



MSD is a tradename of Merck & Co., Inc., with headquarters in Whitehouse Station, N.J., U.S.A.

## SAFETY DATA SHEET

*This SDS was created in accordance with Regulation EC 1907/2006 and all amendments. Merck urges each user or recipient of this SDS to read the entire data sheet to become aware of the hazards associated with this material.*

### **SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

#### **PRODUCT IDENTIFIER**

**SDS NAME:** NITRO-DUR LAMINATE PLACEBO  
**SYNONYM(S):** NITRO-DUR LAMINATE PLACEBO  
**SDS Number:** SP000309  
**REACH REGISTRATION NUMBER:** Not available

#### **RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST**

**IDENTIFIED USE(S):** Placebo  
**USE(S) ADVISED AGAINST:** None known.

#### **DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET**

**EU SUPPLIER/MANUFACTURER:** MSD  
Rathdrum,  
Co. Wicklow, Ireland  
**MERCK SDS HELPLINE:** +1 (908) 473-3371 (Worldwide)  
Monday to Friday, 9am to 5pm (US Eastern Time)  
**SDS EMAIL:** mercksds@merck.com

#### **EMERGENCY TELEPHONE NUMBER**

**EMERGENCY NUMBER(S):** +1 (908) 423-6000 (24/7/365) English Only

### **SECTION 2. HAZARDS IDENTIFICATION**

#### **CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

**Classification according to EC Directive 1272/2008:**

Based on available data, this mixture does not meet the criteria to be classified as hazardous according to EC Directive 1272/2008.

**Classification according to EC Directives 67/548/EEC (substances) or 1999/45/EC (mixtures):**

Based on available data, this preparation does not meet the criteria to be classified as hazardous according to EC Directive 1999/45/EC.

**COLOR:** Tan  
**FORM:** Plastic, laminate transdermal patch  
**ODOR:** Odor unknown

### **LABEL ELEMENTS**

Based on available data, this mixture does not meet the criteria to be classified as hazardous in accordance with Directive 1272/2008.

### **OTHER HAZARDS**

#### **Health-Related Hazards:**

*May cause effects to:*  
gastrointestinal tract

#### **LISTED CARCINOGENS**

<b>INGREDIENT</b>	<b>CAS NUMBER</b>	<b>IARC</b>	<b>EU</b>
Vinyl Acetate	108-05-4	2B	

2B (IARC): IARC Group 2B - Possibly Carcinogenic to Humans

#### **Environmental-Related Hazards:**

This substance has not been fully tested to meet the criteria for listing as a PBT or a vPvB.

#### **Other Hazards:**

No other information known.

## **SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS**

### **SUBSTANCE**

**CHEMICAL FORMULA:** Mixture.

NITRO-DUR transdermal system contains nitroglycerin in acrylic-based polymer adhesives with a resinous cross-linking agent to provide a continuous source of active ingredient. The formulation for this product is proprietary information. Only hazardous ingredients in concentrations of 1% or greater and/or carcinogenic ingredients in concentrations of 0.1% or greater are listed in the Chemical Composition table. Active ingredients in any concentration are listed. For additional information about carcinogenic ingredients see Section 2.

### **CHEMICAL COMPOSITION**

<b>INGREDIENT</b>	<b>CAS NUMBER</b>	<b>EC NUMBER</b>	<b>REACH REGISTRATION NUMBER</b>	<b>EU CLASSIFICATION</b>	<b>GHS CLASSIFICATION</b>	<b>PERCENT</b>	<b>REASON FOR LISTING</b>
Vinyl Acetate	108-05-4	203-545-4	x	F; R11	Flam. Liq. 2 (H225)	.1-1	Classified

#### **ADDITIONAL INFORMATION:**

This MSDS is written to provide health and safety information for individuals who will be handling the final product formulation during research, manufacturing, and distribution. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate MSDS for each ingredient. Refer to the package insert or product label for handling guidance for the consumer.

See section 16 for definitions of risk phrases and GHS classifications.

## SECTION 4. FIRST AID MEASURES

### FIRST AID MEASURES

<b>INHALATION:</b>	Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.
<b>SKIN CONTACT:</b>	In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a physician.
<b>EYE CONTACT:</b>	In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a physician.
<b>INGESTION:</b>	Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or Poison Control Center. If symptoms persist, consult a physician.
<b>FIRST AID RESPONDER PROTECTION:</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves with appropriate personal protective equipment. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. DO NOT use mouth-to-mouth method if victim ingested or inhaled the substance.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

The polymers present in this product may cause possible irritation to skin or eyes, or gastrointestinal effects (e.g. nausea or vomiting) if swallowed.

