

Unverferth
Manufacturing Company, Inc.

October 1, 2026

CERTIFIED MAIL

Clint Reents
Rural Iowa Waste Management
20488 'M' Avenue
Eldora, Iowa 50627

**RE: Renewal Application for Special Waste Authorization
Existing SWA #: 42-SWA-02-02
(Paint Filters and Dried Paint Chips)**

Dear Mr. Reents:

Enclosed please find the one (1) copy of the completed "Renewal Application for Special Waste Authorization (SWA)", waste characterization analytical data for our paint filters and dried paint chips and safety data sheets (SDSs) of our white and clear booth coatings, 2-component paints and catalysts, and MEK. Also, please find attached an explanation regarding the strippable paint booth material used in the paint booths and a signed statement clarifying that the solvents (MEK) used to clean the paint guns and flush paint lines are managed as separate waste streams and are not sprayed into the paint filters (see "Evidence of Process Knowledge").

If you have questions or need additional information, please contact me at (419) 532-3130 ext. 1331.

Sincerely,



Greg Steinecker
Environmental/Safety Specialist

Enclosures

cc: File



IOWA DEPARTMENT OF NATURAL RESOURCES

REQUEST FOR SPECIAL WASTE AUTHORIZATION



Check one of the following:

☐ New Application

☒ Renewal, Existing SWA #:

42-SWA-02-02

The intent of a special waste authorization is to provide safe and proper management for disposal of wastes which present a threat to human health or the environment or a waste with inherent properties which make the disposal of the waste in a sanitary landfill difficult to manage. It is each landfill's responsibility to inform the waste generator if a waste should be handled as a special waste and to ensure that special wastes delivered to the landfill conform to the Special Waste Acceptance Criteria (SWAC) on file with the Department. It is the Department's responsibility to review each application for a special waste authorization to verify that the proposed waste can be landfilled under the current regulations in Iowa.

READ THE FOLLOWING INSTRUCTIONS BEFORE COMPLETING THIS APPLICATION

Waste Generator:

1. Complete Sections 1-3 of this application applicable to the waste characterization and disposal information.
2. Attach Toxicity Characteristic Leaching Procedure (TCLP) test results, material safety data sheet(s) (MSDS), or evidence of "processor knowledge" when appropriate that demonstrates the waste is not considered a characteristic hazardous waste exhibiting the properties of flammability, corrosivity, reactivity or toxicity or a listed hazardous waste as defined in 40 CFR Part 261, Subpart D.
3. Provide signature in Section 3 to verify that the information provided is true, accurate and complete.
4. Mail or deliver the completed application with attachments to the requested disposal destination (*must be a landfill that is authorized to accept waste from the service area of where the waste was generated*). Please contact Mike Smith at (515) 229-8356 for a list of landfills authorized to accept waste from the service area in which your facility is located.

Receiving Landfill: Prior review of this application by the receiving landfill allows the department to more quickly process and evaluate the application.

1. Complete Section 5 of this application applicable to the landfill.
2. Indicate by signing the application that the landfill is willing to accept the waste if a Special Waste Authorization is issued by the department and if instructions for disposal of the waste, as contained in the landfill's SWAC, are followed by the generator.
3. Attach SWAC procedures for disposal of the waste.
4. Keep 1 copy for your records and submit the remaining one copy of the completed application with attachments (TCLP, MSDS, SWAC, etc.) to the department at the following address, or email to mike.smith@dnr.iowa.gov:

Iowa Department of Natural Resources
Land Quality Bureau- Attn: Mike Smith
6200 Park Ave Ste 200
Des Moines, IA 50321

Applications will be considered incomplete if not signed by both the waste generator and receiving landfill. The receiving landfill must attach a copy of the SWAC for the particular waste for which the application has been submitted.

Written notification of approval or rejection will be mailed or emailed to the generator and landfill. If approved, a copy of the authorization must accompany the waste hauler to the landfill.

For questions concerning this application contact Mike Smith at (515) 229-8356 or mike.smith@dnr.iowa.gov.

