Leather Cleaner isoamyl & isopropyl nitrite mixture

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No. 2017/776)

Version:1 Version date:20/06/2019 Language:EN

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name/designation : Leather Cleaner.

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

Relevant identified uses : No data available. Uses advised against : No data available.

1.3. Details of the supplier of the safety data sheet

Supplier : Name: Unlimited

Street: Dorpssingel 6

Postal code/City: 6641BE Beuningen

Country: Netherlands

1.4. Emergency Telephone Number

United Kingdom: In England and Wales: dial 111 (NHS 111), In Scotland: dial 111 (NHS 24), In Northern Ireland: Contact your local GP or pharmacist during normal hours. During GP Out-of-Hours (www.gpoutofhours.hscni.net/): Belfast HSC Trust, (North & West) 028 9074 4447, (South & East) 028 9079 6220 South Eastern HSC Trust, (North Down & Ards) 028 9182 2344, (Lisburn & Downpatrick) 028 9260 2204, Dalriada Urgent Care (Northern Trust area) 028 2566 3500, Southern HSC Trust 028 3839 9201, Western Urgent Care 028 7186 5195

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | Classification | Hazard stateme | ents (H) |
|---------|----------------|----------------|--|
| | Flam. Liq. 2 | H225 | Highly flammable liquid and vapour. |
| | Skin Corr. 1A | H314 | Causes severe skin burns and eye damage. |
| | Skin Sens. 1 | H317 | May cause an allergic skin reaction. |
| | Acute Tox. 2 | H330 | Fatal if inhaled. |
| | Muta. 2 | H341 | Suspected of causing genetic defects. |

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Signal word Dange Product identifiers - Hazard Statements

H225 - Highly flammable liquid and vapour.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H330 - Fatal if inhaled.

H341 - Suspected of causing genetic defects.

Supplemental Hazard information (EU)

Precautionary Statements - General

P102 - Keep out of reach of children.

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

P260 - Do not breathe vapour/aerosol.

Precautionary Statements - Response P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

the skin with water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Precautionary Statements - Storage

Precautionary Statements - Disposal P501 - Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

Not available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Substance | C (%) | Classification | Specific concentration limits | Note |
|--|----------|--|-------------------------------|------|
| isopropyl nitrite CAS N°:541-42-4 EC N°:208-779-0 IDX N°: | C≤ 64.0% | H225: Highly flammable liquid and vapour. H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H330: Fatal if inhaled. H341: Suspected of causing genetic defects. | - | - |
| "amyl nitrite", mixed isomers CAS N°:110-46-3 EC N°:203-770-8 IDX N°:007-020-00-9 | C≤ 16.0% | H225: Highly flammable liquid and vapour. H302: Harmful if swallowed H332: Harmful if inhaled. | - | - |
| propan-2-ol CAS N°:67-63-0 EC N°:200-661-7 IDX N°:603-117-00-0 | C≤ 16.0% | H225: Highly flammable liquid and vapour. H319: Causes serious eye irritation H336: May cause drowsiness or dizziness | - | [1] |
| 1-Butanol, 3-methyl- CAS N°:123-51-3 EC N°:204-633-5 IDX N°:603-006-00-7 | C≤ 4.0% | H226: Flammable liquid and vapour. H315: Causes skin irritation. H318: Causes serious eye damage. H332: Harmful if inhaled. H335: May cause respiratory irritation | - | - |

^[1] Substance for which maximum workplace exposure limits are available.

3.2. Mixtures

The mixture does not contain any substances classified as Substances of Very High Concern (SVHC) by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table.

3.3. Remark

Text phrases and H- EUH-: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information : In case of accident or unwellness, seek medical advice immediately (show directions for use or

safety data sheet if possible). Do not leave affected person unattended. Keep affected person

warm, still and covered.

