

SAFETY DATA SHEET

1. Identification

1. Identification		
Product identifier	Linit	
Other means of identification		
Product Code	4084	
Recommended use	Starch	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/	Distributor information	
Manufacturer		
Company name	Malco Products, Inc.	
Address	361 Fairview Ave	
	Barberton, OH 44203 United States	
Telephone	Phone	800-253-2526
	Fax	330-777-8317
Website	www.malcopro.com	
E-mail	msdsinfo@malcopro.com	
Contact person	Technical Department	1 900 404 0000
Emergency phone number	Phone	1-800-424-9300
2. Hazard(s) identification		
Physical hazards	Not classified.	
Health hazards	Not classified.	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Hazard symbol	None.	
Signal word	None.	
Hazard statement	The mixture does not meet the criteria for classification.	
Precautionary statement		
Prevention	Observe good industrial hyg	iene practices.
Response	Wash hands after handling.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of waste and residues in accordance with local authority requirements.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	None.	

3. Composition/information on ingredients

Mixtures

Chemical name Common name and synonyms		CAS number	%
Antipyonin		1303-96-4	1 - < 3
Glutaral		111-30-8	< 0.1
Propan-2-ol (Isopropyl A	lcohol)	67-63-0	< 0.1
Sodium Hydrogensulfite		7631-90-5	< 0.1
Other components below	/ reportable levels		90 - 100
*Designates that a specific of	chemical identity and/or percentage of composition ha	s been withheld as a trade se	cret.
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symptom	is develop or persist.	
Material name: Linit			SDS US
4084 Version #: 02 Revision	on date: 12-16-2019 Issue date: 08-11-2015		1/7

Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
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 General fire hazards	Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. 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. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits fo	r Air Contaminants (29 CFR 1910.1000)
Components	Туре

Components	Туре	Value	
Propan-2-ol (Isopropyl	PEL	980 mg/m3	

Alcohol) (CAS 67-63-0)

400 ppm

US. ACGIH Threshold Limit Valu	ies
--------------------------------	-----

Components	Туре	Value	Form
Antipyonin (CAS 1303-96-4)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
Glutaral (CAS 111-30-8)	Ceiling	0.05 ppm	
Propan-2-ol (Isopropyl Alcohol) (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
erial name: Linit			SDS US
4 Version #: 02 Revision date: 12-16-2019	Issue date: 08-11-2015		2/7

