RS CLP/GHS revision date: 01/01/20

CP2907 v 1.1 RS 180-5298



RS-GCS-NSP30

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 4/8/2016 Revision date: 3/5/2019 Version: 1.1

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

1.1. Product identifier

UFI NUMBER CQND-X0R4-300J-17P9 Product form : Mixture

Product name : RS-GCS-NSP30 Product code : GCS-NSP30

Type of product : Thermal interface material, Fillers, putties, plasters, modelling clay

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

1.2.1. Relevant identified uses

: Professional use Main use category Use of the substance/mixture : Conductive agents

Fillers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

UK

RS Components Ltd Birchington Road

Corby **Northants** NN17 9RS

Tel: +44 (0) 845 850 9900

Email: RCustomerServicesUK@rs-components.com

Website: www.rs-online.com

Ireland

RS Components Ltd Glenview Industrial Estate Herberton Road

Rialto Dublin 12

Tel: +353 (0) 1 415 3100

Email: Enquiries.ie@rs-components.com

Website: www.rs-online.com

1.4. Emergency telephone number

+44 1235 239670 (24hr) Emergency number : +44 1865 407 333 (24hr)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 2 H319 Specific target organ toxicity — Single exposure, Category 3, H335 Respiratory tract irritation

Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

GHS07 GHS09

Signal word (CLP) : Warning

Hazardous ingredients : ALUMINIUM (IV) OXIDE

Hazard statements (CLP) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing vapours, fume.

P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment. P280 - Wear eye protection, protective gloves.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|----------------------|----------------------|------|---|
| ALUMINIUM (IV) OXIDE | (CAS-No.) 11092-32-3 | 76.5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 |
| BORON NITRIDE | (CAS-No.) 10043-11-5 | 10 | Aquatic Chronic 1, H410 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : Inhalation may cause irritation (cough, short breathing, difficulty in breathing).

Symptoms/effects after skin contact : Causes mild skin irritation.
Symptoms/effects after eye contact : mild eye irritation.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

3/5/2019 (Version: 1.1) EN (English) 2/6

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Insufficient ventilation: wear respiratory protection.

| Materials for protective eletting. Insumoent vertication, wear respiratory protection. | | | | | | | |
|--|--------------------------|-----------|-------------------|-------------|----------|----------|--|
| Materials for protective clothing: | | | | | | | |
| Condition Ma | | Material | | Standard | Standard | | |
| Less resistance: Polyethylene | | | | | | | |
| Hand protection: | | | | | | | |
| Protective gloves | | | | | | | |
| Type Material Permeation Thickness (mm) Penetration | | Standard | | | | | |
| Disposable gloves | Nitrile rubb | er (NBR) | 6 (> 480 minutes) | 0.11 EN 374 | | EN 374-2 | |
| Eye protection: | | | | | | | |
| Safety glasses | | | | | | | |
| Туре | Type Use Characteristics | | | Standard | | | |
| Safety glasses Droplet, Dust | | | | EN 166 | | | |
| Skin and body protection: | | | | | | | |
| Wear suitable protective clothing | | | | | | | |
| Туре | | | Standard | | | | |
| apron | | | | | | | |
| Respiratory protection: | | | | | | | |
| In case of insufficient ventilation, wear suitable respiratory equipment | | | | | | | |
| Device Filter type | | Condition | | Standard | | | |
| Air-Purifying Respirator (APR), disposable Type P1 | | | | EN 14387 | | | |

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Personal protective equipment symbol(s):











: No data available

: No data available

: Not applicable

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

: No data available Colour Odour : No data available Odour threshold : No data available

pН : Approx. 7 Relative evaporation rate (butylacetate=1) : No data available Melting point : No data available Freezing point : Not applicable Boiling point : > 35 °C Flash point : > 93 °C Auto-ignition temperature : Not applicable Decomposition temperature : No data available Flammability (solid, gas) : Non flammable. Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Solubility : No data available Log Pow : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available

Explosive limits 9.2. Other information

Explosive properties

Oxidising properties

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified : Not classified Acute toxicity (dermal) Acute toxicity (inhalation) : Not classified

BORON NITRIDE (100//3-11-5)

| DONON NITRIDE (10045-11-5) | |
|----------------------------|--------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| according to Regulation (EO) No. 1307/2000 (RENOT) with its afficient regulation (EO) 2013/000 | | |
|--|-------------------------------------|--|
| LC50 inhalation rat (mg/l) | 5.19 mg/l/4h | |
| Skin corrosion/irritation | : Causes skin irritation. | |
| | pH: Approx. 7 | |
| Serious eye damage/irritation | : Causes serious eye irritation. | |
| | pH: Approx. 7 | |
| Respiratory or skin sensitisation | : Not classified | |
| Germ cell mutagenicity | : Not classified | |
| Carcinogenicity | : Not classified | |
| Reproductive toxicity | : Not classified | |
| STOT-single exposure | : May cause respiratory irritation. | |
| STOT-repeated exposure | : Not classified | |
| Aspiration hazard | : Not classified | |

SECTION 12: Ecological information

| | | | - | | | |
|---|----|------|---|---|----|--|
| и | -) | 1. 1 | | ~ | VI | |
| | | | | | | |

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term

adverse effects in the environment.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

| BORON NITRIDE (10043-11-5) | |
|----------------------------|------------|
| LC50 fish 1 | > 100 mg/l |
| NOEC chronic fish | > 100 mg/l |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID | | | |
|--|---|----------------|----------------|----------------|--|--|--|
| 14.1. UN number | 14.1. UN number | | | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | | | |
| 14.2. UN proper shippin | g name | | | | | | |
| Not applicable | Not applicable Not applicable Not applicable Not applicable | | Not applicable | | | | |
| 14.3. Transport hazard class(es) | | | | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | | | |
| 14.4. Packing group | | | | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | | | |
| 14.5. Environmental hazards | | | | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | | | |
| No supplementary information available | | | | | | | |

14.6. Special precautions for user

Overland transport

Not applicable

3/5/2019 (Version: 1.1) EN (English) 5/6

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Full text of H- and EUH-statements: | | |
|-------------------------------------|--|--|
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 | |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 | |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | |
| H315 | Causes skin irritation. | |
| H319 | Causes serious eye irritation. | |
| H335 | May cause respiratory irritation. | |
| H410 | Very toxic to aquatic life with long lasting effects. | |
| H411 | Toxic to aquatic life with long lasting effects. | |

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product