



SAFETY DATA SHEET

Floor Finish Concentrate

Section 1. Identification

GHS product identifier : Floor Finish Concentrate
Other means of identification : ST-0716
CHEM-4600
Product type : Liquid.

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

Product use : Acrylic finish for floors
Area of application : Industrial applications, Professional applications.

Product dilution information : 50 ounces (1.48 L) of concentrate plus 78 ounces of water (2.30 L) make 1 gallon (3.78 L)

Supplier/Manufacturer : **STEARNS PACKAGING CORPORATION**
4200 Sycamore Avenue (53714)
PO Box 3216
Madison, WI 53704-0216
Telephone no.: 800-655-5008
Fax no.: 608-246-5149
Website: www.stearnspkg.com

e-mail address of person responsible for this SDS : stearns@stearnspkg.com

Emergency telephone number (with hours of operation) : CHEM-TEL : 800-255-3924

Section 2. Hazards identification

	Product as SOLD	Product AT USE DILUTION
Physical hazards	: Not classified.	Not classified.
Health hazards	: Not classified.	Not classified.
Environmental hazards	: Not classified.	Not classified.
OSHA defined hazards	: Not classified.	Not classified.
<u>Label elements</u>		
Hazard symbol	: None	None
Signal word	: None	None
Hazard statements	: The mixture does not meet the criteria for classification.	The mixture does not meet the criteria for classification.
<u>Precautionary statements</u>		
General	: Keep out of the reach of children.	Keep out of the reach of children.
Prevention	: Observe good industrial hygiene practices.	Observe good industrial hygiene practices.
Response	: Wash hands after handling.	Rinse hands after handling.
Storage	: Store away from incompatible materials.	No storage precautions necessary.
Disposal	: Dispose of waste and residues in accordance with local authority requirements.	Dispose of solution down the drain to municipal sewer.
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.	Not applicable.
Supplemental information	: Not applicable.	Not applicable.

Section 3. Composition/information on ingredients

Chemical name	CAS No.	Weight %*
Styrene acrylic copolymer	Proprietary	10-30
2-(2-ethoxyethoxy)ethanol	111-90-0	3-7
Tributoxyethyl phosphate	78-51-3	1-5
Zinc oxide	1314-13-2	0.1-1
Ammonia	7664-41-7	0.1-1

*The exact percentage (concentration) of composition has been withheld as a trade

This material is not considered to be hazardous according to regulatory guidelines (see Section 15 of the SDS).

Section 4. First aid measures

	Product as SOLD	Product AT USE DILUTION
Inhalation	: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.	No special measures required. Treat symptomatically.
Skin contact	: If irritation occurs, flush exposed area with water. Get medical attention if irritation develops and persists.	No known effect after skin contact. Rinse with water for a few minutes.
Eye contact	: Rinse with water. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.	No known effect after eye contact. Rinse with water for a few minutes. If irritation persists, get medical attention.
Ingestion	: Rinse mouth. DO NOT INDUCE VOMITING. If ingestion of a large amount does occur, call a poison control center immediately.	Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	: Direct contact with eyes may cause temporary irritation.	No known effects.
Indication of immediate medical attention and special treatment needed	: Treat symptomatically.	Treat symptomatically.
General information	: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.	No special measures required.

Section 5. Fire-fighting measures

Suitable extinguishing media	: Treat for surrounding material.
Unsuitable extinguishing media	: Not available.
Specific hazards arising from the chemical	: During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	: Move containers from fire area if you can do so without risk.
Specific methods	: Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	: No unusual fire or explosion hazards noted.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Product as SOLD

: Keep out of low areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

: This product is miscible in water. Stop the flow of material, if this is without risk.

Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

: Avoid discharge into storm water drains, water courses or onto the ground.

Product AT USE DILUTION

Use personal protective equipment as required.

Avoid contact of large amounts of spilled material and run off with soil and surface waterways.

Use a water rinse for final clean-up.

Large Spills: Flush area with water. Prevent entry into waterways.

Small Spills: Wipe up with absorbent material.