US. ACGIH Threshold Limit Values

		Туре	Va	alue	Form
Sodium Hydrogensulfite (CAS 7631-90-5)		TWA	5	mg/m3	
US. NIOSH: Pocket Guide	to Chemical Ha	zards			
Components		Туре	Va	alue	
Antipyonin (CAS 1303-96-4	-)	TWA	5	mg/m3	
Glutaral (CAS 111-30-8)		Ceiling	0.	8 mg/m3	
			0.	2 ppm	
Propan-2-ol (Isopropyl Alcohol) (CAS 67-63-0)		STEL	12	225 mg/m3	
			50	00 ppm	
		TWA	98	30 mg/m3	
)0 ppm	
Sodium Hydrogensulfite (CAS 7631-90-5)		TWA	5	mg/m3	
ological limit values					
ACGIH Biological Exposu Components	ire Indices Value	Determinant	Specimen	Sampling Tin	10
			•	*	
Propan-2-ol (Isopropyl Alcohol) (CAS 67-63-0)	40 mg/l	Acetone	Urine	×	
* - For sampling details, ple					
opropriate engineering		I ventilation (typically 10			
ontrols	or other engi	atched to conditions. If ap neering controls to mainta its have not been establis	ain airborne leve	ls below recomme	ended exposure limits. If
	or other engi exposure lim	neering controls to maintaits have not been establis	ain airborne leve shed, maintain a	ls below recomme	ended exposure limits. If
ontrols dividual protection measure Eye/face protection	or other engi exposure lim es, such as perso	neering controls to maintaits have not been establis	ain airborne leve shed, maintain a e nt	ls below recomme	ended exposure limits. If
dividual protection measure Eye/face protection	or other engi exposure lim es, such as perso	neering controls to maintaits have not been establis nal protective equipme	ain airborne leve shed, maintain a e nt	ls below recomme	ended exposure limits. If
dividual protection measure	or other engi exposure lim es, such as perso Wear safety	neering controls to maintaits have not been establis nal protective equipme	ain airborne leve shed, maintain a e nt (or goggles).	Is below recomme irborne levels to a	ended exposure limits. If n acceptable level.
dividual protection measure Eye/face protection Skin protection	or other engi exposure lim es, such as perso Wear safety Wear approp supplier.	neering controls to maintaits have not been establis conal protective equipme glasses with side shields	ain airborne leve shed, maintain a e nt (or goggles).	Is below recomme irborne levels to a	ended exposure limits. If n acceptable level.
dividual protection measure Eye/face protection Skin protection Hand protection	or other engi exposure lim es, such as perso Wear safety Wear approp supplier. Wear suitable	neering controls to mainta its have not been establis onal protective equipme glasses with side shields priate chemical resistant g	ain airborne leve shed, maintain a e nt (or goggles). loves. Suitable (ils below recomme irborne levels to a gloves can be reco	ended exposure limits. If n acceptable level.
dividual protection measure Eye/face protection Skin protection Hand protection Other	or other engi exposure lim es, such as perso Wear safety Wear approp supplier. Wear suitable In case of ins	neering controls to mainta its have not been establis onal protective equipme glasses with side shields priate chemical resistant g e protective clothing.	ain airborne leve shed, maintain a e nt (or goggles). loves. Suitable (ils below recomme irborne levels to a gloves can be reco tory equipment.	ended exposure limits. If n acceptable level.
dividual protection measure Eye/face protection Skin protection Hand protection Other Respiratory protection	or other engi exposure lim es, such as perso Wear safety Wear approp supplier. Wear suitable In case of ins Wear approp Always obse and before e	neering controls to main its have not been establis onal protective equipme glasses with side shields priate chemical resistant g e protective clothing. sufficient ventilation, wear	ain airborne leve shed, maintain a ent (or goggles). loves. Suitable g suitable respira lothing, when ne	els below recomme irborne levels to a gloves can be reco tory equipment. ecessary. ch as washing afte	ended exposure limits. If n acceptable level. ommended by the glove er handling the material

SDS US 3 / 7

Appearance	Hazy	
Physical state	Liquid.	
Form	Liquid.	
Color	White Translucent	
Odor	Floral/Citrus	
Odor threshold	Not available.	
рН	8.5 - 9.5	
Melting point/freezing point	167 °F (75 °C) estimated	
Initial boiling point and boiling	Not available.	
range		
Flash point	> 220.0 °F (> 104.4 °C)	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits		
Flammability limit - lower	Not available.	
(%)		
Material name: Linit		
4084 Version #: 02 Revision date:	12-16-2019 Issue date: 08-11-2015	

Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.00001 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	30 cP
Viscosity temperature	68 °F (20 °C)
Other information	
Density	8.67 lbs/gal
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Kinematic viscosity	28.8463 cSt
Kinematic viscosity temperature	68 °F (20 °C)
Oxidizing properties	Not oxidizing.
VOC	0 % w/w By Weight
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

No hazardous decomposition products are known.

