SECTION I: IDENTIFICATION

1.1 Product Identifier

Product Name: Lonseal #400 Contact Adhesive

Product Code(s): ZAD4001, ZAD40055

1.2 Relevant Identified Uses and Uses Advised Against

Product Use: Sheet vinyl flooring adhesive (see Technical Data Sheet for additional details)
Product Restrictions: For use with sheet vinyl flooring only (see Technical Data Sheet for additional details)

1.3 Details of the Supplier of the Safety Data Sheet

Manufactured for: Lonseal, Inc.

Address: 928 E. 238th Street

Carson, CA 90745 (310) 830-7111

24 Hour Emergency Phone Number(s): INFOTRAC - U.S. & Canada: 1-800-535-5053

International: 1-352-353-3500

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the Substance or Mixture

Flammable Liquids, Category 2: H225 Highly flammable liquid and vapor.

Acute Toxicity, Category 4: H302 Harmful if swallowed.

Skin Corrosion/Irritation, Category 3: H312 Harmful in contact with skin. Causes mild skin irritation.*
Serious Eye Damage/Irritation, Category 1: H318 Causes serious eye damage.

Skin Sensitizer, Category 1: H317 May cause an allergic skin reaction.

Carcinogenicity, Category 1A: H350 May cause cancer.

STOT SE, Category 3: H336 May cause drowsiness or dizziness.

2.2 Label Elements



Signal Word: DANGER

Hazard Statement(s):

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.
H316 Causes mild skin irritation.*
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.

H350 May cause cancer.

Precautionary Statement(s):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No Smoking.

P235 Keep cool.

P240 Ground and bond container and receiving equipment.

P241 Use explosion proof equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.

P262 Do not get in eyes, on skin, or on clothing.
P264 Wash skin thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.



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P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves, eye protection, and face protection.

Response Statement(s):

P301+P310 IF SWALLOWED: Immediately call POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see information on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
Remove person to fresh air and keep comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use dry chemical, foam, or water fog to extinguish.

Storage Statement(s):

P403+P233 Store in a well-ventilated space. Keep container tightly closed.

P405 Store locked up.

Disposal Statement(s):

P501 Dispose of contents/container in accordance with local/national regulations.

2.3 Other Hazards

None noted by manufacturer.

*Not adopted by US OSHA

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations:

Ingredient/Chemical Name	CAS Number	Weight %	Classification*
Acetone ^{1,2}	67-64-1	50 - 75	Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H336
Butadiene-acrylonitrile copolymer ¹	9003-18-3	10 - 25	Not classified
Chlorinated paraffin c22-30 ¹	63449-39-8	1.0 - 10	Not classified
Formaldehyde, polymer with 4-(1,1-dimethylethyl)ph ¹	25085-50-1	1.0 - 10	Not classified
Formaldehyde, polymer with ammonia ¹	55185-45-0	1.0 - 10	Not classified
Salicylic acid ¹	69-72-7	1.0 - 10	Acute Tox. 4: H302 Eye Dam. 1: H318
Zinc oxide ^{1,2}	1314-13-2	1.0 - 10	Aquatic Acute 1: H400 Aquatic Chronic 1: H410

¹Substance classified with a health or environmental hazard.

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary first-aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Eyes: Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart, and seek medical attention.



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²Substance with a workplace exposure limit.

^{*}The full text of the GHS Hazards Statement may be found in Section 16.

Ingestion: If swallowed obtain immediate medical attention. Do NOT induce vomiting. If vomiting should occur spontaneously, keep victims head below their knees to prevent aspiration into the lungs.

Inhalation: Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Overview:

EFFECTS OF OVEREXPOSURE – EYE CONTACT: Liquid, aerosols, and vapors of this product are irritating and can cause pain, tearing, reddening, and swelling accompanied by a stinging sensation and/or feeling like that of fine dust in the eyes.

EFFECTS OF OVEREXPOSURE - INGESTION CONTACT: This material may be harmful or fatal if swallowed.