Polymer D and Polymer C contain vinyl acetate. Vinyl acetate is an eye and respiratory system irritant. Inhalation exposure may cause respiratory distress, nasal irritation, nasal mucosal and tracheal tissue changes, bronchitis or bronchiolitis (inflammation). In workers exposed to vinyl acetate, cardiac effects, fainting, and chest pain were reported. These effects are not expected at the concentrations present in this formulation. There is evidence that vinyl acetate is a possible mutagen and a potential carcinogen in animal studies.

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

**NOTE TO PHYSICIAN:** Treat supportively and symptomatically.

## SECTION 5. FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

**SUITABLE EXTINGUISHING MEDIA:**

Carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray.

**UNSUITABLE EXTINGUISHING MEDIA:**

None known.

### SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

**SPECIAL FIRE HAZARDS:**

None known.

### ADVICE FOR FIREFIGHTERS

**SPECIAL FIRE FIGHTING PROCEDURES:**

Wear full protective clothing and self-contained breathing apparatus (SCBA).

See Section 9 for Physical and Chemical Properties.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

**PERSONAL PRECAUTIONS:**

Keep personnel away from the clean-up area. Wear appropriate personal protective equipment as specified in Section 8.

## METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

### **SPILL RESPONSE / CLEANUP:**

All spills should be handled according to site requirements and based on precautions cited in the MSDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required.

See Sections 9 and 10 for additional physical, chemical, and hazard information.

## **SECTION 7. HANDLING AND STORAGE**

### **PRECAUTIONS FOR SAFE HANDLING**

#### **HANDLING:**

Keep containers adequately sealed during material transfer, transport, or when not in use. Wash face, hands, and any exposed skin after handling. Do not eat, drink, or smoke when using this substance or mixture.

Appropriate handling of this material is dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. See Section 8 (Exposure Controls) for additional guidance.

### **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

#### **STORAGE:**

Store in a cool, dry, well ventilated area. Do not refrigerate. Store between 15 and 30 deg C.

#### **SPECIFIC END USE(S)**

Refer to Section 1 for identified use(s).

See Section 8 for exposure controls and additional safe handling information.

## **SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

The following guidance applies to the handling of the active ingredient(s) in this formulation.

### **CONTROL PARAMETERS**

#### **EXPOSURE LIMIT VALUES:**

INGREDIENT	CAS NUMBER	ACGIH TLV (TWA)	ACGIH TLV (STEL / SKIN)	ACGIH TLV (CEIL)
Vinyl Acetate	108-05-4	10 ppm	15 ppm	

INGREDIENT	CAS NUMBER	EU	Austria	Belgium	Denmark	France
Vinyl Acetate	108-05-4		STEL 20 ppm STEL 70 mg/m <sup>3</sup> MAK 10 ppm MAK 35 mg/m <sup>3</sup>	STEL 15 ppm STEL 54 mg/m <sup>3</sup> TWA 10 ppm TWA 36 mg/m <sup>3</sup>	TWA 10 ppm TWA 30 mg/m <sup>3</sup>	VME 10 ppm VME 30 mg/m <sup>3</sup>

INGREDIENT	CAS NUMBER	Germany	Ireland	Italy	Netherlands
Vinyl Acetate	108-05-4		STEL 20 ppm STEL 60 mg/m <sup>3</sup> TWA 10 ppm TWA 30 mg/m <sup>3</sup>		

INGREDIENT	CAS NUMBER	Norway	Portugal	Spain	Switzerland	UK:
Vinyl Acetate	108-05-4	STEL 20 ppm STEL 45 mg/m <sup>3</sup> TWA 10 ppm TWA 30 mg/m <sup>3</sup>	STEL 15 ppm TWA 10 ppm	VLA-ED 10 ppm VLA-ED 36 mg/m <sup>3</sup> VLA-EC 15 ppm VLA-EC 54 mg/m <sup>3</sup>	STEL 10 ppm STEL 35 mg/m <sup>3</sup> MAK 10 ppm MAK 35 mg/m <sup>3</sup>	

INGREDIENT	Greece	Poland	Hungary	Croatia	Turkey
Vinyl Acetate	STEL 20 ppm STEL 70 mg/m <sup>3</sup> TWA 10 ppm TWA 35 mg/m <sup>3</sup>	NDSch 30 mg/m <sup>3</sup> NDS 10 mg/m <sup>3</sup>			