SECTION 1: WASTE GENERATOR INFORMATION

Name of Primary Contact* Greg Steinecker **Title** Environmental/Safety Specialist

**SWA approvals will be sent to this person at the address provided below.*

Company Name Unverferth Mfg. Co., Inc. - Brent Division

Mailing Address 27612 Temple Avenue

City Shell Rock **State** IA **Zip Code** 50670

Telephone # 319-885-6578 **Email Address** gregs@unverferth.com

Address or location of the point of generation of the waste, if different from the company address:

Address _____

City _____ **State** _____ **Zip Code** _____

SECTION 2: WASTE CHARACTERIZATION

Waste determined to be hazardous may not be landfilled in Iowa. Attach TCLP analysis that demonstrates the waste is not considered hazardous. For raw or virgin materials being disposed of, a MSDS that indicates the waste is not hazardous may be submitted in lieu of a TCLP analysis.

The generator may also apply knowledge of the hazardous characteristic(s) of the waste in light of the materials or the processes used ("knowledge of process"). In order to use knowledge to characterize the waste, the knowledge that is applied must be valid and verifiable and the generator must be able to demonstrate the basis for their claim by providing supporting information to justify that conclusion.

Name and description of waste. Please address any RCRA listings derived from wastes etc., that may be applicable and why these listings would not pertain to the waste:

Paint Filters and Paint Chips

1) See attached Eurofins Analytical Report (Lab # 310-340783, dated 9-14-2026)

Has any pretreatment been utilized? If so, please describe the pretreatment process:

None

List the alternatives to disposal that were analyzed and reason not utilized (attach extra sheets if necessary):

Physical state at room temperature?

☒ Solid

☐ Semi-Solid

☐ Liquid

Percent (%) Solid: 100

pH: 6.0-8.0

Flashpoint: >212°F

Does this waste pass the paint filter liquids test?

Free liquids are prohibited from landfill disposal. Free liquids are defined as the liquid produced when a 100-millimeter or 100-gram representative sample is placed on a standard mesh number 60 (fine mesh size) conical paint filter for five minutes.

☒ Yes ☐ No

Is this waste a listed hazardous waste as identified in 40 CFR 261, Subpart D? Refer to the following web link to find listed hazardous wastes: <http://www.gpoaccess.gov/cfr/index.html>

☐ Yes ☒ No

Does this waste exhibit the property of *ignitability* as defined in 40 CFR 261, Subpart C?

☐ Yes ☒ No

Does this waste exhibit the property of *corrosivity* as defined in 40 CFR 261, Subpart C?

☐ Yes ☒ No

Does this waste exhibit the property of *reactivity* as defined in 40 CFR 261, Subpart C?

☐ Yes ☒ No

Does this waste exhibit the property of *toxicity* as defined in 40 CFR 261, Subpart C?

☐ Yes ☒ No

SECTION 3: WASTE DISPOSAL INFORMATION

Indicate the proposed disposal location and if this is a request for an ongoing disposal of a special waste or a one-time disposal. If on going, indicate the approximate amount in pounds to be disposed of quarterly.

Landfill Name* Rural Iowa Sanitary Landfill

**List only a landfill that is authorized to accept waste from the service area of where the waste was generated. Sue Johnson at (515) 217-0872 or susan.johnson@dnr.iowa.gov for a list of landfills authorized to accept waste from your facility.*

☒ Ongoing (or intermittent) with an average disposal rate per quarter of 10,000 pounds

Indicate the amount on hand to be disposed of immediately: _____ pounds

☐ One time only, with an estimated quantity of _____ pounds

SECTION 4: WASTE GENERATOR CERTIFICATION

"I certify under penalty of law (§455B.417.1(c), Code of Iowa) that I have examined and am familiar with the information submitted in this document concerning hazardous waste, and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete."

Applicant Signature:



Date: 10-1-2026

Printed Name: Mikel Johnson

Title: Director of Operations

See Landfill Information on the following page.

