

SECTION 1: Identification of the Substance/Mixture and of the Company/undertaking

- 1.1 Product Name:** Lemon Verbena Fragrance Oil
Product Code: 303-238X
- 1.2 Intended Use:** Compound used in customer substance/mixture/product.
- 1.3 Supplier:** Majestic Mountain Sage Inc
2490 S 1350 W
Nibley, Utah 84321 - United States of America
T 435.755.0863 - F 435.755.2108
www.TheSage.com
- 1.4 Emergency Telephone Number**
No additional information available.

SECTION 2: Hazards Identification

2.1 Classification of the Substance or Mixture

Flammable Liquids, Category 3	H226: Flammable liquid and vapor.
Aspiration Hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Skin Corrosion/Irritation, Category 2	H315: Causes skin irritation.
Skin Sensitization, Category 1	H317: May cause an allergic skin reaction.
Eye Damage/Irritation, Category 1	H318: Causes serious eye damage.
Carcinogenicity, Category 2	H351: Suspected of causing cancer.
Aquatic Acute Toxicity, Category 2	H401: Toxic to aquatic life.
Aquatic Chronic Toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label Elements

Hazard Pictograms



Signal Word: Danger.

Hazard Statements

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

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 surface, sparks, open flames and other ignition sources. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting /equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist or vapor.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.

Response:

P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash before reuse.

P370+P378
P391

In case of fire: Use appropriate media to extinguish.
Collect spillage.

Storage:

P403+P235
P405

Store in a well-ventilated place. Keep cool.
Store locked up.

Disposal:

P501

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

2.3 Other Hazards

1.11% of the mixture consists of component(s) of unknown acute oral toxicity.
1.11% of the mixture consists of component(s) of unknown acute dermal toxicity.
1.11% of the mixture consists of component(s) of unknown acute inhalation toxicity.
6.39% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 6.39% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

SECTION 3: Composition/Information on Ingredients
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3.1 Mixtures

Chemical Name	CAS Number	%
Diethyl phthalate	84-66-2	20 - < 30%
Lemon Terpenes	68917-33-9	10 - < 20%
Lemongrass oil	8007-02-1	5 - < 10%
Lime oil terpenes	68917-71-5	5 - < 10%
Linalool	78-70-6	5 - < 10%
Linalyl acetate	115-95-7	5 - < 10%
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta-gamma-2-benzopyran	1222-05-5	1 - < 3%
3 and 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde	31906-04-4	1 - < 3%
Benzyl acetate	140-11-4	1 - < 3%
Benzyl alcohol	100-51-6	1 - < 3%
Dihydromyrcenol	18479-58-8	1 - < 3%

Chemical Name	CAS Number	%
Geranyl acetate	105-87-3	1 - < 3%
Grapefruit oil	8016-20-4	1 - < 3%
Lavandin abrialis oil	8022-15-9	1 - < 3%
Lime oil	8008-26-2	1 - < 3%
Orange sweet, valencia oil	8008-57-9	< 1%
Petitgrain oil terpeneless	68915-85-5	< 1%
Basil oil	8015-73-4	< 0.2%
Clary sage oil	8016-63-5	< 0.2%
Coriander seed oil	8008-52-4	< 0.2%
Geraniol	106-24-1	< 0.2%
Lemon oil	8008-56-8	< 0.2%
Petitgrain oil	8014-17-3	< 0.2%
Alpha-Pinene	80-56-8	< 0.1%
Butylated hydroxytoluene	128-37-0	< 0.1%
Citral	5392-40-5	< 0.1%
Diphenyl ether	5392-40-5	< 0.1%
Other components below reportable levels		5 - < 10%

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

General Information:

Take off all contaminated clothing immediately. If exposed or concerned: get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Inhalation:

Move to fresh air. Call a physician if symptoms develop or persist.

Skin Contact:

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion:

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Suitable: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Specific Hazards Arising from the Chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

5.3 Advice for Firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.

6.2 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. Prevent entry into waterways, sewer, 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 to remove residual contamination.