Following inhalation : Remove person to fresh air and keep comfortable for breathing. If the victim is unconscious but

breathing normally, place her in recovery position and seek medical advice. No resuscitation mouth-to-mouth or mouth-to-nose. Ambu use a mask or respirator. If breathing is irregular or stopped, administer artificial respiration. After inhaling vapours the first signs of poisoning can

show up hours later, so always consult a doctor.

Following skin contact : After contact with skin, wash immediately with plenty of water and soap. Take off immediately

all contaminated clothing. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician. Immediate medical treatment required because corrosive

injuries that are not treated are hard to cure.

Following eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes

flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and

consult an ophthalmologist.

Following ingestion : Never give anything by mouth to an unconscious person or a person with cramps. IF

SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Self-protection of the first aider : First aider: Pay attention to self-protection!.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Extinguishing powder. Carbon dioxide (CO2). Sand.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Do not inhale vapors and fumes. Co-ordinate fire-fighting measures to the fire surroundings. Move undamaged containers from immediate hazard area if it can be done safely. Use caution when applying carbon dioxide in confined spaces. carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove persons to safety. Provide adequate ventilation. Use appropriate respiratory protection.

6.2. Environmental precautions

Ensure that waste is collected and contained. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Contain leaks or spills within cabinets with removable trays.

6.3. Methods and material for containment and cleaning up

Treat the recovered material as prescribed in the section on waste disposal. Collect in closed and suitable containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations. Ventilate affected area. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Wipe up with absorbent material (eg. cloth, fleece).

6.4. Reference to other sections

Safe handling: see section 7. Disposal: see section 13. Personal protection equipment: see section 8.

6.5. Additional information

Not available

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Avoid exposure - obtain special instructions before use. Use only outdoors or in a well-ventilated area.

PROTECTIVE MEASURES

Avoid contact with skin, eyes and clothes.

Only allow access to authorised staff.

Use only in well-ventilated areas.

If local exhaust ventilation is not possible or not enough, the entire work area must be ventilated by technical means.

Provide adequate ventilation as well as local exhaustion at critical locations.

Wear personal protective clothing (see section 8).

Do not put any product-impregnated cleaning rags into your trouser pockets.

Vapours/aerosols should be exhausted directly at the point of origin.

Do not breathe gas/fumes/vapour/spray.

Avoid breathing gas/fumes/vapour/spray.

Advices on general occupational hygiene

Provide eye shower and label its location conspicuously

Wash hands before breaks and after work.

Remove contaminated, saturated clothing immediately.

Work in well ventilated zones or use proper respiratory protection.

Street clothing should be stored seperately from work clothing.

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry, cool, and well-ventilated place. Keep container in upright position in order to prevent leakage.

Requirements for storage rooms and vessels

Ensure adequate ventilation of the storage area.

Ground/bond container and receiving equipment.

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

Store locked up.

Advice on joint storage

 $\label{thm:condition} \textbf{Keep away from food, drink and animal feeding stuffs.}$

Keep away from clothing and other combustible materials.

Keep only in the original container in a cool, well-ventilated place, away from highly flammable substances.

Further information on storage conditions

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

Use only non-sparking tools.

7.3. Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

| v | ecupational exposure limits | | | | | | |
|---|----------------------------------|-------|-------|-----------------------------|--|--|--|
| | Substance | Value | Unit | Туре | | | |
| | propan-2-ol CAS: 67-63-0 (IE) | 200 | ppm | Exposure limit (8 hours) | | | |
| | propan-2-ol CAS: 67-63-0 (IE) | 400 | ppm | Exposure limit (15 minutes) | | | |
| | propan-2-ol | 999 | mg/m³ | Exposure limit (8 hours) | | | |

| CAS: 67-63-0 (GB) | | | |
|----------------------------------|-------|-------|-----------------------------|
| propan-2-ol CAS: 67-63-0 (GB) | 400 | ppm | Exposure limit (8 hours) |
| propan-2-ol CAS: 67-63-0 (GB) | 1,250 | mg/m³ | Exposure limit (15 minutes) |
| propan-2-ol CAS: 67-63-0 (GB) | 500 | ppm | Exposure limit (15 minutes) |

Not available

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation as well as local exhaustion at critical locations.