## EXPOSURE CONTROLS

The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

### RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

Body Protection:	In small-scale or laboratory operations, lab coats or equivalent protection is required. Disposable Tyvek or other dust impermeable suit should be considered based on procedure or level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.
Skin Protection:	In large-scale or manufacturing operations, disposable Tyvek or other dust impermeable suit is recommended and based on level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance. Gloves that provide an appropriate barrier to the skin are recommended if there is potential for contact with this material. Consult your site safety staff for guidance.
Respiratory Protection:	Respiratory protective equipment (RPE) may be required for certain laboratory and large-scale manufacturing tasks if potential airborne breathing zone concentrations of substances exceed the relevant exposure limit(s). Workplace risk assessment should be completed before specifying and implementing RPE usage. Potential exposure points and pathways, task duration and frequency, potential employee contact with the substance, and the ability of the substance to be rendered airborne during specific tasks should be evaluated. Initial and ongoing strategies of quantitative exposure measurement should be obtained as required by the workplace risk assessment. All RPE must conform to local and regional specifications for efficacy and performance. Consult your site or corporate health and safety professional for additional guidance.
Eye Protection:	Safety glasses with side shields. Use of goggles or full face protection may be required based on hazard, potential for contact, or level of exposure. Consult your site safety staff for guidance.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Plastic, laminate transdermal patch
COLOR:	Tan
ODOR:	Odor unknown
ODOR THRESHOLD:	Not determined
pH:	Not determined
BOILING POINT / RANGE:	Not determined
MELTING POINT / RANGE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined
VAPOR PRESSURE:	Not determined
VAPOR DENSITY:	Not determined
SPECIFIC GRAVITY:	Not determined
SOLUBILITY:	
Water:	Not determined
PARTITION COEFFICIENT (log Pow):	Not determined
VISCOSITY:	Not determined
EVAPORATION RATE:	Not determined
FLAMMABILITY DATA:	
Flash Point:	>93.3 deg C ( >200 deg F )
Flammability (solid, gas):	Not determined
UEL:	Not determined
LEL:	Not determined
Autoignition Temperature:	Not determined

## SECTION 10. STABILITY AND REACTIVITY

### STABILITY/ REACTIVITY:

Stable under conditions specified in Section 7 of this SDS. No hazardous reactions known.

### CONDITIONS AND MATERIALS TO AVOID:

Oxidizers.

### HAZARDOUS DECOMPOSITION PRODUCTS / REACTIONS:

Carbon oxides (COx). Nitrogen oxides (NOx). Ammonia. Formaldehyde. Hydrogen chloride (HCl). Phosgene (COCl<sub>2</sub>).

## SECTION 11. TOXICOLOGICAL INFORMATION

The information presented below pertains to the following individual ingredients, and not to the mixture(s).

### LIKELY ROUTES OF EXPOSURE:

Skin, eye, inhalation, and ingestion.

### ACUTE TOXICITY DATA

#### INHALATION:

No data available.

#### ORAL:

Acrylic Multipolymer Resins: Oral LD50 (rat): >5000 mg/kg

#### EYE:

Acrylic Multipolymer Resins are practically not irritating to slightly irritating to rabbit eyes.

#### SKIN:

Acrylic Multipolymer Resins: Dermal LD50 (rabbit): >5000 mg/kg

Practically not irritating to rabbit skin. In controlled skin contact studies in human volunteers, acrylic multipolymer resins have demonstrated a potential for cumulative irritation; however, primary irritation and allergic skin reaction were not observed.

#### ASPIRATION:

No data available.

#### DERMAL AND RESPIRATORY SENSITIZATION:

Acrylic Multipolymer Resins demonstrated a potential for cumulative irritation in human volunteers; however, primary irritation and allergic skin reactions were not observed.

### REPEAT DOSE TOXICITY DATA

#### SUBCHRONIC / CHRONIC TOXICITY:

Chronic exposure of vinyl acetate by inhalation in animals caused changes in the lung and non-neoplastic effects, atrophic and regenerative changes, in the nasal cavity. Chronic exposure via the drinking-water caused decreases in body-weights at high doses.