SECTION 5: LANDFILL INFORMATION

The following section is to be completed by the receiving landfill. By signing below, the landfill verifies that the application has been examined and if approved by the department, is willing to accept the waste described within, provided that instructions for disposal of the waste, as contained in the landfill's Special Waste Acceptance Criteria, are followed by the generator.

Prior review of this application by the receiving landfill will allow the department to more quickly process and evaluate the application. Please address the following:

Indicate the properties that lead you to believe this is a special waste:

It was a previously approved special waste.

Indicate any special handling procedures that the waste generator must follow prior to delivery at the landfill:

Make sure loads are covered.

Name of Responsible Official*: Clint Reents
**SWA approvals will be sent to this person at the address given below.*

Solid Waste Agency Name RIWMA

Mailing Address 20488 M AVE

City Eldora State IA Zip Code 50627

Telephone # 641-858-5904 Email Address director@riwma.com

Responsible Official Signature: *Clint Reents* Date: 10/17/26

EVIDENCE OF PROCESS KNOWLEDGE

Unverferth has several sources that utilize methyl ethyl ketone (MEK) in our painting process applications. These sources include paint, strippable booth coatings and MEK (solvent flushing).

Paints

Unverferth applies a 2-component primer and catalyst and 2-component paints (topcoats) and catalyst to our product line in all 3 paint booths. We also apply a graphite coating to our products in 2 of our paint booths. Unverferth has recently changed paint suppliers, and our new paint formulation contains MEK in our primer only (see attached SDSs).

When applying our 2-component primer, 2-component paints and graphite coatings to our products, the paint booths down draft exhaust system removes the fumes/vapors generated in the paint booths through the exhaust stacks, therefore, drawing the solvents (e.g., MEK, xylene, ethylbenzene) of the 2-component primer, paints and graphite coating into the filters when being applied to our products inside the paint booths. The primer, paints, catalysts and graphite coating are never sprayed directly into the filters of our down draft paint booths.

Strippable Booth Coatings

Unverferth continues to use a white strippable booth coating (solvent based), which contains MEK, as well as a water based white strippable booth coating, to coat the inside walls of the paint booths. The purpose of the white strippable booth coating is to aid in cleaning the walls of the paint booths when they build up w/ paint. Both white strippable booth coatings are applied with a paint gun to the walls and allowed to dry. Once dried, we begin painting our products. After several months of painting in each booth, the paint booth will then need to be cleaned. At that time, we then remove the combination of dried paint and white strippable booth coating off the walls of the paint booths and dispose of accordingly and reapply the white strippable booth coating.

Unverferth also uses a clear booth coating (solvent based), which contains toluene, as well as a water based clear booth coating, to coat the cover on the lights which are on the inside of the paint booths. The purpose of the clear strippable booth coating is to aid in cleaning the covers on the lights as they also build up w/ paint as well. The clear booth coating is also applied with a paint gun to the lights in the paint booths daily.

When the white and clear strippable booth coatings are applied, the exhaust/ventilation system is turned on to aid in the removal/venting the fumes/vapors generated in the paint booths, therefore, potentially drawing MEK and toluene into the filters from the down draft exhaust system when being applied inside the paint booths. The white strippable booth coating and clear booth coating are never sprayed directly into the filters of our down draft paint booths.

MEK Used for Solvent Flushing Paint Guns and Paint Lines

The paint gun(s) and paint line(s) used in our 3 paint booths are flushed and cleaned with MEK at least once per shift or between each color change. The 2-component primer and catalyst are typically flushed once per shift whereas the 2-component paints and catalyst are flushed at least once per shift or between color changes (could be multiple times per shift).

Between color changes, for example, after applying the 2-component paint and catalyst, the paint line(s) and paint gun(s) are flushed with MEK 1st and then the paint line(s) and paint gun(s) are filled with the next 2-component topcoat.

