

Safety Data Sheet

Product name : GRAVICOL 2428 TC

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SDS n°GREN273

Version of :2003-12-09

This sheet supersedes the one dated :2003-01-03

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : GRAVICOL 2428 TC

PRODUCT CODE : 1102

SUPPLIER OR COMPANY NAME :

- NAME : Société CRAY VALLEY

- FULL ADDRESS :
6 rue de l'Industrie
BP 123
27931 GRAVIGNY CEDEX
FRANCE

- TELEPHONE : (33) 02.32.78.30.00

- FAX : (33) 02.32.78.30.20

- INTERNET : <http://www.crayvalley.com>

APPLICATIONS :
Industrial bonding paste

URGENCE / EMERGENCY / EMERGENCIA / NOTRUFNUMMER / N° 24/24 :

Pays / Countries / Países / Länder	Tel.
DK, FI, FR, DE, IE, IT, LU, NL, NO, PT, ES, SE, BE, GB	+800 76767600
AT, TR, CH, RO, BG, AL, BA, HR, HU, SI, YU, MK	+49 89 45560 321
BY, CZ, SK, EE, LV, LT, MD, RU, PL, UA	+420 2 2186 0618
GR	+30 2 10 42 96 678

2 - COMPOSITION / INFORMATION ON INGREDIENTS

PREPARATION :

- CHEMICAL NAME OR GENERIC NAME : Polyester Bonding Paste

- COMPONENTS OR IMPURITIES CONTRIBUTING TO HAZARDS :

Styrene

Symbols	R Phrases	S Phrases	Index N°	CAS N°
Xn	R 10	S 23	601-026-00-0	100-42-5
	R 20			
	R36/38			

Conc. range: ~ 30%

3 - HAZARDS IDENTIFICATION

SPECIFIC HAZARDS : Flammable.

ADVERSE HUMAN HEALTH EFFECTS :
Irritating to eyes an skin
Harmful by inhalation

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PHYSICAL AND CHEMICAL HAZARDS :

The mixture of product vapour and air could be explosive.
Strongly exothermic polymerisation may caused by :
Heat
Free radical formers
Peroxides

4 - FIRST AID MEASURES

INHALATION : Take person out of the contaminated area. Remove patient to fresh air.
Call a doctor in case of doubt or if symptoms persist.

SKIN CONTACT : Take off all contaminated clothing.
Wash with soap and water and rinse with water.

EYE CONTACT : Wash immediately (15 min) with water, opening eyelids.
If irritation continues, see an ophthalmologist.

INGESTION : Do not induce vomiting
Put under medical supervision.
If swallowed, seek immediate medical advice and show container or label to the doctor.

5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA :

- SUITABLE : Powder, foam, carbon dioxide, sand and pulverized water.

- NOT SUITABLE : Water jet.

SPECIFIC HAZARDS : By combustion , formation of toxic products : carbon, carbon monoxide, carbon dioxide

SPECIFIC METHODS : Cool the container with sprayed water to avoid polymerisation.
Eliminate all sources of combustion.

PROTECTION OF FIRE-FIGHTERS : Wear individual breathing apparatus.

OTHERS : Treat as hydrocarbon fire.
Limit spreading of extinguishing fluids.

6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Avoid inhaling vapours.
Wear protective equipment.
Gloves - Goggles - Boots.
Wear self contained breathing apparatus

ENVIRONMENTAL PRECAUTIONS : Do NOT discharge in sewers.
Do not allow this chemical to enter the environment.
If the product contaminates lakes, rivers or sewers, inform appropriate authorities in accordance with local regulations

METHODS OF CLEANING UP :

- RECOVERY : Spread sand.
Collect the product in a container pending future destruction.

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- DISPOSAL : Burn in an approved installation for liquids
Polymerized product : discharge authorized.
- INCOMPATIBLE MATERIALS : Wood sawdust

7 - HANDLING AND STORAGE

HANDLING :

- PREVENTION OF WORKER EXPOSURE : Collect vapours at source.
When using, workplace ventilation is required - NO SMOKING.
- PREVENTION OF FIRE AND EXPLOSION : Do NOT smoke when using.
Take precautionary measures against electrostatic discharges.

STORAGE :

- STORAGE CONDITION :

SUITABLE :

Keep at temperature not exceeding 30 °C.
Keep container tightly closed in a cool, well ventilated place.

TO AVOID :

Sunlight, heat and way from sources of ignition (no smoking)

- INCOMPATIBLE MATERIALS :

Strong oxidizing agents.
Catalysts and accelerators

- PACKAGING MATERIALS :

RECOMMENDED :

GRP tanks
Metal packaging except aluminium, copper or copper alloy

NOT SUITABLE :

Aluminium.
Copper or copper alloy and plastics.