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

6.3 Environmental Precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not get this material in contact with eyes. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Occupational Exposure Limits

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.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Diphenyl ether (CAS 101-84-8)	PEL	7 mg/m ³	Vapor
		1 ppm	Vapor

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
alpha-Pinene (CAS 80-56-8)	TWA	20 ppm	-
Benzyl acetate (CAS 140-11-4)	TWA	10 ppm	-
Butylated hydroxytoluene (CAS 128-37-0)	TWA	2 mg/m ³	Inhalable fraction and vapor
Citral (CAS 5392-40-5)	TWA	5 ppm	Inhalable fraction and vapor
Diethyl phthalate (CAS 84-66-2)	TWA	5 mg/m ³	-
Diphenyl ether (CAS 101-84-8)	STEL TWA	2 ppm 1 ppm	Vapor Vapor

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Butylated hydroxytoluene (CAS 128-37-0)	TWA	10 mg/m ³	-
Diethyl phthalate (CAS 84-66-2)	TWA	5 mg/m ³	-
Diphenyl ether (CAS 101-84-8)	TWA	7 mg/m ³ 1 ppm	Vapor Vapor

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Benzyl alcohol (CAS 100-51-6)	TWA	44.2 mg/m ³ 10 ppm

Biological Limit Values:

No biological exposure limits noted for the ingredient(s).

Exposure Guidelines**US ACGIH Threshold Limit Values: Skin Designation**

Citral (CAS 5392-40-5) Can be absorbed through the skin.

Appropriate Engineering Controls:

Explosion-proof general and local exhaust ventilation. 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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

8.2 Individual Protection Measures, Such as Personal Protective Equipment

Eye/Face Protection:	Chemical respirator with organic vapor cartridge and full face piece.
Skin/Hand Protection:	Wear appropriate chemical resistant gloves and clothing. Use of an impervious apron is recommended.
Respiratory Protection:	Chemical respirator with organic vapor cartridge and full face piece.
Thermal Hazards:	Wear appropriate thermal protective clothing, when necessary.
Hygiene Measures:	Observe any medical surveillance requirements. 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. Contaminated work clothing should not be allowed out of the workplace.

SECTION 9: Physical and Chemical Properties
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9.1 Information on Basic Physical and Chemical Properties

Appearance:	Medium to Golden Yellow
Physical State:	Liquid
Form:	Liquid
Color:	Not available
Odor:	Characteristic of name
Odor Threshold:	Not available
pH:	Not available
Melting/Freezing Point:	-40.9°F (-40.5°C) estimated
Initial Boil Point/Range:	508.79°F (264.88°C) estimated

Flash Point:	134.1°F (56.7°C) Closed cup
Evaporation Rate:	Not available
Flammability (solid, gas):	Not applicable
Vapor Pressure:	0.046 hPa estimated
Vapor Pressure Temperature:	Not available
Vapor Density:	Not available
Relative Density:	Not available
Solubility(ies)	
Solubility (Water):	NO
Solubility (Other):	Not available
Auto-Ignition Temperature:	855°F (457.22°C) estimated
Decomposition Temperature:	Not available
Viscosity:	Not available
Explosive Properties:	Not explosive.
Oxidizing Properties:	Not oxidizing.

9.2 Other Information

Density:	8.46 lbs/gal estimated
Hydrocarbons Percent:	Not determined
Refractive Index:	1.4775 - 1.4825
Specific Gravity:	0.914 - 0.954
VOC (Weight %):	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical Stability

Material is stable under normal conditions.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

10.4 Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5 Incompatible Materials

Strong acids. Strong oxidizing agents.

10.6 Hazardous Decomposition Products

No hazardous decomposition products are known.

SECTION 11: Toxicological Information

11.1 Information on Likely Routes of Exposure

Inhalation:	Prolonged inhalation may be harmful.
Skin Contact:	Causes skin irritation. May cause an allergic skin reaction.
Eye Contact:	Causes serious eye damage.
Ingestion:	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms Related to the Physical, Chemical, Toxicological Characteristics:
Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

11.2 Information on Toxicological Effects

Acute Toxicity: May be fatal if swallowed and enters airways.

Components	Species	Test Results
alpha-Pinene (CAS 80-56-8) Acute Oral LD50	Rat	3700 mg/kg
Benzyl acetate (CAS 140-11-4) Acute Oral LD50	Rat	2490 mg/kg
Benzyl alcohol (CAS 100-51-6) Acute Oral LD50	Rat	1230 - 3100 mg/kg
Citral (CAS 5392-40-5) Acute Oral LD50	Rat	> 2000 mg/kg

Components	Species	Test Results
Diphenyl ether (CAS 101-84-8) Acute Oral LD50	Rat	3.99 g/kg
Geraniol (CAS 106-24-1) Acute Oral LD50	Rat	3600 mg/kg

* Estimates for product may be base on additional component data not known.