Discharge collected material per Section 13 of the SDS.

Avoid discharge into storm water drains, water courses, or onto the ground.

Section 7. Handling and storage

Precautions for safe handling

: Use care in handling/storage.

Conditions for safe storage, including any incompatibilities

: Keep out of reach of children. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Product AT USE DILUTION

Wash hands thoroughly after handling.

Keep out of reach of children.

Section 8. Exposure controls/personal protection

Occupational exposure limits

Product as SOLD

Product AT USE DILUTION

No exposure limits noted for ingredient(s).

Exposure Guidelines		Exposure guidelines noted for ingredient(s).	
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc oxide 1314-13-2	STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume (vacated)	IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume
Ammonia 7664-41-7	STEL: 35 ppm TWA: 25 ppm	TWA: 50 ppm TWA: 35 mg/m ³ (vacated) STEL: 35 ppm (vacated) STEL: 27 mg/m ³	IDLH: 300 ppm TWA: 25 ppm TWA: 18 mg/m ³ STEL: 35 ppm STEL: 27 mg/m ³
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Section 8. Exposure controls/personal protection

	Product as SOLD	Product AT USE DILUTION
Appropriate engineering controls	: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.	Good general ventilation should be used.
Individual protection measures, such as personal protective equipment		
Eye/face protection	: Safety glasses if eye contact is possible.	No protective equipment is needed under normal conditions.
Skin protection		
Hand protection	: Not normally needed.	No protective equipment is needed under normal conditions.
Other	: As required by employer code.	No protective equipment is needed under normal conditions.
Respiratory protection	: No personal respiratory protective equipment normally required.	No protective equipment is needed under normal conditions.
Thermal hazards	: Wear appropriate thermal protective clothing, when necessary.	No protective equipment is needed under normal conditions.
General hygiene considerations	: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9. Physical and chemical properties

	Product as SOLD	Product AT USE DILUTION
Appearance	: Opaque	Opaque
Physical state	: Liquid.	Liquid.
Form	: Liquid.	Liquid.
Color	: Off-white	Off-white
Odor	: Mild ammonia	Mild ammonia
Odor threshold	: Not available.	Not available.
pH	: 8.0-9.0	7.5-8.5
Melting point	: Not available.	Not available.
Initial boiling point and boiling range	: 212 °F (100 °C)	212 °F (100 °C)
Pour point	: Not available.	Not available.
Specific gravity	: Not available.	Not available.
Flash point	: None	None
Evaporation rate	: Not available.	Not available.
Flammability (solid, gas)	: Not applicable.	Not applicable.
Lower and upper explosive (flammable) limits	: Not available.	Not available.
Vapor pressure	: <0.013 kPa (<0.1 mm Hg)	<0.013 kPa (<0.1 mm Hg)

Section 9. Physical and chemical properties

	Product as SOLD	Product AT USE DILUTION
Vapor density	: Not available.	Not available.
Relative density	: 1.054	Not available
Solubility	: Complete	Complete
Auto-ignition temperature	: Not available.	Not available.
Decomposition temperature	: Not available.	Not available.
Viscosity	: <100 mPa·s (<100 cP)	<100 mPa·s (<100 cP)
Other information		
Bulk density	: 8.79 lbs/gallon	Not available
VOC Content (%)	6.10247	Not available

Section 10. Stability and reactivity

	Product as SOLD
Reactivity	: None known.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Material is stable under normal conditions.
Conditions to avoid	: Do not mix with other chemicals. Keep from freezing.
Incompatible materials	: Strong oxidizing agents.
Hazardous decomposition products	: No hazardous decomposition products are known.

