



SAFETY DATA SHEET

1. Identification

Product number 1000003766
 Product identifier **DISINFECTANT SPRAY FOR HEALTH CARE USE**
 Company information Claire Manufacturing Co.
 1005 S. Westgate Drive
 Addison, IL 60101 United States
 Company phone General Assistance 1-630-543-7600
 Emergency telephone US 1-866-836-8855
 Emergency telephone outside US 1-952-852-4646
 Version # 01
 Recommended use CLEANER
 Recommended restrictions None known.

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1
 Health hazards Acute toxicity, oral Category 4
 Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 2
 Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3
 Hazardous to the aquatic environment, long-term hazard Category 4
 OSHA defined hazards Not classified.

Label elements



Signal word Danger
 Hazard statement Extremely flammable aerosol. Causes serious eye irritation.
 Precautionary statement
 Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. Wear eye/face protection.
 Response Wash hands after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
 Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
 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 | % |
|--------------------|--------------------------|------------|---------|
| Ethyl Alcohol | | 64-17-5 | 40 - 60 |
| 1,1-Difluoroethane | | 75-37-6 | 20 - 40 |

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|---------|
| Sodium Nitrite | | 7632-00-0 | 0.1 - 1 |
| Other components below reportable levels | | | 20 - 40 |

#: This substance has workplace exposure limit(s).

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

| | |
|---|--|
| Inhalation | Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician or Poison Control Center immediately. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. Call a physician or Poison Control Center immediately. Get medical attention if irritation develops and persists. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Call a physician or Poison Control Center immediately. |
| Ingestion | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |
| Most important symptoms/effects, acute and delayed | Headache. Irritation of nose and throat. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Skin irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| General information | 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. Show this safety data sheet to the doctor in attendance. Keep victim under observation. |

5. Fire-fighting measures

| | |
|--|---|
| Suitable extinguishing media | Alcohol resistant foam. Water fog. 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 | Contents under pressure. Pressurized container may explode when exposed to heat or flame. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| Fire-fighting equipment/instructions | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes. |
| General fire hazards | Extremely flammable aerosol. |

6. Accidental release measures

| | |
|--|--|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|--|--|

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. 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. For waste disposal, see section 13 of the SDS. This material and its container must be disposed of as hazardous waste.

Environmental precautions

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

7. Handling and storage

Precautions for safe handling

Vapors may form explosive mixtures with air. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Do not get this material in contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Do not get this material on clothing. When using do not eat or drink. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Keep locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Level 1 Aerosol (NFPA 30B)

8. Exposure controls/personal protection

Occupational exposure limits

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

| Components | Type | Value |
|-----------------------------|------|------------------------|
| Ethyl Alcohol (CAS 64-17-5) | PEL | 1900 mg/m3 1000 ppm |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|-----------------------------|------|----------|
| Ethyl Alcohol (CAS 64-17-5) | STEL | 1000 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|-----------------------------|------|------------------------|
| Ethyl Alcohol (CAS 64-17-5) | TWA | 1900 mg/m3 1000 ppm |

US. Workplace Environmental Exposure Level (WEEL) Guides

| Components | Type | Value |
|----------------------------------|------|------------------------|
| 1,1-Difluoroethane (CAS 75-37-6) | TWA | 2700 mg/m3 1000 ppm |

Biological limit values

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

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear appropriate chemical resistant gloves.

| | |
|---------------------------------------|---|
| Skin protection | |
| Other | Avoid exposure - obtain special instructions before use. Wear suitable protective clothing. It may provide little or no thermal protection. |
| Respiratory protection | If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | When using, do not eat, drink or smoke. Do not get in eyes. Do not get this material in contact with skin. Avoid contact with skin. 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. |

9. Physical and chemical properties

| | |
|---|--|
| Appearance | Clear. |
| Physical state | Gas. |
| Form | Aerosol. |
| Color | Light yellow. |
| Odor | Aromatic. |
| Odor threshold | Not available. |
| pH | 9.5 - 10.5 estimated estimated |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | 135.34 °F (57.41 °C) estimated |
| Flash point | -58.0 °F (-50.0 °C) Propellant estimated |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | 2.6 % estimated |
| Flammability limit - upper (%) | 12.8 % estimated |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | >= 75 psig @70F 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 | 856.4 °F (458 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Specific gravity | 0.86 - 0.88 estimated estimated |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Risk of ignition. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.
Inhalation Prolonged inhalation may be harmful.
Skin contact No adverse effects due to skin contact are expected.
Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Headache. Irritation of nose and throat. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Skin irritation.