11. Toxicological information

Hazardous decomposition products

Information on likely routes of exposure

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

Information on toxicological effects

Acute toxicity

Components	Species	Test Results	
Antipyonin (CAS 1303-96-4	4)		
<u>Acute</u>			
Inhalation			
LC50	Rat	> 0.002 mg/l, 4 Hours	
Material name: Linit		SDS US	

4 / 7

4084 Ve	ersion #: 02	Revision date: 12-16-2019	Issue date: 08-11-2015
---------	--------------	---------------------------	------------------------

Components	Species	Test Results
Oral		
LD50	Rat	396 mg/kg
Glutaral (CAS 111-30-8)		
Acute		
Dermal		
LD50	Rabbit	2560 mg/kg
Oral		
LD50	Rat	96.1 mg/kg
Propan-2-ol (Isopropyl Alcohol) (0	CAS 67-63-0)	
<u>Acute</u>		
Oral		
LD50	Rat	4.7 g/kg
Sodium Hydrogensulfite (CAS 76	31-90-5)	
<u>Acute</u>		
Oral		
LD50	Rat	2 g/kg
* Estimates for product may l	be based on additional componer	nt data not shown
Skin corrosion/irritation	Prolonged skin contact may ca	
Serious eye damage/eye	Ū į	
irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitizatio	n	
ACGIH sensitization		
GLUTARALDEHYDE, A	CTIVATED AND INACTIVATED	Dermal sensitization
(CAS 111-30-8)		
		Respiratory sensitization
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
Not listed.		
	ed Substances (29 CFR 1910.10	001-1052)
Not regulated.		
Not listed.	ogram (NTP) Report on Carcine	ogens
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
	Not classified.	
Specific target organ toxicity - single exposure		
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	

Chronic effects	Prolonged	d inhalation may be harmful.		
12. Ecological inform	nation			
Ecotoxicity			ardous. However, this does not exclude the rmful or damaging effect on the environment.	-
Components		Species	Test Results	
Propan-2-ol (Isopropyl	Alcohol) (CAS 67-	63-0)		
Aquatic				
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours	
Material name: Linit			SDS	
4084 Version #: 02 Revis	ion date: 12-16-2019	Issue date: 08-11-2015	5 /	/7

Components		Species	Test Results
Sodium Hydrogensulfite	e (CAS 7631-90-5)		
Aquatic			
Fish	LC50	Western mosquitofish	(Gambusia affinis) 240 mg/l, 96 hours
* Estimates for product	may be based on	additional component data ı	not shown.
ersistence and degradat	oility No data is	available on the degradabi	lity of this product.
Bioaccumulative potentia	l		
Partition coefficient n	-octanol / water (I	og Kow)	
Propan-2-ol (Isopropyl	Alcohol)	0.05	
lobility in soil	No data a	vailable.	
Other adverse effects			ts (e.g. ozone depletion, photochemical ozone creation warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
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	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according toNot established.Annex II of MARPOL 73/78 andthe IBC Code

15. Regulatory information

US federal regulations	This product is not know	One or more components are not listed on TSCA. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
TSCA Section 12(b) Exp	ort Notification (40 CFR 707	′, Subpt. D)	
Not regulated.			
CERCLA Hazardous Sub	ostance List (40 CFR 302.4)		
Sodium Hydrogensulf	fite (CAS 7631-90-5)	Listed.	
SARA 304 Emergency re	elease notification		
Not regulated.	lated Substances (29 CFR ²	1010 1001 1052)	
USHA Specifically Regu	ialeu Substailles (29 CFR	1910.1001-1032)	

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

Classified hazard Reproductive toxicity categories

SARA 313 (TRI reporting) Not regulated.

Material name: Linit		SDS US
4084 Version #: 02 Revision date: 12-16-2019	Issue date: 08-11-2015	6 / 7

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Propan-2-ol (Isopropyl Alcohol) (CAS 67-63-0)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Low priority

Antipyonin (CAS 1303-96-4) Glutaral (CAS 111-30-8) Propan-2-ol (Isopropyl Alcohol) (CAS 67-63-0)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	08-11-2015
Revision date	12-16-2019
Version #	02
Disclaimer	Malco Products, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	HazReg Data: International Inventories GHS: Classification

Material name: Linit				SDS US
4084	Version #: 02	Revision date: 12-16-2019	Issue date: 08-11-2015	7 / 7