - < 1 %	Xn - Harmful; R22 R43 Xi - Irritant; R36/37/38 N - Dangerous for the environment; R50/53
Ammonia 7664-41-7	231-635-3	0,1 - 1 %	R10 T - Toxic; R23 C - Corrosive; R34 N - Dangerous for the environment; R50

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:
Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
SKIN: Rash, Urticaria.

Prolonged or repeated contact may cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
See section: Description of first aid measures

SECTION 5: Firefighting measures

Combustion behaviour:
The product itself does not burn. Any fire extinguishing action should be appropriate to the surroundings.

5.1. Extinguishing media
Suitable extinguishing media:
All common extinguishing agents are suitable.

5.2. Special hazards arising from the substance or mixture
Toxic and irritating vapors.

5.3. Advice for firefighters
Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid contact with skin and eyes.

6.2. Environmental precautions
Do not let product enter drains.

6.3. Methods and material for containment and cleaning up
Scrape up as much material as possible.
Store in a closed container until ready for disposal.

6.4. Reference to other sections
See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Use only in well-ventilated areas.
Avoid skin and eye contact.
See advice in section 8

Hygiene measures:
Good industrial hygiene practices should be observed.
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities
Ensure good ventilation/extraction.
Store in a cool place in closed original container.

7.3. Specific end use(s)
Loddemaske

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient	ppm	mg/m³	Type	Category	Remarks
TITANIUM DIOXIDE, TOTAL INHALABLE 13463-67-7		10	Time Weighted Average (TWA):		EH40 WEL
TITANIUM DIOXIDE, RESPIRABLE 13463-67-7		4	Time Weighted Average (TWA):		EH40 WEL
AMMONIA, ANHYDROUS 7664-41-7	35	25	Short Term Exposure Limit (STEL):		EH40 WEL
AMMONIA, ANHYDROUS 7664-41-7	25	18	Time Weighted Average (TWA):		EH40 WEL
AMMONIA, ANHYDROUS 7664-41-7	20	14	Time Weighted Average (TWA):	Indicative	ECTLV
AMMONIA, ANHYDROUS 7664-41-7	50	36	Short Term Exposure Limit (STEL):	Indicative	ECTLV

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

Respiratory protection:
Ensure adequate ventilation.
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A

Hand protection:
Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste white
Odor	ammoniacal

Odour threshold	No data available / Not applicable
pH (20 °C (68 °F))	7,00 - 9,00
Initial boiling point	100 °C (212 °F)
Flash point	Not applicable
Decomposition temperature	No data available / Not applicable
Vapour pressure	Not determined
Density (25,0 °C (77 °F))	0,910 - 0,990 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Miscible
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	Not determined
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
Reaction with strong acids.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
No decomposition if stored and applied as directed.

10.5. Incompatible materials
None if used properly.

10.6. Hazardous decomposition products
Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:
May cause nausea, vomiting and abdominal pain.

Inhalative toxicity:
May cause irritation to respiratory system and mucous membranes if used in confined spaces.

Dermal toxicity:
This product is considered to have low dermal toxicity.

Skin irritation:
Prolonged or repeated contact may cause skin irritation.

Eye irritation:
Vapours may be irritating to eyes causing lachrymatory effect.

Sensitizing:
May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Rubber, natural 9006-04-6	LD50	2.043 - 2.210 mg/kg	oral		rat	
Zinc diethyldithiocarbamate 14324-55-1	Acute toxicity estimate (ATE)	1.960 mg/kg	oral			

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ammonia 7664-41-7	corrosive	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Ammonia 7664-41-7	negative with metabolic activation	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
Ammonia 7664-41-7	not carcinogenic	rat	male/female	Carcinogenicity study: 104 ... Daily - ad libitum in diet	oral: feed	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Ammonia 7664-41-7	NOAEL=250 mg/kg	oral: gavage	daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Ecotoxicity:

Harmful to aquatic life with long lasting effects.
Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Rubber, natural 9006-04-6	LC50	> 10.000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ammonia 7664-41-7	LC50	0,16 - 1,1 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Bioaccumulative potential:

Octanol/Water distribution coefficient: Not determined

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of as hazardous waste in compliance with local and national regulations.
Incineration under controlled conditions is recommended.

Disposal of uncleaned packages:

Dispose of as unused product.

Waste code

16 10 01 - aqueous liquid wastes containing dangerous substances

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.4. Packaging group

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (1999/13/EC)	< 1 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Great Britain):

Remarks	The Health & Safety at Work Act 1974. The Control of Substances Hazardous to Health Regulations. L5:General Approved Code of Practice to the COSHH Regulations. HS(G)97:A Step by Step Guide to the COSHH Regulations. HS(G)193:COSHH essentials: Easy steps to control chemicals.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text
of all abbreviations indicated by codes in this safety data sheet are as follows:

R10 Flammable.
R22 Harmful if swallowed.
R23 Toxic by inhalation.
R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitisation by skin contact.
R50 Very toxic to aquatic organisms.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
H221 Flammable gas.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.