Skin Corrosion/Irritation: Causes skin irritation.
Serious Eye Damage/Irritation: Causes serious eye damage.
Respiratory Sensitization: Not a respiratory sensitizer.
Skin Sensitization: May cause an allergic skin reaction.
ACGIH Sensitization:
CITRAL, INHALABLE FRACTION AND Dermal Sensitization
VAPOR (CAS 5392-40-5)
TURPENTINE AND SELECTED Dermal Sensitization
MONOTERPENES (CAS 80-56-8)

Germ Cell Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity: Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity
Benzyl acetate (CAS 140-11-4) 3 - Not classifiable as to carcinogenicity to humans.
Butylated hydroxytoluene (CAS 128-37-0) 3 - Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

Reproductive Toxicity: This product is note expected to cause reproductive or developmental effects.
Specific Target Organ Toxicity
Single Exposure: Not classified.

Specific Target Organ Toxicity**Repeated Exposure:**

Not classified.

Aspiration Hazard:

May be fatal if swallowed and enters airways.

Chronic Effects:

Prolonged inhalation may be harmful.

SECTION 12: Ecological Information**12.1 Ecotoxicity**

Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
3 and 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene-1-carboxaldehyde (CAS 31906-04-4)	-	-
Dihydromyrcenol (CAS 18479-58-8)	-	-
Lemon oil (CAS 8008-56-8)	-	-
Lime oil (CAS 8008-26-2)	-	-
Petitgrain oil (CAS 8014-17-3)	-	-

12.2 Persistence and Degradability

No data is available on the degradability of this product.

12.3 Bioaccumulative Potential

Partition Coefficient n-octanol/water (log Kow)	
alpha-Pinene	4.83
Benzyl acetate	1.96
Benzyl alcohol	1.1
Diethyl phthalate	2.47
Diphenyl ether	4.21
Linalool	2.97

12.4 Mobility in Soil

No data available.

12.5 Other Adverse Effects

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

SECTION 13: Disposal Considerations
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13.1 Waste Treatment Methods

Disposal Instructions:	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national /international regulations.
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
Residual Waste:	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.

SECTION 14: Transport Information
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14.1 Transport Information

DOT

UN Number:	UN1169
UN Proper Shipping Name:	Extracts, aromatic, liquid
Transport Hazard Class(es)	
Class:	3
Subsidiary Risk:	-
Label(s):	3
Packing Group:	III
Special Precautions for User:	Read safety instructions, SDS and emergency procedures before handling.
Special Provisions:	B1, IB3, T2, TP1
Packaging Exceptions:	150
Packaging Non Bulk:	203
Packaging Bulk:	242

IATA

UN Number:	UN1169
UN Proper Shipping Name:	Extracts, aromatic, liquid
Transport Hazard Class(es)	
Class:	3
Subsidiary Risk:	-
Packing Group:	III
Environmental Hazards:	No.
ERG Code	3L
Special Precautions for User:	Read safety instructions, SDS and emergency procedures before handling.

Other Information

Passenger and Cargo Aircraft:	Allowed with restrictions.
Cargo Aircraft Only:	Allowed with restrictions.

IMDG

UN Number:	UN1169
UN Proper Shipping Name:	EXTRACTS, AROMATIC, LIQUID
Transport Hazard Class(es)	
Class:	3
Subsidiary Risk:	-
Packing Group:	III
Environmental Hazards	
Marine Pollutant:	No.
EmS:	F-E, S-D
Special Precautions for User:	Read safety instructions, SDS and emergency procedures before handling.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not established.

DOT



IATA; IMDG



SECTION 15: Regulatory Information

15.1 US Federal Regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Diethyl phthalate (CAS 84-66-2) Listed.

SARA 304 Emergency Release Notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely Hazardous Substance

Not listed.

SARA 311/312 Hazardous Chemical

No.

SARA 313 (TRI reporting)

Not regulated.

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

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

Diphenyl ether (CAS 101-84-8) Low Priority

15.2 US State Regulations

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))

Diethyl phthalate (CAS 84-66-2)

15.3 International Inventories

Country(s) or region	Inventory name	On Inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
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 products are not listed on the inventory administered by the governing country(s).

SECTION 16: Other Information

16.1 HMIS® Ratings

Health: 2
Flammability: 1
Physical hazard: 0
Personal protection: B



16.2 NFPA ratings

Health: 2
Flammability: 1
Instability: 0

Notes:

This safety data sheet is based on the properties of the material known at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment holds no responsibility. This document is not intended for quality assurance purposes.