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**Name:** SLA-92 Identified Uses

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**Legal entity owner:** Almatris GmbH / Frankfurt / Germany, Almatris BV

# SLA-92 Uses

## Formulation or re-packing

### Formulation

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**Use number**

2

**Use name**

Manufacture of Al<sub>12</sub>O<sub>19</sub>Ca-containing catalyst and catalyst precursors

**Contributing activity / technique for the environment****Name of activity / technique**

Manufacture of Al<sub>12</sub>O<sub>19</sub>Ca-containing catalyst and catalyst precursors

**Environmental release category (ERC)**

ERC3: Formulation into solid matrix

**Contributing activity / technique for workers****Name of activity / technique**

Manufacture of Al<sub>12</sub>O<sub>19</sub>Ca-containing catalyst and catalyst precursors

**Process category (PROC)**

PROC 1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

PROC 2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions

PROC 4: Chemical production where opportunity for exposure arises

PROC 8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC 14: Tableting, compression, extrusion, pelletisation, granulation

**Product category formulated**

PC 0: Other: Al<sub>12</sub>O<sub>19</sub>Ca-containing catalyst

**Technical function of the substance during formulation**

processing aid

**Substance supplied to that use in form of**

as such

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**Total EU tonnage for this use**

false

**Limited number of sites for this use**

true

**Details on limited number of sites**

1-10

**Related assessment**

use assessed in an own CSR

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**Uses at industrial sites****Use number**

3

**Use name**

Use at industrial site [Manufacture of Al<sub>2</sub>O<sub>3</sub>Ca-containing refractory products]

**Use as on-site isolated intermediate registered according to REACH Article 17(3)**

false

**Any precursor use(s)**

false

**Contributing activity / technique for the environment****Name of activity / technique**

Use at industrial site [Manufacture of Al<sub>2</sub>O<sub>3</sub>Ca-containing refractory products]

**Environmental release category (ERC)**

ERC5: Use at industrial site leading to inclusion into/onto article

**Contributing activity / technique for workers****Name of activity / technique**

Use at industrial site [Manufacture of Al<sub>2</sub>O<sub>3</sub>Ca-containing refractory products]

**Process category (PROC)**

PROC 3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions

PROC 5: Mixing or blending in batch processes

PROC 14: Tableting, compression, extrusion, pelletisation, granulation

**Product category used**

PC 0: Other: refractory material

**Sector of end use**

SU 13: Manufacture of other non-metallic mineral products, e.g. plasters, cement

SU 14: Manufacture of basic metals, including alloys

**Technical function of the substance during use**

other: refractory material

**Substance supplied to that use in form of**

as such

in a mixture

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**Subsequent service life relevant for this use**

yes

**Total EU tonnage for this use**

false

**Limited number of sites for this use**

true

**Details on limited number of sites**

1-10

**Related assessment**

use assessed in an own CSR

**Remarks:**

SLA 92 is a synthetic insulating refractory aggregate based on the mineralogical phase calcium hexaluminate, CA6. Due to its high porosity it has a very low thermal conductivity and reduces heat losses when applied in heat intensive applications. Calcium hexaluminate is described in the literature as a refractory material that exhibits: (1) very high refractoriness (onset of melting at 1830 °C), (2) high stability in reducing atmospheres, e.g. CO, (3) high chemical resistance in alkaline environment, (4) thermal expansion coefficient similar to corundum. SLA 92 combines the above described characteristics of CA6, resulting in advantages e.g. in insulating applications (low thermal conductivity) or in aggressive environments at elevated temperatures (high chemical resistance and high refractoriness).

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## Uses at industrial sites

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**Use number**

4

**Use name**

Use of Al<sub>2</sub>O<sub>3</sub>/Ca-containing refractory products

**Use as on-site isolated intermediate registered according to REACH Article 17(3)**

false

**Any precursor use(s)**

false

**Contributing activity / technique for the environment****Name of activity / technique**

Use of Al<sub>2</sub>O<sub>3</sub>/Ca-containing refractory products

**Environmental release category (ERC)**

ERC5: Use at industrial site leading to inclusion into/onto article

**Contributing activity / technique for workers****Name of activity / technique**

Use of Al<sub>2</sub>O<sub>3</sub>/Ca-containing refractory products

**Process category (PROC)**

PROC 3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions

PROC 5: Mixing or blending in batch processes

PROC 14: Tableting, compression, extrusion, pelletisation, granulation

**Product category used**

PC 2: Adsorbents

PC 0: Other: refractory material

**Sector of end use**

SU 8: Manufacture of bulk, large scale chemicals (including petroleum products)

SU 13: Manufacture of other non-metallic mineral products, e.g. plasters, cement

SU 14: Manufacture of basic metals, including alloys

**Technical function of the substance during use**

other: refractory material

**Substance supplied to that use in form of**

as such

in a mixture

**Subsequent service life relevant for this use**

no

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**Total EU tonnage for this use**

false

**Limited number of sites for this use**

false

**Related assessment**

use assessed in an own CSR

**Remarks:**

SLA 92 is a synthetic insulating refractory aggregate based on the mineralogical phase calcium hexaluminate, CA6. Due to its high porosity it has a very low thermal conductivity and reduces heat losses when applied in heat intensive applications. Calcium hexaluminate is described in the literature as a refractory material that exhibits: (1) very high refractoriness (onset of melting at 1830 °C), (2) high stability in reducing atmospheres, e.g. CO, (3) high chemical resistance in alkaline environment, (4) thermal expansion coefficient similar to corundum. SLA 92 combines the above described characteristics of CA6, resulting in advantages e.g. in insulating applications (low thermal conductivity) or in aggressive environments at elevated temperatures (high chemical resistance and high refractoriness).

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**Service life****Service life number**

5

**Service life name**Service life (worker at industrial site) [Manufacture of Al<sub>12</sub>O<sub>19</sub>Ca-containing refractory products]**Any precursor use(s)**

false

**Article used by**

workers

**Article category (AC)**

AC 4: Stone, plaster, cement, glass and ceramic articles

**Substance intended to be released from article**

no

**Contributing activity / technique for the environment****Name of activity / technique**Manufacture of Al<sub>12</sub>O<sub>19</sub>Ca-containing refractory products**Environmental release category (ERC)**

ERC12a: Processing of articles at industrial sites with low release

ERC12b: Processing of articles at industrial sites with high release

**Contributing activity / technique for workers**

**Name of activity / technique**

Manufacture of Al<sub>2</sub>O<sub>3</sub>-containing refractory products

**Process category (PROC)**

PROC 3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions

PROC 5: Mixing or blending in batch processes

PROC 14: Tableting, compression, extrusion, pelletisation, granulation

**Percentage (w/w) of substance in mixture /article (%)**

70

**Technical function of the substance during use**

other: used as a refractory material



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**Total EU tonnage for this use**

false

**Related assessment**

use assessed in an own CSR

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# LEGAL\_ENTITY: Almatis GmbH, Almatis BV

## General information

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**Legal entity name**

Almatis GmbH

**Legal entity type**

company

## Contact information

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**Contact persons**

**Person**

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