Personal protection equipment











Eye/face protection

Suitable eye protection: Wear eye protection equipment.Recommended eye protection

articles: Face protection shield

Skin protection

Hand protection: Wear protective gloves.

Hand protection: NBR (nitrile rubber)

Hand protection: Do not wear gloves near machines and rotating tools.

Hand protection: Use gloves only once.

Hand protection: When handling with chemical substances, protective gloves must be worn

with the CE-label including the four control digits.

Hand protection: The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Hand protection: For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Hand protection: Breakthrough times and swelling properties of the material must be taken

into consideration.Body protection: Lab coat.

Body protection: Chemical resistant safety shoes

Respiratory protection

Respiratory protection necessary at: If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protection apparatus: Wear respiratory protection. Remark: The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus

must be used.

Remark: Observe the wear time limits as specified by the manufacturer.

Remark: Use only respiratory protection equipment with CE-symbol including four digit test

number.

8.3. Additional information

Not available

SECTION 9: Physical and chemical Properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: Not available Odour: Not available Odour threshold: Not available Not available pH: Melting point/freezing point: Not available Initial boiling point and boiling range: Not available Not available Flash point: Evaporation rate: Not available Flammability: Not available

Upper/lower flammability or explosive

Not available

limits:

Vapour pressure:

Vapour density:

Relative density:

Solubility(ies):

Partition coefficient: n-octanol/water (Log

Not available
Not available
Not available

KOC):

Auto-ignition temperature: Not available Decomposition temperature: Not available Viscosity: Not available Explosive properties: Not available Oxidising properties: Not available

9.2. Other safety information

Not available

SECTION 10: Stability and Reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Not available

10.3. Possibility of hazardous reactions

Not available

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Not available

10.7. Additional information

Not available

SECTION 11: Toxicological information

11.1. Acute oral toxicity

Data for mixture

Not available

Substances

propan-2-ol (CAS: 67-63-0)

Species : Rat

Sex : Not available Guideline : Not available

| Subendpoint | Operator | Value | Unit |
|-------------|----------|-------|-------|
| LD50: | > | 5000 | mg/kg |

Conclusion : Not available

1-Butanol, 3-methyl- (CAS: 123-51-3)

Species : Rat

Sex : Not available Guideline : Not available

| Subendpoint | Operator | Value | Unit |
|-------------|----------|-------|-------|
| LD50: | > | 5.000 | mg/kg |

Conclusion : Not available

"amyl nitrite", mixed isomers (CAS: 110-46-3)

Species: Mouse.Sex: Not availableGuideline: Not available

| Subendpoint | Operator | Value | Unit |
|-------------|----------|-------|-------|
| LD50: | = | 852 | mg/kg |

Conclusion : Not available

11.2. Acute skin toxicity

Data for mixture

Not available **Substances**

propan-2-ol (CAS: 67-63-0)

Species : Rabbit
Sex : Not available
Guideline : Not available
Exposure duration/value : Not available
Exposure duration/unit : Not available

| Subendpoint | Operator | Value | Unit |
|-------------|----------|-------|-------|
| LD50: | > | 5000 | mg/kg |

Conclusion : Not available

1-Butanol, 3-methyl- (CAS: 123-51-3)

Species : Rabbit Sex : Not available

Guideline : Similar to the OECD guideline 402

Exposure duration/value : Not available Exposure duration/unit : Not available

| Subendpoint | Operator | Value | Unit |
|-------------|----------|-------|-------|
| LD50: | * | 3.216 | mg/kg |

Conclusion : Not available

11.3. Acute inhalation toxicity

Data for mixture

Not available

Substances

isopropyl nitrite (CAS: 541-42-4)

Species : Rat

Sex : Not available
Guideline : Not available
Route of administration : Not available