Section 11. Toxicological information

Information on the likely routes of exposure

	Product as SOLD	Product AT USE DILUTION
Ingestion	: Expected to be a low ingestion hazard.	Expected to be a low ingestion hazard.
Inhalation	: No adverse effects due to inhalation are expected.	No adverse effects due to inhalation are expected.
Skin contact	: No adverse effects due to skin contact are expected.	No adverse effects due to skin contact are expected.
Eye contact	: Direct contact with eyes may cause temporary irritation.	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	: Direct contact with eyes may cause temporary irritation	Direct contact with eyes may cause temporary irritation.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-ethoxyethoxy)ethanol 111-90-0	= 1920 mg/kg (Rat)	= 4200 µL/kg (Rabbit) = 6 mL/kg (Rat)	> 5240 mg/m ³ (Rat) 4 h
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h

Information on toxicological effects

	Product as SOLD	Product AT USE DILUTION
Acute toxicity	: Not available.	Not available.
Skin corrosion/irritation	: Prolonged skin contact may cause temporary irritation.	No known significant effects or critical hazards.
Exposure minutes	: Not available.	Not available.
Erythema value	: Not available.	Not available.
Oedema value	: Not available.	Not available.

Section 11. Toxicological information

	Product as SOLD	Product AT USE DILUTION
Serious eye damage/eye irritation	: Direct contact with eyes may cause temporary irritation.	No known significant effects or critical hazards.
Corneal opacity value	: Not available.	Not available.
Iris lesion value	: Not available.	Not available.
Conjunctival reddening value	: Not available.	Not available.
Conjunctival oedema value	: Not available.	Not available.
Recover days	: Not available.	Not available.
Respiratory or skin sensitization	: Direct contact with eyes may cause temporary irritation.	No known significant effects or critical hazards.
Respiratory sensitization	: Not available.	Not available.
Skin sensitization	: This product is not expected to cause skin sensitization.	No known significant effects or critical hazards.
Germ cell mutagenicity	: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	No known significant effects or critical hazards.
Carcinogenicity	: The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.	No known significant effects or critical hazards.
ACGIH (American Conference of Governmental Industrial Hygienists) A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present		

	Product as SOLD	Product AT USE DILUTION
Reproductive toxicity	: This product is not expected to cause reproductive or developmental effects.	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity -single exposure	: Not classified.	Not classified.
Specific target organ toxicity -repeated exposure	: Not classified.	Not classified.
Aspiration hazard	: Not available.	Not available.
Chronic effects	: Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.	Not available.
Further information	: 0.916927% of the mixture consists of ingredient(s) of unknown toxicity	This product has no known adverse effect on human health.

Section 12. Ecological information

Ecotoxicity : 34.68746% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

34.68746% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-(2-ethoxyethoxy)ethanol 111-90-0	-	10000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 19100 - 23900: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 11400 - 15700: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 11600 - 16700: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 13400: 96 h <i>Salmo gairdneri</i> mg/L LC50 flow-through	3940 - 4670: 48 h <i>Daphnia magna</i> mg/L EC50
Tributoxyethyl Phosphate 78-51-3	-	10.4 - 12.0: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	-
Nonylphenol Ethoxylate 9016-45-9	-	5: 96 h Fish mg/L LC50	-
Ammonia 7664-41-7	-	0.44: 96 h <i>Cyprinus carpio</i> mg/L LC50 0.26 - 4.6: 96 h <i>Lepomis macrochirus</i> mg/L LC50 1.17: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 0.73 - 2.35: 96 h <i>Pimephales promelas</i> mg/L LC50 5.9: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1.5: 96 h <i>Poecilia reticulata</i> mg/L LC50 1.19: 96 h <i>Poecilia reticulata</i> mg/L LC50 static	25.4: 48 h <i>Daphnia magna</i> mg/L LC50
Ethanol 64-17-5	-	12.0 - 16.0: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 13400 - 15100: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	9268 - 14221: 48 h <i>Daphnia magna</i> mg/L LC50 2: 48 h <i>Daphnia magna</i> mg/L EC50 Static 10800: 24 h <i>Daphnia magna</i> mg/L EC50
Methyl Chloro Isothiazolinone 26172-55-4	0.11 - 0.16: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 0.03 - 0.13: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 0.31: 120 h <i>Anabaena flos-aquae</i> mg/L EC50	1.6: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static	4.71: 48 h <i>Daphnia magna</i> mg/L EC50 0.12 - 0.3: 48 h <i>Daphnia magna</i> mg/L EC50 Flow through 0.71 - 0.99: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Magnesium Chloride 7786-30-3	2200: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	1970 - 3880: 96 h <i>Pimephales promelas</i> mg/L LC50 static 4210: 96 h <i>Gambusia affinis</i> mg/L LC50 static	140: 48 h <i>Daphnia magna</i> mg/L EC50 Static 1400: 24 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability : No data is available on the degradability of this product.