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS (TLV-TWA, TLV-STEL) :

- Product name : Styrene

8 Hours (TLV-TWA)	8 Hours (TLV-TWA)	Short period (TLV-STEL)	Short period (TLV-STEL)	According to
ppm	mg/m3	ppm	mg/m3	
50	215			FR (INRS-1999)

8 Hours (TLV-TWA)	8 Hours (TLV-TWA)	Short period (TLV-STEL)	Short period (TLV-STEL)	According to
ppm	mg/m3	ppm	mg/m3	
20	86			DE (MAK-2002)

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8 Hours (TLV-TWA)	8 Hours (TLV-TWA)	Short period (TLV-STEL)	Short period (TLV-STEL)	According to
ppm	mg/m3	ppm	mg/m3	
100	430	250	1080	UK (EH40-2002)

8 Hours (TLV-TWA)	8 Hours (TLV-TWA)	Short period (TLV-STEL)	Short period (TLV-STEL)	According to
ppm	mg/m3	ppm	mg/m3	
50		100 (15mn)		USA (ACGIH-2002)

PERSONAL PROTECTIVE EQUIPMENT :

- RESPIRATORY PROTECTIVE EQUIPMENT :

Remove working clothes after work.
In case of insufficient ventilation, wear suitable respiratory equipment.

- HAND PROTECTION :

Wear solvent-proof gloves.

- EYE PROTECTION :

Wear glasses.

- SKIN AND BODY PROTECTION :

Wear suitable protective clothing.
Remove working clothes after work.

- SPECIFIC HYGIENE MEASURES :

When using do NOT eat, drink or smoke.

9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :

- PHYSICAL STATE :

Thixotropic Paste

- COLOUR :

Not applicable

- ODOUR :

With characteristic odour

RISK OF FIRE OR EXPLOSION :

- FLASH POINT :

31°C

- AUTO-IGNITION TEMPERATURE :

(*) 490°C

- EXPLOSIVE OR FLAMMABLE LIMITS IN AIR :

Lower	Upper
1,1%	6,1% (*)

VAPOUR PRESSURE :

20°C 6 mbar (*)

DENSITY :

- RELATIVE DENSITY (WATER) :

iso 2811 : ~1,26 g/cm3

SOLUBILITY :

- IN WATER :

Insoluble in water.

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- IN ORGANIC SOLVENTS : Soluble in most organic solvents.

VISCOSITY : Not applicable

OTHERS : (*) Values referred to the styren and not to the preparation

10 - STABILITY AND REACTIVITY

STABILITY : Stable under normal storage condition.

CONDITION TO AVOID : Light.
Heat.
Sources of ignition

HAZARDOUS DECOMPOSITION PRODUCTS :
By thermal decomposition, formation of C, CO, CO₂, ...

HAZARDOUS REACTION WITH : Exothermic polymerisation may occur by :
Strong oxidizing agents.
Peroxides.
Radical formers.

11 - TOXICOLOGICAL INFORMATION

SKIN IRRITATION : Irritating to skin.

EYE IRRITATION : Irritating to eyes.

SENSITIZATION : None to our knowledge

INHALATION : Harmful by inhalation.
Symptoms and signs include :
Headache
Dizziness
Tiring.

12 - ECOLOGICAL INFORMATION

PERSISTANCE / DEGRADABILITY : Easily biodegradable (*)
(*) For styren

POSSIBLE ENVIRONMENTAL IMPACT / ECOTOXICITY :
Do not discharge into drains or the environment, dispose to an
authorised waste collection point.

13 - DISPOSAL CONSIDERATIONS

MEASURES FOR DISPOSAL : Incineration in approved installation.

NEUTRALIZING OR DESTROYING PROCEDURE OF PRODUCT :
Crushing then incineration when high solid proportion.
Incineration for liquid resins. Crushing then incineration for solid
resins.

DESTROYING PROCEDURE OF CONTAMINATED PACKAGING :
Cleaned packaging may be recycled.
This material and/or its container must be disposed of as hazardous
waste.

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14 - TRANSPORT INFORMATION

INTERNATIONAL REGULATION : Regulations do not apply to this product.

15 - REGULATORY INFORMATION

EC REGULATIONS :

Dir. 2001/59/EC : Commission Directive of 06/08/2001 adapting to the 28th time Council Directive 67/548/EC relating to classification, packaging and labelling of dangerous substances, OJ n° L 225, 21/08/2001.

Dangerous preparations : Directive 99/45 amended by Directive 2001/60/EC - OJEC L226 - 22/08/2001.

Directive 91/155/EEC amended by Directive 93/112/EEC and Directive 2001/58/EC : Safety data sheets.

- EEC LABELLING :

Contains styrene

R Phrases :

R 10 - Flammable.

R 20 - Harmful by inhalation.

R36/38 :Irritating to eyes and skin.

S Phrases :

S24/25 :Avoid contact with skin and eyes.

S 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37 - Wear suitable gloves.

Symbols :

Xn - Harmful

16 - OTHER INFORMATION

REMARK :

In accordance with the requirements of Directive 2001/58/EC, the full text of risk phrases (R) referred to in chapter 2 is stated here:

Flammable (R10).

Harmful by inhalation (R20).

Harmful if swallowed (R22).

Irritating to eyes and skin (R36/38).

Irritating to skin (R38).

May cause sensitization by skin contact (R43).

This sheet completes the technical sheet of use but it doesn't replace it. The information contained in this sheet are based on our knowledge of the product at the date : 05 11 1903 .