EFFECTS OF OVEREXPOSURE – INHALATION CONTACT: Harmful if inhaled. Headaches, dizziness, nausea, decreased blood pressure, changes in heart rate, and cyanosis may result from overexposure to vapor or skin exposure. Breathing saturated vapors for a few minutes may be fatal. Saturated vapors can be encountered in confined spaces and/or under conditions of poor ventilation. Prolonged inhalation may be harmful.

EFFECTS OF OVEREXPOSURE – SKIN CONTACT: Prolonged or repeated skin contact can result in defatting or drying of the skin which may result in skin irritation and dermatitis (rash).

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure may cause lung damage.

Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver, and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness, and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See Section 2 for further details.

Eyes: Causes serious eye irritation. **Ingestion:** Harmful if swallowed.

Inhalation: May cause drowsiness or dizziness.

Skin: Harmful in contact with skin. May cause an allergic skin reaction. Causes a mild skin irritation. (Not adopted by US

OSHA).

Chronic Effects: Moderate CNS depression may be shown by giddiness, headache, dizziness, and nausea. If vomiting occurs, keep head below hips to prevent aspiration of liquid into lungs, which can cause severe lung damage. Aspiration pneumonitis may be evidenced by coughing and cyanosis.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed

No specific information provided by the manufacturer.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

Dry chemical, foam, water fog

5.2 Specific Hazards Arising from the Substance or Mixture

Hazardous Decomposition: Oxides of carbon and nitrogen, low molecular weight hydrocarbons, and organic acids.

See Section 2 Precautionary Statement(s).

5.3 Special Protective Actions for Fire-Fighters

Volatile solvent constituent can readily form explosive or flammable mixtures in air. Vapors can flow along surfaces to distant ignition sources and flash back.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from firefighting to enter drains or water ways.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

Put on appropriate personal protective equipment. See Section 8.

Remove sources of ignition. Do not turn lights or unprotected electrical equipment on or off. In case of major spill or spillage in a confined space, evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2 Environmental Precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using the toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3 Methods and Materials for Containment and Cleaning Up

Handle as a flammable liquid. Remove all ignition sources. Soak up wet material on a non-combustible absorbent and placed in a closed metal container.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Store in cool, well-ventilated area away from any ignition sources and strong oxidizing agents. Keep containers tightly closed when not in use. Do not transfer to plastic containers.

Store in accordance with National Fire Prevention Association's publication NFPA 30, Flammable and Combustible Liquids. Code 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

See Section 2 Precautionary Statement(s).

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Ground and bond metal containers when dispensing. No smoking in areas of use or storage. Use only non-sparking tools near wet adhesive or solvent vapors. Solvent vapor is much heavier than air and can collect in dangerous concentrations in floor drains or low areas.

See Section 2 Storage Statement(s).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Exposure (Only components with established OEL are shown)

Component	Source	STEL	TWA
Acetone	ACGIH	500 ppm (skin)	250 ppm
	NIOSH	-	250 ppm (590 mg/m³)
	OSHA	2400 mg/m ³	1000 ppm (2400 mg/m³)
Zinc oxide	ACGIH	10 mg/m³ (A1, 1, Revised 2003)	2 mg/m³
	OSHA	-	5 mg/m³ (fume); 15 mg/m³ (total dust); 5 mg/m³ (resp. dust)
C!			- 5/ (

Carcinogen Data

Component	Source	Value
Acetone	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
	NTP	Known: No; Suspected: No
	OSHA	Select Carcinogen: No
Butadiene-acrylonitrile copolymer	IARC NTP	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No Known: No; Suspected: No



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	OSHA	Select Carcinogen: No
Chlorinated paraffin c22-30	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
	NTP	Known: No; Suspected: Yes
	OSHA	Select Carcinogen: No
Formaldehyde, polymer with 4-	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
(1,1-dimethylethyl)ph	NTP	Known: No; Suspected: No
	OSHA	Select Carcinogen: No
Formaldehyde, polymer with ammonia	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
	NTP	Known: No; Suspected: No
	OSHA	Select Carcinogen: No
Salicylic acid	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
	NTP	Known: No; Suspected: No
	OSHA	Select Carcinogen: No
Zinc oxide	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No
	NTP	Known: No; Suspected: No
	OSHA	Select Carcinogen: No

8.2 Appropriate Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits, suitable respiratory protection must be worn.

8.3 Appropriate Protection Measures, Including Personal Protective Equipment

Eye Protection: Safety glasses or chemical goggles should be worn.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guidelines. Use an approved, full-face, supplied air respirator or a NIOSH approved positive pressure, self-contained breathing apparatus if these levels are exceeded. **Skin Protection:** Overalls which cover the body, arms, and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. Use neoprene, vinyl, or natural rubber gloves.