Between each flushing, the 2-component primer and catalyst, paint and MEK are flushed into a lidded, 5-gallon bucket inside 2 of our 3 paint booths. When approximately $\frac{1}{2}$ to $\frac{3}{4}$ full, each bucket is then emptied into a 55-gallon drum (hazardous waste drum) located outside the booth. When flushing the 2-component primer/catalyst and paint and MEK in the 3rd paint booth, the MEK and paints are flushed directly into a 55-gallon drum (hazardous waste drum) that is located on the outside of the paint booth. Therefore, when flushing our paint lines and paint guns, MEK, as well as the paints in the paint lines, are never directly sprayed into the paint filters of the paint booths. They are captured inside a bucket or drum.

Greg Steinecker
Environmental/Safety Specialist



1 Identification

- **Product identifier**
- **Trade name:** Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow
- **Article number:** 830Y060
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Baril Coatings USA
401 Growth Parkway
Angola, IN 46703
- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +1 (260) 665-8431

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger

Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

(Contd. of page 1)

· **Hazard-determining components of labeling:**Quartz (SiO₂)reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Solvent naphtha (petroleum), light arom.

titanium dioxide

· **Hazard statements**

Flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

· **Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

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

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

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

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO₂, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 3

Reactivity = 0

· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

US

(Contd. on page 3)

Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

(Contd. of page 2)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Hazardous substances listed below.

· **Dangerous components:**

1330-20-7	xylene	14.01%
7727-43-7	barium sulphate, natural	11.93%
14808-60-7	Quartz (SiO ₂)	9.49%
13463-67-7	titanium dioxide	7.58%
110-43-0	Methyl n-amyl ketone	6.89%
78-93-3	butanone	2.36%
108-10-1	4-methylpentan-2-one	1.18%
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	1.0%
100-41-4	ethylbenzene	0.24%
64742-95-6	Solvent naphtha (petroleum), light arom.	0.21%

4 First-aid measures

- **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.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **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:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

US

(Contd. on page 4)

Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

(Contd. of page 3)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

- **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.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

25036-25-3	Diglycidyl ether of bisphenol A	12 mg/m ³
1330-20-7	xylene	130 ppm
7727-43-7	barium sulphate, natural	15 mg/m ³
14808-60-7	Quartz (SiO ₂)	0.075 mg/m ³
13463-67-7	titanium dioxide	30 mg/m ³
110-43-0	Methyl n-amyl ketone	150 ppm
7779-90-0	trizinc bis(orthophosphate)	12 mg/m ³
1314-13-2	zinc oxide	10 mg/m ³
78-93-3	butanone	200 ppm
108-10-1	4-methylpentan-2-one	75 ppm
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	90 mg/m ³
1344-28-1	aluminium oxide	15 mg/m ³
78-92-2	butanol	150 ppm
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	9.3 mg/m ³
108-38-3	m-xylene	130 ppm
100-41-4	ethylbenzene	33 ppm
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
1314-23-4	zirconium dioxide	14 mg/m ³

- **PAC-2:**

25036-25-3	Diglycidyl ether of bisphenol A	130 mg/m ³
1330-20-7	xylene	920* ppm
7727-43-7	barium sulphate, natural	170 mg/m ³
14808-60-7	Quartz (SiO ₂)	33 mg/m ³
13463-67-7	titanium dioxide	330 mg/m ³
110-43-0	Methyl n-amyl ketone	670 ppm
7779-90-0	trizinc bis(orthophosphate)	36 mg/m ³
1314-13-2	zinc oxide	15 mg/m ³
78-93-3	butanone	2700* ppm

(Contd. on page 5)

Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

(Contd. of page 4)

108-10-1	4-methylpentan-2-one	500 ppm
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	990 mg/m ³
1344-28-1	aluminium oxide	170 mg/m ³
78-92-2	butanol	220 ppm
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	100 mg/m ³
108-38-3	m-xylene	920 ppm
100-41-4	ethylbenzene	1100* ppm
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
1314-23-4	zirconium dioxide	110 mg/m ³

PAC-3:

25036-25-3	Diglycidyl ether of bisphenol A	790 mg/m ³
1330-20-7	xylene	2500* ppm
7727-43-7	barium sulphate, natural	990 mg/m ³
14808-60-7	Quartz (SiO ₂)	200 mg/m ³
13463-67-7	titanium dioxide	2,000 mg/m ³
110-43-0	Methyl n-amyl ketone	4000* ppm
7779-90-0	trizinc bis(orthophosphate)	220 mg/m ³
1314-13-2	zinc oxide	2,500 mg/m ³
78-93-3	butanone	4000* ppm
108-10-1	4-methylpentan-2-one	3000* ppm
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	5,900 mg/m ³
1344-28-1	aluminium oxide	990 mg/m ³
78-92-2	butanol	10000** ppm
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	230 mg/m ³
108-38-3	m-xylene	2500* ppm
100-41-4	ethylbenzene	1800* ppm
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
1314-23-4	zirconium dioxide	680 mg/m ³

7 Handling and storage**Handling:****Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** Keep receptacle tightly sealed.

(Contd. on page 6)

Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

(Contd. of page 5)

· **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.· **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.

1330-20-7 xylene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm BEI

7727-43-7 barium sulphate, natural

PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 5* mg/m ³ *inhalable fraction; E

14808-60-7 Quartz (SiO₂)

PEL	Long-term value: 0.05* mg/m ³ *resp. dust; 30mg/m ³ /%SiO ₂ +2
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction

110-43-0 Methyl n-amyl ketone

PEL	Long-term value: 465 mg/m ³ , 100 ppm
REL	Long-term value: 465 mg/m ³ , 100 ppm
TLV	Long-term value: 233 mg/m ³ , 50 ppm

78-93-3 butanone

PEL	Long-term value: 590 mg/m ³ , 200 ppm
REL	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
TLV	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm BEI

108-10-1 4-methylpentan-2-one

PEL	Long-term value: 410 mg/m ³ , 100 ppm
REL	Short-term value: 300 mg/m ³ , 75 ppm Long-term value: 205 mg/m ³ , 50 ppm
TLV	Short-term value: 307 mg/m ³ , 75 ppm Long-term value: 82 mg/m ³ , 20 ppm BEI

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Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

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100-41-4 ethylbenzene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Long-term value: 87 mg/m ³ , 20 ppm BEI

· **Ingredients with biological limit values:****1330-20-7 xylene**

BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
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78-93-3 butanone

BEI	2 mg/L Medium: urine Time: end of shift Parameter: MEK
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108-10-1 4-methylpentan-2-one

BEI	1 mg/L Medium: urine Time: end of shift Parameter: MIBK
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100-41-4 ethylbenzene

BEI	0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)
-	Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative)

· **Additional information:** The lists that were valid during the creation were used as basis.· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 8)

Trade name: Steelkote 830 Fast Dry High Solids Epoxy Primer Yellow

(Contd. of page 7)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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:**



Tightly sealed goggles

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Yellow
Odor:	Solvent-like
Odor threshold:	Not determined.

· pH-value:	Not determined.
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- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	137-143 °C (278.6-289.4 °F)

· Flash point:	30 °C (86 °F)
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· Flammability (solid, gaseous):	Not applicable.
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· Ignition temperature:	500 °C (932 °F)
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· Decomposition temperature:	Not determined.
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· Auto igniting:	Product is not selfigniting.
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· Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
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- **Explosion limits:**

Lower:	1.1 Vol %
Upper:	7 Vol %

· Vapor pressure at 20 °C (68 °F):	6.7-8.2 hPa (5-6.2 mm Hg)
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· Density at 20 °C (68 °F):	1.54 g/cm ³ (12.85 lbs/gal)
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· Relative density	Not determined.
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· Vapor density	Not determined.
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· Evaporation rate	Not determined.
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- | | |
|---|--|
| · Solubility in / Miscibility with Water: | Miscible |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 26.4 % |
| VOC content: | 26.37 % |
| | 404.8 g/l / 3.38 lb/gal |
| · Solids content: | 71.9 % (by weight) 51.58 % (by volume) |
| · Other information: | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

1330-20-7 xylene

Oral	LD50	4,300 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)

7779-90-0 trizinc bis(orthophosphate)

Oral	LD50	>5,000 mg/kg (rat)
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1314-13-2 zinc oxide

Oral	LD50	>5,000 mg/kg (rat)
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64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6,800 mg/kg (rat)
Dermal	LD50	>3,400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

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Harmful
Irritant
Carcinogenic.
The product can cause inheritable damage.

· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

1330-20-7	xylene	3
14808-60-7	Quartz (SiO ₂)	1
13463-67-7	titanium dioxide	2B
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	3
108-10-1	4-methylpentan-2-one	2B
108-38-3	m-xylene	3
106-42-3	p-xylene	3
100-41-4	ethylbenzene	2B
95-47-6	o-xylene	3

· **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO ₂)	K
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

14 Transport information

· UN-Number	UN1263
· DOT, IMDG, IATA	
· UN proper shipping name	Paint
· DOT	PAINT (trizinc bis(orthophosphate), zinc oxide), MARINE POLLUTANT
· IMDG	
· IATA	PAINT
· Transport hazard class(es)	
· DOT	
	
· Class	3 Flammable liquids
· Label	3
· IMDG	
 	
· Class	3 Flammable liquids
· Label	3
· IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, IMDG, IATA	III
· Environmental hazards:	Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
· Marine pollutant:	Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E, S-E
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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US

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· **Transport/Additional information:**· **DOT**· **Quantity limitations**

On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

· **IMDG**· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**UN 1263 PAINT, 3, III, ENVIRONMENTALLY
HAZARDOUS**15 Regulatory information**· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

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

1330-20-7 xylene

7727-43-7 barium sulphate, natural

7779-90-0 trizinc bis(orthophosphate)

1314-13-2 zinc oxide

108-10-1 4-methylpentan-2-one

1344-28-1 aluminium oxide

78-92-2 butanol

108-38-3 m-xylene

106-42-3 p-xylene

100-41-4 ethylbenzene

95-47-6 o-xylene

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**· **Chemicals known to cause cancer:**14808-60-7 Quartz (SiO₂)

13463-67-7 titanium dioxide

108-10-1 4-methylpentan-2-one

100-41-4 ethylbenzene

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

108-10-1 4-methylpentan-2-one

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· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

1330-20-7	xylene	I
7727-43-7	barium sulphate, natural	D, CBD(inh), NL(oral)
7779-90-0	trizinc bis(orthophosphate)	D, I, II
1314-13-2	zinc oxide	D, I, II
78-93-3	butanone	I
108-10-1	4-methylpentan-2-one	I
108-38-3	m-xylene	I
106-42-3	p-xylene	I
100-41-4	ethylbenzene	D
95-47-6	o-xylene	I

· **TLV (Threshold Limit Value established by ACGIH)**

1330-20-7	xylene	A4
14808-60-7	Quartz (SiO ₂)	A2
13463-67-7	titanium dioxide	A4
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)	A4
1344-28-1	aluminium oxide	A4
108-38-3	m-xylene	A4
106-42-3	p-xylene	A4
100-41-4	ethylbenzene	A3
95-47-6	o-xylene	A4
1314-23-4	zirconium dioxide	A4

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

14808-60-7	Quartz (SiO ₂)
13463-67-7	titanium dioxide

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

Quartz (SiO₂)

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Solvent naphtha (petroleum), light arom.

titanium dioxide

· **Hazard statements**

Flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

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Precautionary statements

If medical advice is needed, have product container or label at hand.
 Keep out of reach of children.
 Read label before use.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Keep container tightly closed.
 Ground/bond container and receiving equipment.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If exposed or concerned: Get medical advice/attention.
 Specific treatment (see on this label).
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 In case of fire: Use for extinction: CO2, powder or water spray.
 Store in a well-ventilated place. Keep cool.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Environment protection department.**Contact:** Mr. Williams**Date of preparation / last revision** 01/10/2025 / -**Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 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)
 VOC: Volatile Organic Compounds (USA, EU)
 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 & Health
 TLV: Threshold Limit Value

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PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEL: Biological Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 1B: Germ cell mutagenicity – Category 1B
Carc. 1A: Carcinogenicity – Category 1A

US