#### REPRODUCTIVE / DEVELOPMENTAL TOXICITY:

Teratology studies with vinyl acetate in rats exposed to high oral and inhalation doses produced maternal toxicity and affected embryonic growth. There were no increases in teratogenic effects. In a two-generation reproduction study, rats were exposed to vinyl acetate in drinking water at concentrations up to 5000 ppm. At the highest dose, decreased body weights and impaired reproductive performance in males were observed, but there were no adverse effects on reproduction. Mice given intraperitoneal doses ranging from 125 to 500 mg/kg/day showed reduced sperm production and testicular weights. Sperm abnormalities were also noted in rodents.

Experimental animal studies suggest that typical consumer exposures to vinyl acetate in plastic films would be unlikely to have adverse effects on sperm production in men or on pregnancy outcome.

#### MUTAGENICITY / GENOTOXICITY:

Acrylic Multipolymer Resins were negative in standard tests using bacterial and animal cells.

Vinyl acetate is rapidly transformed into acetaldehyde in human blood and animal tissues. Vinyl acetate and acetaldehyde are genotoxic in human cells *in vitro* and in animals *in vivo*.

Vinyl acetate induced sperm abnormalities and sister chromatid exchange in rodents exposed *in vivo*; micronuclei were induced in bone marrow but not in meiotic cells. In human lymphocytes *in vitro*, vinyl acetate produced chromosomal aberrations, micronuclei, sister chromatid exchange and DNA cross-links. It enhanced viral transformation and sister chromatid exchange in mammalian cells *in vitro*, and it induced DNA-protein cross-links in rat nasal epithelial cells *in vitro*. Vinyl acetate did not induce mutation in bacteria but induced DNA-protein cross-links in plasmid DNA.

**CARCINOGENICITY:**

Vinyl acetate is rapidly transformed into acetaldehyde in human blood and animal tissues. Vinyl acetate and acetaldehyde are listed as possible carcinogens to humans (Group 2B) by the International Agency for Research on Cancer (IARC) and confirmed animal carcinogens with unknown relevance to humans (A3) by the American Conference of Governmental Industrial Hygienists (ACGIH). Both vinyl acetate and acetaldehyde induce nasal cancer in rats after administration by inhalation.

Vinyl acetate was tested in mice and rats by inhalation. No treatment-related increase in tumor incidence was observed in mice; in rats, an increased incidence of nasal cavity tumors was found. In drinking water studies in rats, equivocal carcinogenic effects were demonstrated. In a study in rats exposed to vinyl acetate in utero and followed by lifetime exposure, there was no increase in incidence of tumors. In another study, there was an elevated incidence of adenocarcinomas of the uterus, C-cell neoplasms of the thyroid, and neoplastic nodules in the liver in female rats given 2500 ppm; however, similar effects were not demonstrated in male rats.

**Classification according to EC Directive 1272/2008:**

Based on available data, this mixture does not meet the criteria to be classified as hazardous according to EC Directive 1272/2008.

**Classification criteria have not been met for the following endpoints due to lack of data, inconclusive data, technical impossibility to obtain the data, or data which are conclusive although insufficient for classification (available information to support classification criteria is given in Section 4 or Section 11 of this data sheet):**

Eye damage or irritation. Skin sensitization. Skin corrosion or irritation. Respiratory sensitization. Mutagenicity. Carcinogenicity. Reproductive toxicity. Specific target organ toxicity (STOT) - Single Exposure. Aspiration hazard. Inhalation toxicity. Dermal toxicity. Oral toxicity. Specific target organ toxicity (STOT) - Repeated Exposure.

See Section 4 for human health symptoms and effects.

<b>SECTION 12. ECOLOGICAL INFORMATION</b>
---

There are no data for the final product or its formulation(s). The information presented below pertains to the following ingredient(s).

**ECOTOXICITY DATA****INGREDIENT ECOTOXICITY**

Acrylic Multipolymer Resins:  
 96-hr LC50 (bluegill): >1000 mg/L  
 96-hr LC50 (rainbow trout): >1000 mg/L  
 48-hr EC50 (daphnid): >1000 mg/L

**PERSISTENCE AND DEGRADABILITY****Biodegradation Results:**

No data available.

**BIOACCUMULATIVE POTENTIAL****Partition Coefficient (log Pow) Results:**

No data available.

**MOBILITY IN SOIL****Soil Adsorption/Desorption Results:**

No data available.

**PBT and vPvB ASSESSMENT**

This substance has not been assessed.

**OTHER ADVERSE EFFECTS****ENVIRONMENTAL FATE AND EFFECTS:**

No data available.