Other Work Practices: Eye wash fountain or bottles. Solvent insoluble barrier hand cream. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using the toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See Section 2 Precautionary Statement(s).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Tan, Red, or Pink

Odor: Sweet pungent smell of acetone

Melting Point/Freezing Point:Not measuredBoiling Point [or Initial Boiling Point and Range]:56.1 °C (133 °F)Flammability:Not applicable

Lower Explosion Limit: 2.2% Upper Explosion Limit: 13.0%

Flash Point: -20 °C (-4 °F) [TCC]

Auto-Ignition Temperature:Not measuredDecomposition Temperature:Not measured



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pH: Not measured

Kinematic Viscosity: Not measured

Solubility (in water): Nil

Partition Coefficient (n-octanol/water):Not measuredVapor Pressure:Not measuredDensity [or Relative Density]:Not noted by mfg.Relative Vapor Density:Heavier than airParticle Characteristics:Not noted by mfg.Odor Threshold:Not measuredEvaporation Rate (Ether = 1):Slower than ether

Specific Gravity ($H_20 = 1$): 0.9

VOC %: Not applicable

SECTION IO: STABILITY AND REACTIVITY

10.1 Reactivity

Hazardous polymerization will not occur.

10.2 Chemical Stability

Stable under normal circumstances.

10.3 Possibility of Hazardous Reactions

No data available.

10.4 Conditions to Avoid

Avoid contact with open flame, sparks, or hot surfaces.

10.5 Incompatible Materials

Avoid contact with strong acids or bases. Contact with strong oxidizers may cause fire and explosion.

10.6 Hazardous Decomposition Products

Oxides of carbon and nitrogen, low molecular weight hydrocarbons, and organic acids.

SECTION II: TOXICOLOGICAL INFORMATION

Acute Toxicity: Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver, and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness, and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the kin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Only components with provided data are shown.

Acetone a) acute toxicity LD50 Inhalation, Rat = 76.00 mg/L/4h

LD50 Oral, Rat, Category: 4 = 2000.00 mg/kg

LD50 Skin, Rabbit, Category: 4 = 2000.00 mg/kg

Chlorinated paraffin c22-30 a) acute toxicity LD50 Oral, Rat = 11700.00 mg/kg

Salicylic acid a) acute toxicity LD50 Oral, Rat, Category: 4 = 891.00 mg/kg

LD50 Skin, Rabbit = 10000.00 mg/kg

Zinc oxide a) acute toxicity LD50 Oral, Rat, Category: 5 = 5000.00 mg/kg

LD50, Inhalation: Dust/Mist, Mouse,

Category: 4 = 2.50 mg/kg



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Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	4	Harmful in contact with skin.
Acute toxicity (inhalation)	-	Not applicable
Skin corrosion/irritation	3	Causes mild skin irritation. (Not adopted by US OSHA)
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	-	Not applicable
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	-	Not applicable
Carcinogenicity	1A	May cause cancer.
Reproductive toxicity	-	Not applicable
STOT-single exposure	3	May cause drowsiness or dizziness.
STOT-repeated exposure	-	Not applicable
Aspiration hazard	-	Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic life.

Aquatic Ecotoxicity (only components with mfg. provided data are shown)

Component	LC50	EC50	ErC50
	fish	daphnia	Algae
	(96h)	(48h)	(72h)
Acetone	P. promelas	D. magna	U. pertusa
	100.00 mg/L	10.00 mg/L	20.565 mg/L
Chlorinated paraffin c22-30	L. macrochirus 300.00 mg/L	D. magna 102.00 mg/L	Not available
Salicylic acid	L. idus	D. magna	D. subspicatus
	90.00 mg/L	105.00 mg/L	100.00 mg/L
Zinc oxide	O. mykiss	D. magna	P. subcapitata
	1.10 mg/L	0.098 mg/L	0.042 mg/L

12.2 Persistence and Degradability

There is no data available on the preparation itself.

