

# SAFETY DATA SHEET (SDS)

According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

## 1: PRODUCT AND COMPANY IDENTIFICATION

**Trade name:** FL250CR SN62PB36AG2

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:**

Kester Inc.  
800 West Thorndale Avenue  
Itasca, IL 60143 USA  
Tel (630) 616-4000

ITW Specialty Materials (Suzhou) Co., Ltd.  
Heng Qiao Road  
Wujiang Economic Development Zone  
Suzhou, Jiangsu 215200 China  
Tel +86 512 82060808

Kester GmbH  
Ganghofer Strasse 45  
D-82216 Gernlinden Germany  
Tel +49 (0) 8142 4885 0

**Information department:** Product Compliance: EHS\_Kester@kester.com**1.4 Emergency telephone number:**

CHEMTREC 24-Hour Emergency Response Telephone Number : (800) 424-9300

CHEMTREC 24-Hour Emergency Response (Outside US &amp; Canada) Telephone Number : (703) 527-3887

## 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 1 H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

**Hazard pictograms**

GHS07



GHS08

(Contd. on page 2)

US

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

Trade name: FL250CR SN62PB36AG2

(Contd. of page 1)

**Signal word** Danger

**Hazard-determining components of labeling:**

LEAD (Pb)  
Rosin  
Halogenated organic diol

**Hazard statements**

Harmful if swallowed or if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
May damage fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing must not be allowed out of the workplace.  
Do not handle until all safety precautions have been read and understood.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
If skin irritation or rash occurs: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of water.  
Take off contaminated clothing and wash it before reuse.  
Store in a dry place.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard description:**

**WHMIS Symbols**



**Classification system:**

**NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 0  
Reactivity = 0

**HMIS-ratings (scale 0 - 4)**



Health = \*1  
Fire = 0  
Reactivity = 0

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

PBT: Not applicable.  
vPvB: Not applicable.

**3: COMPOSITION OF MIXTURE**

**Description:** Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 3)

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

Trade name: FL250CR SN62PB36AG2

(Contd. of page 2)

CAS No.	Description	% Range
CAS: 7440-31-5 EINECS: 231-141-8	TIN (Sn)	55-70%
CAS: 7439-92-1 EINECS: 231-100-4	LEAD (Pb) ⚠ Carc. 2, H351; Repr. 1B, H360; STOT RE 2, H373 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	25-40%
	Rosin ⚠ Skin Sens. 1, H317	1.0-3.0%
CAS: 7440-22-4 EINECS: 231-131-3	SILVER (Ag)	1.0-3.0%
CAS: 112-73-2 EINECS: 204-001-9	bis(2-butoxyethyl) ether ⚠ Acute Tox. 3, H311	1.0-3.0%

**4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Follow general first aid procedures.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** Seek immediate medical advice.

**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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

No further relevant information available.

**5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable extinguishing agents:**

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture** In case of fire, the following can be released:

**5.3 Advice for firefighters**

**Protective equipment:** Wear self-contained respiratory protective device.

**6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation

**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

Trade name: FL250CR SN62PB36AG2

(Contd. of page 3)

**7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Thorough dedusting.  
Prevent formation of dust.

**Information about protection against explosions and fires:** No special measures required.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage:**

**Requirements to be met by storerooms and receptacles:** Store in a cool location.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

**7.3 Specific end use(s)** No further relevant information available.

**8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Additional information about design of technical systems:** No further data; see item 7.

**8.1 Control parameters**

**Components with limit values that require monitoring at the workplace:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

**7440-31-5 TIN (Sn)**

PEL Long-term value: 2 mg/m<sup>3</sup>  
metal

REL Long-term value: 2 mg/m<sup>3</sup>

TLV Long-term value: 2 mg/m<sup>3</sup>  
metal

**7439-92-1 LEAD (Pb)**

PEL Long-term value: 0.05\* mg/m<sup>3</sup>  
\*see 29 CFR 1910.1025

REL Long-term value: 0.05\* mg/m<sup>3</sup>  
\*8-hr TWA, excl. lead arsenate; See PocketGuideApp.C

TLV Long-term value: 0.05\* mg/m<sup>3</sup>  
\*and inorganic compounds, as Pb; BEI

**7440-22-4 SILVER (Ag)**

PEL Long-term value: 0.01 mg/m<sup>3</sup>

REL Long-term value: 0.01 mg/m<sup>3</sup>

TLV Long-term value: 0.1 mg/m<sup>3</sup>  
metal: dust and fume

**Additional information:**

PEL = Permissible Exposure Limit (OSHA)

TLV= Threshold Limit Value (ACGIH)

OSHA= Occupational Safety and Health Administration

ACGIH= American Conference of Governmental Industrial Hygienists

**8.2 Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

(Contd. on page 5)

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

**Trade name: FL250CR SN62PB36AG2**

(Contd. of page 4)

Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.

**Breathing equipment:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

**Protection of hands:**



Protective gloves

**Material of gloves:**

Nitrile rubber, NBR

Natural rubber, NR

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Safety glasses



Face Shield with Safety Glasses when refilling.