<b>SECTION 13. DISPOSAL CONSIDERATIONS</b>
--

**WASTE TREATMENT METHODS****MATERIAL WASTE:**

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Operations that involve the crushing or shredding of waste materials or returned goods must be handled to meet the recommended exposure limit(s).

**PACKAGING AND CONTAINERS:**

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

**SECTION 14. TRANSPORT INFORMATION**

This material is not subject to the transportation regulations of DOT, IATA, IMO, and the ADR.

**SECTION 15. REGULATORY INFORMATION****SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE****Germany, Water Endangering Classes (WGK)**

INGREDIENT	Annex 1	Annex 2 - Water Hazard Classes	Annex 3
Vinyl Acetate	Not listed.	203	Not listed.

**Ozone Depleting Substance(s)**

INGREDIENT	Listing
Vinyl Acetate	Not listed.

**Persistent Organic Pollutants**

INGREDIENT	Listing
Vinyl Acetate	Not listed.

**EU Import and Export Restrictions**

INGREDIENT	Requires PIC Notification	Requires Export Notification	Export Ban
Vinyl Acetate	Not listed.	Not listed.	Not listed.

**SEVESO II EU Directive**

INGREDIENT	Listing
Vinyl Acetate	Not listed.

**REACH**

INGREDIENT	Subject to Authorization	Candidate List for Authorization	Potential Substances of High Concern	Restrictions
Vinyl Acetate	Not listed.	Not listed.	Not listed.	Not listed.

**CHEMICAL SAFETY ASSESSMENT**

A Chemical Safety Assessment has not been done.

**SECTION 16. OTHER INFORMATION**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

**DEPARTMENT ISSUING SDS:**

Global Safety & the Environment  
Merck & Co., Inc.  
One Merck Drive  
Whitehouse Station, NJ 08889

**MERCK SDS HELPLINE:**

+1 (908) 473-3371 (Worldwide)  
Monday to Friday, 9am to 5pm (US Eastern Time)

**SIGNIFICANT CHANGES (EU SUBFORMAT):**

New regional format

**DEFINITIONS (referred to under Sections 2 and 3):**

**SDS NAME:** NITRO-DUR LAMINATE PLACEBO

**SDS Number:** SP000309

Latest Revision Date: 27-Jun-2012

Page 8 of 9



<b>CLP Classifications:</b>	<ul style="list-style-type: none"> <li>Based on available data, this mixture does not meet the criteria to be classified as hazardous according to EC Directive 1272/2008.</li> </ul>
<ul style="list-style-type: none"> <li>Flam. Liq. 2 (H225) - Highly flammable liquid and vapor.</li> </ul>	
<b>Risk Phrases:</b>	<ul style="list-style-type: none"> <li>Based on available data, this preparation does not meet the criteria to be classified as hazardous according to EC Directive 1999/45/EC.</li> <li>R11 - Highly flammable.</li> </ul>

**GLOSSARY:**

IARC - International Agency for Research on Cancer, IARC Group 1 or 2A.  
NTP - National Toxicology Program  
ACGIH - American Conference of Governmental Industrial Hygienists  
ADR - International Carriage of Dangerous Goods by Road  
API - Active Pharmaceutical Ingredient  
CAS - Chemical Abstract Service  
CLP - Classification, Labeling and Packaging  
DOT - Department of Transportation  
EC - European Council  
ETAC - Estimated Target Airborne Concentration  
GHS - Globally Harmonized System  
HEPA - High Efficiency Particulate Arresting  
HHC - Health Hazard Category  
HPA - Hypothalamic Pituitary Adrenal  
IATA - International Air Transport Association  
IMO - International Maritime Organization  
IP - Intraperitoneal Injection  
LD50 - Lethal Dose, 50%  
LC50 - Lethal Concentration, 50%  
LOEL - Lowest Observed Effect Level  
NEL - No Effect Level  
NOAEL - No Adverse Effect Level  
NOEL - No Observe Effect Level  
OEG - Occupational Exposure Guideline  
PBT - Persistent BioaccumulativeToxic  
PG - Packing Group  
PIC - Prior Informed Consent  
PPE - Personal Protective Equipment  
REACH - Registration, Evaluation, Authorization and Restriction of Chemical Substances  
RPE - Respiratory Protective Equipment  
SCBA - Self Contained Breathing Apparatus  
STOT - Specific Target Organ Toxicity  
TSCA - Toxic Substances Control Act  
TWA - Time Weighted Average  
UN - United Nations  
vPvB - Very Persistent andVery Bioaccumulative  
WGK - Water Hazard Class (Germany)