Information on toxicological effects

Acute toxicity

| Product | Species | Test Results |
|---------|---------|--------------|
|---------|---------|--------------|

DISINFECTANT SPRAY FOR HEALTH CARE USE (CAS Mixture)

Acute

Inhalation

| | | |
|------|-----|-------------|
| LC50 | Rat | 228 mg/l/4h |
|------|-----|-------------|

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

1,1-Difluoroethane (CAS 75-37-6)

Acute

Inhalation

| | | |
|------|-----|------------------------|
| LC50 | Rat | 44 - 437500 %, 4 Hours |
|------|-----|------------------------|

Ethyl Alcohol (CAS 64-17-5)

Acute

Inhalation

| | | |
|------|-------|-------------------------|
| LC50 | Cat | 85.41 mg/l, 4.5 Hours |
| | | 43.68 mg/l, 6 Hours |
| | Mouse | > 60000 ppm |
| | | 79.43 mg/l, 134 Minutes |
| Rat | | > 115.9 mg/l, 4 Hours |
| | | 51.3 mg/l, 6 Hours |

Oral

| | | |
|------|--------|-------------------|
| LD50 | Monkey | 6000 mg/kg |
| | Mouse | 10500 ml/kg |
| | Rat | 1187 - 2769 mg/kg |
| | | 7800 ml/kg |

Sodium Nitrite (CAS 7632-00-0)

Acute

Inhalation

| | | |
|------|-----|-----------------------------|
| LC50 | Rat | 5.5 mg/kg, 4 hours supplier |
|------|-----|-----------------------------|

Oral

| | | |
|------|-----|-------------------|
| LD50 | Rat | 88 mg/kg supplier |
|------|-----|-------------------|

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

| | |
|---|--|
| 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. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | |
| | Not listed. |
| Reproductive toxicity | This product is not 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 | Not available. |
| Chronic effects | Hazardous by WHMIS criteria. Prolonged inhalation may be harmful. |
| Further information | Danger of very serious irreversible effects. |

12. Ecological information

Ecotoxicity Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

| Product | | Species | Test Results |
|--|------|--|------------------------------|
| DISINFECTANT SPRAY FOR HEALTH CARE USE (CAS Mixture) | | | |
| Aquatic | | | |
| Algae | IC50 | Algae | 554 mg/L, 72 Hours |
| Crustacea | EC50 | Daphnia | 929 mg/L, 48 Hours |
| Fish | LC50 | Fish | 9956 mg/L, 96 Hours |
| Components | | | |
| Species | | | |
| Test Results | | | |
| Ethyl Alcohol (CAS 64-17-5) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 7700 - 11200 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | > 100.1 mg/l, 96 hours |
| Sodium Nitrite (CAS 7632-00-0) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Greasyback shrimp (Metapenaeus ensis) | 16.14 - 26.61 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout, donaldson trout (Oncorhynchus mykiss) | 0.15 - 0.25 mg/l, 96 hours |

* Estimates for product may be based on additional component data not shown.

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

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

| | |
|--------------------|-------|
| 1,1-Difluoroethane | 0.75 |
| Ethyl Alcohol | -0.31 |

Mobility in soil No data available.

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

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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.

| | |
|--|--|
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers. |

14. Transport information

DOT

| | |
|-------------------------------------|---|
| UN number | UN1950 |
| UN proper shipping name | Aerosols |
| Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | None |
| Packing group | Not applicable. |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | 153, N82 |
| Packaging exceptions | 306 |
| Packaging non bulk | None |
| Packaging bulk | None |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

| | |
|-------------------------------------|---|
| UN number | UN1950 |
| UN proper shipping name | Aerosols, flammable |
| Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| Packing group | Not applicable. |
| Environmental hazards | Yes |
| ERG Code | 10L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information | |
| Passenger and cargo aircraft | Allowed. |
| Cargo aircraft only | Allowed. |
| Packaging Exceptions | LTD QTY |

IMDG

| | |
|---|---|
| UN number | UN1950 |
| UN proper shipping name | AEROSOLS |
| Transport hazard class(es) | |
| Class | 2 |
| Subsidiary risk | - |
| Packing group | Not applicable. |
| Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-D, S-U |
| 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 | This substance/mixture is not intended to be transported in bulk. |

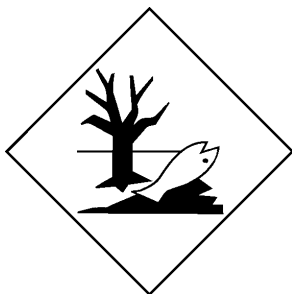
DOT



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium Nitrite (CAS 7632-00-0) 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 - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity | Threshold planning quantity | Threshold planning quantity, lower value | Threshold planning quantity, upper value |
|-------------------|------------|---------------------|-----------------------------|--|--|
| Anhydrous Ammonia | 7664-41-7 | 100 | 500 lbs | | |

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|----------------|------------|----------|
| Sodium Nitrite | 7632-00-0 | 0.1 - 1 |

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)

1,1-Difluoroethane (CAS 75-37-6)

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

1,1-Difluoroethane (CAS 75-37-6)

Ethyl Alcohol (CAS 64-17-5)

Sodium Nitrite (CAS 7632-00-0)

US. New Jersey Worker and Community Right-to-Know Act

1,1-Difluoroethane (CAS 75-37-6)

Ethyl Alcohol (CAS 64-17-5)

Sodium Nitrite (CAS 7632-00-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethyl Alcohol (CAS 64-17-5)

Sodium Nitrite (CAS 7632-00-0)

US. Rhode Island RTK

1,1-Difluoroethane (CAS 75-37-6)

Sodium Nitrite (CAS 7632-00-0)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | 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 | 05-23-2015 |
| Version # | 01 |

Disclaimer

We 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 in the sheet was written based on the best knowledge and experience currently available. 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.