Bioaccumulative potential : No data available.

Chemical Name	Partition coefficient
2-(2-ethoxyethoxy)ethanol 111-90-0	-0.8
Tributoxyethyl Phosphate 78-51-3	4.78
Ammonia 7664-41-7	-1.14

Mobility in soil : No data available.

Mobility in general : Not available.

Other adverse effects : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13. Disposal considerations

	Product as SOLD	Product AT USE DILUTION
Disposal instructions	: Collect and reclaim or dispose in sealed containers at licensed waste disposal site.	Diluted product can be flushed to sanitary sewer. Discard empty container in trash.
Local disposal regulations	: Dispose in accordance with all applicable regulations.	
Hazardous waste code	: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
Waste from residues / unused products	: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).	
Contaminated packaging	: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.	

Chemical Name	California Hazardous Waste Status
Zinc oxide 1314-13-2	Toxic

Section 14. Transport information

Product as SOLD

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	Cleaning Compounds, NOI, liquid	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Product AT USE DILUTION

Not intended for transport

Section 15. Regulatory information

US Federal Regulations	Product as SOLD	Product AT USE DILUTION
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	: Not regulated.	Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	: Not listed.	Not listed.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	: Not listed.	Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 15. Regulatory information

Hazard categories : Immediate Hazard - No
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance : No

SARA 311/312 Hazardous chemical : No

SARA 313 (TRI reporting) :

Product AT USE DILUTION

Non-hazardous.

Not listed.

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name
 2-(2-ethoxyethoxy)ethanol - 111-90-0

SARA 313 - Threshold Values %
 1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc oxide 1314-13-2	-	X	-	-
Ammonia 7664-41-7	100 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonia 7664-41-7	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

US State RegulationsCalifornia Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Ethanol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-(2-ethoxyethoxy)ethanol 111-90-0	X	-	X
Ammonia 7664-41-7	X	X	X
Ethanol 64-17-5	X	X	X
Magnesium Nitrate 10377-60-3	X	X	X

Other federal regulations

Clean Air Act (CAA)
Section 112 Hazardous Air
Pollutants (HAPs) List

Product as SOLD

: Not regulated.

Clean Air Act (CAA)
Section 112(r) Accidental
Release Prevention
(40 CFR 68.130)

: Not regulated.

Safe Drinking Water Act
(SDWA)

: Not regulated.

Food and Drug
Administration (FDA)

: Not regulated.

US State regulations

US - California Proposition
65 - Carcinogens &
Reproductive Toxicity
(CRT): Listed substance

: See above.

US. Massachusetts RTK -
Substance List

: See above

US. Pennsylvania RTK -
Hazardous Substances

: See above.

US. Rhode Island RTK

: Not regulated.

Country(s) or region

United States & Puerto Rico

Inventory name

Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

Product AT USE DILUTION

Not regulated.

Not regulated.

Not regulated.

Not regulated.

See above

See above

See above

Not regulated.

On inventory (yes/no)*

Yes

Section 16. Other information

Product as SOLD

Hazardous Material Information System (U.S.A.)

Health	1
Flammability	0
Physical hazards	0

National Fire Protection Association (U.S.A.)

Health  Flammability
Instability/Reactivity
Special

Product AT USE DILUTION

Hazardous Material Information System (U.S.A.)

Health	0
Flammability	0
Physical hazards	0

Health  Flammability
Instability/Reactivity
Special

MSDS File Name

: CHEM-4600 FLOOR FINISH SDS

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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