12.3 Bioaccumulative Potential

Not measured.

12.4 Mobility in Soil

No data available.

12.5 Other Adverse Effects

No data available

Results of PBT and vPvB Assessment: This product contains no PBT/vPvB chemicals.



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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Methods

Dispose of in accordance with all applicable federal, state, and local regulations. Consult authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

DOT/ADR IMO/IMDG ICAO/IATA

UN Number: UN1133 UN1133 UN1133

UN Proper Shipping Name:Adhesives, containing a flammable liquid, 3, II
Adhesives, containing a flammable liquid, 3, II
Adhesives, containing a flammable liquid, 3, II

Transport Hazard Class(es): DOT Hazard Class: 3 IMDG: 3 (sub-class: n/a) Air Class: 3

Packing Group: II II II

Environmental Hazards: Marine Pollutant: No **Special Precautions for User:** No further information

SECTION 15: REGULATORY INFORMATION

Regulatory Overview: The regulatory data in Section 15 is not intended to be all-inclusive. Only selected regulations are represented.

Toxic Substance Control Act (TSCA): All components of this material are either listed or exempt from listing in the TSCA Inventory.

WHMIS Classification: B2 D2A E

US EPA Tier II Hazards: Fire: Yes Sudden Release of Pressure: No

Sudden Release of Pressure:

Reactive:

No
Immediate (Acute):

Pelayed (Chronic):

No
Yes
Yes

EPCRA 311/312 Chemicals and RQs (lbs.): EPCRA 302 Extremely Hazardous:Acetone (5,000 lbs.)
Cresol, Phenol

EPCRA 313 Toxic Chemicals: Lead compounds (as Pb), Zinc oxide

Proposition 65 – Carcinogens (>0.0%):Benzene, Butadiene, Cadmium, Ethyl benzene, Formaldehyde,

Lead compounds (as Pb), Propenenitrile, Vinylcyclohexene

Proposition 65 – Developmental Toxins (>0.0%): Benzene, Butadiene, Lead compounds (as Pb)

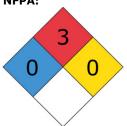
Proposition 65 – Female Reproductive Toxins (>0.0%): Butadiene, Lead compounds (as Pb), Vinylcyclohexene **Proposition 65 – Male Reproductive Toxins (>0.0%):** Benzene, Butadiene, Cadmium, Lead compounds (as Pb)

New Jersey RTK Substances (>1%): Acetone, Zinc oxide Pennsylvania RTK Substances (>1%): Acetone, Zinc oxide

SECTION 16: OTHER INFORMATION

Additional Classification Information:

NFPA:



LONSEAL®

Full Text of GHS Hazard Statements from Section 3: H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Disclaimer: Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. This information relates only to the product designated herein, and does not relate to its use in combination with other materials or in any other process. The manufacturer makes no representations and assumes no liability for any direct, incidental, or consequential damages resulting from its use. The information herein is presented in good faith and based upon data from manufacturers or technical sources, and is believed to be accurate as of the revision date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State, or local laws. Conditions of use are beyond Lonseal's control and therefore users are responsible to verify this data under their own conditions to determine suitability for their purpose. Users of this product must comply with all applicable health and safety laws, regulations, and orders. Users of this product assume all risks of use, handling, and disposal, or from use of the information contained within this document.

General Statements:

Keep out of the reach of children.

For professional or industrial use only.

If you cannot read, or do not understand all directions, cautions, and warnings for this product, DO NOT use.