Exposure duration/value : 4
Exposure duration/unit : h

| Subendpoint | Results/Sex | Operator | Value | Unit |
|-------------|-------------|----------|-------|-------|
| LC50: | - | = | 1250 | mg/m3 |

Conclusion : Not available

Species : mus

Sex : Not available
Guideline : Not available
Route of administration : Not available

Exposure duration/value : 2 Exposure duration/unit : h

| Subendpoint | Results/Sex | Operator | Value | Unit |
|-------------|-------------|----------|-------|-------|
| LC50: | - | = | 2800 | mg/m3 |

Conclusion : Not available

"amyl nitrite", mixed isomers (CAS: 110-46-3)

Species : Rat

Sex : Not available Guideline : Not available Route of administration : Not available

Exposure duration/value : 4
Exposure duration/unit : h

| Subendpoint | Results/Sex | Operator | Value | Unit |
|-------------|-------------|----------|-------|------|
| LC50: | - | = | 716 | ppm |

Conclusion : Not available

Species : mus

Sex : Not available
Guideline : Not available
Route of administration : Not available

Exposure duration/value : 4
Exposure duration/unit : h

| Subendpoint | Results/Sex | Operator | Value | Unit |
|-------------|-------------|----------|-------|------|
| LC50: | - | = | 1430 | ppm |

Conclusion : Not available

11.4. Skin corrosion

Data for mixture

Not available

Substances Not available

11.5. Eye damage

Data for mixture

Not available

Substances

Not available

11.6. Skin sensitisation

Data for mixture

Not available

Substances

Not available

11.7. STOT RE

Data for mixture

Not available

Substances

Not available

11.8. STOT SE

Data for mixture

Not available

Substances

Not available

11.9. STOT RE

Data for mixture

Not available

Substances

Not available

11.10. Carcinogenicity

Data for mixture

Not available

Substances

Not available

11.11. Reproductive and Developmental Toxicity

Data for mixture

Not available

Substances

Not available

11.12. Genotoxicity

Data for mixture

Not available

Substances

Not available

11.13. In vitro genotoxicity

Data for mixture

Not available

Substances

Not available

11.14. Respiratory sensitisation

Data for mixture

Not available

Substances

Not available

Additional information

Not available

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

Acute aquatic toxicity

Substances

propan-2-ol (CAS: 67-63-0)

Animals/category : Fish

Species : Leuciscus idus (Ide melanote)

Test duration : 48 Unit : h

Guideline : Not available

| Subendpoint | Value | Unit |
|-------------|-------|------|
| LC50: | >100 | mg/L |

Remarks : Not available

Animals/category : Crustacean Species : Daphnia magna

Test duration : 48 Unit : h

Guideline : Not available

| Subendpoint | Value | Unit |
|-------------|-------|------|
| EC50 | >100 | mg/L |

Remarks : Not available

Animals/category : algea or cyanobacteria Species : Scenedesmus subspicatus.

Test duration : 72 Unit : h

Guideline : Not available

| Subendpoint | Value | Unit |
|-------------|-------|------|
| EC50 | >100 | mg/L |

Remarks : Not available

1-Butanol, 3-methyl- (CAS: 123-51-3)

Animals/category : Fish

Species : Oncorhynchus mykiss (rainbow trout)

Test duration : 96 Unit : h

Guideline : OECD 203

| Subendpoint | Value | Unit |
|-------------|-------|------|
| LC50: | >120 | mg/L |

Remarks : Not available

Animals/category : Crustacean Species : Daphnia magna

Test duration : 48 Unit : h

Guideline : (DIN 38412 Part 11, static)

| Subendpoint | Value | Unit |
|-------------|-------|------|
| EC50 | >100 | mg/L |

Remarks : Not available

Animals/category : algea or cyanobacteria Species : Scenedesmus subspicatus. Test duration : 72 Unit : h

Guideline : (DIN 38412 Part 9, static)

| Subendpoint | Value | Unit |
|-------------|-------|------|
| EC50 | >100 | mg/L |

Remarks : Not available

Animals/category : microorganisms
Species : Not available

Test duration : 3 Unit : h

Guideline : OECD 209

| Subendpoint | Value | Unit |
|-------------|-------|------|
| EC10 | 370 | mg/L |

Remarks : Not available

12.2. Persistence and degradability

The product has not been tested.