**9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

**General Information**

**Appearance:**

**Form:** Solid  
**Color:** Silver grey  
**Odor:** Odorless

**pH-value:** Not applicable.

**Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** >999 °C (>1830 °F)

**Flash point:** >100 °C (>212 °F)

**Flammability (solid, gaseous):** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Vapor pressure:** Not applicable.

**Density at 20 °C (68 °F):** 6 g/cm<sup>3</sup> (50.07 lbs/gal)

**Vapor density:** Not applicable.

**Solubility in / Miscibility with**

**Water:** Insoluble.

**Solvent content:**

**Organic solvents:** 1.4 %

(Contd. on page 6)

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

Trade name: FL250CR SN62PB36AG2

(Contd. of page 5)

Solids content: 96.1 %

**10: STABILITY AND REACTIVITY**

**10.1 Reactivity** No further relevant information available.

**10.2 Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known.

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute toxicity:**

Harmful if swallowed or if inhaled.

**LD/LC50 values that are relevant for classification:**

**Rosin**

Oral	LD50	> 4000 mg/kg (Rat)
------	------	--------------------

Dermal	LD50	>2500 mg/kg (rabbit)
--------	------	----------------------

**112-73-2 bis(2-butoxyethyl) ether**

Oral	LD50	3900 mg/kg (rat)
------	------	------------------

**Primary irritant effect:**

**on the skin:** Based on available data, the classification criteria are not met.

**on the eye:** Based on available data, the classification criteria are not met.

**Sensitization:**

May cause an allergic skin reaction.

**Additional toxicological information:**

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)**

7439-92-1	LEAD (Pb)	2B
-----------	-----------	----

102-71-6	2,2',2''-nitrioltriethanol	3
----------	----------------------------	---

**NTP (National Toxicology Program)**

7439-92-1	LEAD (Pb)	R
-----------	-----------	---

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12: ECOLOGICAL INFORMATION**

**12.1 Toxicity**

**Aquatic toxicity:** No further relevant information available.

**Additional ecological information:**

**General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 7)

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

Trade name: FL250CR SN62PB36AG2

(Contd. of page 6)

**12.5 Results of PBT and vPvB assessment**

**PBT:** Not applicable.  
**vPvB:** Not applicable.

**13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**14: TRANSPORT INFORMATION**

**14.1 UN-Number**

DOT, ADR, ADN, IMDG, IATA Not applicable

**14.2 UN proper shipping name**

DOT, ADR, ADN, IMDG, IATA Not applicable

**14.3 Transport hazard class(es)**

DOT, ADR, ADN, IMDG, IATA

Class Not applicable

**14.4 Packing group**

DOT, IMDG, IATA Not applicable

**14.6 Special precautions for user** Not applicable.

**14.7 Transport in bulk according to Annex II of**

**MARPOL73/78 and the IBC Code** Not applicable.

**UN "Model Regulation":** Not applicable

**15: REGULATORY INFORMATION**

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

**USA** The following information relates to product regulation specific to the USA.

**SARA (Superfund Amendments and Reauthorization Act)**

**Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

**Section 313 (Specific toxic chemical listings):**

7439-92-1	LEAD (Pb)
7440-22-4	SILVER (Ag)
112-73-2	bis(2-butoxyethyl) ether

**TSCA (Toxic Substances Control Act):** Kester certifies that all components listed below for the subject finished product are on the TSCA Inventory of Chemical Substances and are not subject to any chemical specific regulation under TSCA Section 12(b) export notification requirements delineated at 40 CFR part 707, subpart D.

All ingredients are listed or exempt from listing.

**California Proposition 65**

**Chemicals known to cause cancer:**

LEAD (Pb)

(Contd. on page 8)

**SAFETY DATA SHEET (SDS)**  
According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

Trade name: FL250CR SN62PB36AG2

(Contd. of page 7)

**Chemicals known to cause reproductive toxicity:**

LEAD (Pb)

**Carcinogenic categories**

**EPA (Environmental Protection Agency)**

7439-92-1	LEAD (Pb)	B2
7440-22-4	SILVER (Ag)	D

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**CANADA:**

Workplace Hazardous Materials Identification (WHMIS):

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the Safety Data Sheet (SDS) contains all of the information required by the CPR.

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

**Hazard pictograms**



GHS07 GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**

LEAD (Pb)

Rosin

Halogenated organic diol

**Hazard statements**

Harmful if swallowed or if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Do not handle until all safety precautions have been read and understood.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If skin irritation or rash occurs: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store in a dry place.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16: OTHER INFORMATION**

Department issuing Safety Data Sheet (SDS): Product Compliance / EHS Department

(Contd. on page 9)



**SAFETY DATA SHEET (SDS)**

According to 1907/2006/EC, Article 31

Printing Date 06/15/2016

Version number 5

Reviewed on 06/15/2016

**Trade name: FL250CR SN62PB36AG2**

(Contd. of page 8)

**Contact:** EHS\_Kester@kester.com**Date of preparation / last revision** 06/15/2016 / 4**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 1: Reproductive toxicity, Hazard Category 1

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

**\* Data compared to the previous version altered.**