Abbreviations (may not actually appear within document):

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatief au transport international de marchandises Dangereuses par Route

(European agreement for the international carriage of Dangerous goods by Road)

Asp. Aspiration

ATE Acute Toxicity Estimate

bw Body Weight Carc. Carcinogenicity

CAS Chemical Abstracts Service
CFR Code of Federal Regulations

CLP Classification, Labeling, and Packaging

CMR Carcinogenicity, Mutagenicity, and Toxicity for Reproduction

CNS Central Nervous System

cSt Centistokes d Day(s) Dam. Damage

DIN Deutsches Institut für Normung (German Institute for Standardization)

DNEL Derived No Effect Level
DOT Department of Transportation
EC European Commission

EC0 Effective Concentration for 0% of Test Population
EC10 Effective Concentration for 10% of Test Population
EC50 Effective Concentration for 50% of Test Population
EC90 Effective Concentration for 90% of Test Population
EC100 Effective Concentration for 100% of Test Population

EPA Environmental Protection Agency

EPCRA Emergency Planning and Community Right-to-Know Act ErC50 Effective Concentration for 50% of Test Population

ERG Emergency Response Guidebook

EU European Union Flam. Flammable q Gram(s)

GHS Globally Harmonized System

h Hour(s) Haz. Hazard

HMIS Hazardous Materials Identification System



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hPa Hectopascal(s)

hr. Hour(s)

IARC International Agency for Research on Cancer
IATA International Air Transport Association

IBC Intermediate Bulk Container

ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

IOELV Indicative Occupational Exposure Limit Values

Irrit. Irritation

IUCLID International Uniform Chemical Information Database

kg Kilogram(s)
L Liter(s)
lbs. pounds

LC50 Lethal Concentration for 50% of Test Population LC100 Lethal Concentration for 100% of Test Population

LD50 Lethal Dose for 50% of Test Population

Liq. Liquid

LOEC Lowest Observed Effect Concentration

LTEL Long-Term Exposure Limit

m Meter(s)

MAK Maximale Arbeitsplatz-Konzentrazion (Maximum Workplace Concentration)

MARPOL Maritime Pollution
mfg. Manufacturer
mg Milligram(s)
mL Milliliter(s)
mPa Millipasacal(s)

Muta. Germ Cell Mutagenicity

n/a Not Applicable

NFPA National Fire Protection Association

NIOSH National Institute for Occupational Safety and Health

NOEC
No Observed Effect Concentration
NTP
National Toxicology Program
n.o.s.
Not Otherwise Specified
OEL
Occupational Exposure Limits

OSHA Occupational Safety and Health Administration

Pa Pascal(s)

PBT Persistent Bioaccumulative and Toxic

PEL Permissible Exposure Limit
PNEC Predicted No Effect Concentration
PPE Personal Protective Equipment

ppm Parts Per Million
PVC Polyvinyl Chloride
Repr. Reproductive
Respir. Respiratory

RQ Reportable Quantities
RTK Right-to-Know
SDS Safety Data Sheet
Sens. Sensitization

STEL Short-Term Exposure Limit
STOT Specific Target Organ Toxicity

STOT RE Specific Target Organ Toxicity, Repeat Exposure STOT SE Specific Target Organ Toxicity, Single Exposure

TCC Tagliabue Closed Cup
THF Tetrahydrofuran
TLV Threshold Limit Value

Tox. Toxicity

TWA Time Weighted Average



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UN **United Nations** US **United States**

vPvB Very Persistent and very Bioaccumulative

WEL Workplace Exposure Limit

WHMIS Workplace Hazardous Materials Information System

Revision History:

6.1.2015	Initial SDS Release. SDS provided by mrg. was incorporated into Lonsean's letternead/layout. Items contained
	within Section 16, from "DISCLAIMER" and below, are exclusive to Lonseal's version of the SDS.
7.8.2015	Added missing precautionary statements P262 and P270.

8.5.2019 SDS formatting updated. Minor grammar and typo corrections. Tables in Sections 3, 8.1, 11, and 12.1

revised to match the most recent SDS provided by the manufacturer. NFPA symbol added under Section 16.

Removed unnecessary paragraph from Section 16.

2.18.2020 Minor typo corrections.

3.13.2020 Minor formatting change and typo correction to table in Section 12. Updated abbreviations list under Section

7.14.2021 Added new product code ZAD40055 in Section 1.1.



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