Biodegradation

Substances

1-Butanol, 3-methyl- (CAS: 123-51-3)

Inoculum : Activated sludge

Guideline : OECD 301F; ISO 9408; 92/69/EEC, C.4-D

Test duration : 27 Unit : days

| Parameter | Degradation rate | Unit |
|-----------------|------------------|------|
| BOD (% of COD). | 84 | % |

Remarks : Not available

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

12.7. Additional ecotoxicological information

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste requiring special supervision.

Dispose of waste according to applicable legislation.

Delivery to an approved waste disposal company.

Non-contaminated packages must be recycled or disposed of.

Contaminated packing must be completely emptied and can be reused after proper cleaning.

Packing which cannot be properly cleaned must be disposed of.

Handle contaminated packages in the same way as the substance itself.

Dispose of waste according to applicable legislation.

For recycling, contact manufacturer.

Collect the waste separately.

Consult the appropriate authorities about waste disposal.

Do not mix with other wastes.

The waste is to be kept separate from other types of waste until its disposal.

Concerning the waste it has to be checked, whether a transport authorisation is required.

13.2. Additional information

Not available

SECTION 14: Transport information

14.1. UN number

Not available

14.2. UN proper shipping name

Not available

14.3. Transport hazard class(es)

Not available

14.4. Packing group

Not available

14.5. Environmental hazards

Not available

14.6. Special precautions for user

Not available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

14.8. Additional information

Not available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This SDS has been established in accordance with REACH regulation, including its amendments: REACH Regulation (EC) No 1907/2006. This SDS has been established in accordance with CLP regulation, including its amendments: CLP Regulation EC No. 1272/2008.

Not available

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier. For this substance/mixture a chemical safety assessment has been elaborated. For this mixture, the relevant data of the Substances' Chemical safety assessment are integrated in the sections of the SDS.

15.3. Additional information

Not available

SECTION 16: Other information

 Creation date:
 20/06/2019

 Version date:
 20/06/2019

 Printing date:
 04/11/2019

16.1. Indication of changes

Not applicable (first edition of the MSDS).

16.2. Abbreviations and acronyms

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways. ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail. CAS: Chemical Abstract Service Number. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods Code. DPD Dangerous Preparation Directive. UN number: United Nations number. No EC: European Commission Number. CLP: Classification, labeling and packaging. VPvB: very persistent and very bioaccumulative substances.

16.3. Key literature references and sources for data

No data available.

16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

| H225 | Flam. Liq. 2 | Highly flammable liquid and vapour. |
|------|-------------------|--|
| H226 | Flam. Liq. 3 | Flammable liquid and vapour. |
| H302 | Acute Tox. 4 ORAL | Harmful if swallowed |
| H314 | Skin Corr. 1A | Causes severe skin burns and eye damage. |
| H315 | Skin Irrit. 2 | Causes skin irritation. |
| H317 | Skin Sens. 1 | May cause an allergic skin reaction. |
| H318 | Eye Dam. 1 | Causes serious eye damage. |
| H319 | Eye Irrit. 2 | Causes serious eye irritation |
| H330 | Acute Tox. 2 | Fatal if inhaled. |
| | INHALATION | |
| H332 | Acute Tox. 4 | Harmful if inhaled. |
| | INHALATION | |
| H335 | STOT SE 3 H335 | May cause respiratory irritation |
| H336 | STOT SE 3 H336 | May cause drowsiness or dizziness |
| H341 | Muta. 2 | Suspected of causing genetic defects. |

16.6. Training advice

Not available

16.7. Additional information

Not available

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsability of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.