

1 Identification

- **Product identifier**
- **Trade name:** Natural Instincts 4W Dark Warm Brown - MAR
- **Article number:** 99210011107, 315000016382
- **Application of the substance / the mixture** Hair dye
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Wella International Operations Switzerland Sàrl, Chemin Louis-Hubert 1-3, 1213 Petit-Lancy, Switzerland
- **Information department:** Wella SDS Info Team
- **Emergency telephone number:**
CHEMTREC Emergency number: +1-704-741-5970
CHEMTREC: +1 703-741-5970

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.



GHS07

Skin Irritation 2 H315 Causes skin irritation.
Sensitization - Skin 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
2-aminoethanol
1,4-Diamino-2-(methoxymethyl)-benzene
2-methylresorcinol
4-aminophenol
- **Hazard statements**
Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 1)

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

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

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

57-55-6	Propylene glycol	>2.5-≤10%
141-43-5	2-aminoethanol	>2.5- <5%
337906-36-2	1,4-Diamino-2-(methoxymethyl)-benzene	≥1-≤2.5%
178949-82-1	L-Aspartic acid, N,N'-1,2-ethanediybis-, sodium salt (1:3)	≤2.5%
608-25-3	2-methylresorcinol	≥0.1- <1%
123-30-8	4-aminophenol	≥0.1- <1%
13463-67-7	titanium dioxide	≥0.1-≤2.5%

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

57-55-6	Propylene glycol	30 mg/m ³
141-43-5	2-aminoethanol	6 ppm
108-46-3	resorcinol	20 ppm
591-27-5	3-aminophenol	3 mg/m ³
	Natriumsulfit	11 mg/m ³
9005-00-9	Steareth-2	5.7 mg/m ³
1310-73-2	sodium hydroxide	0.5 mg/m ³
13463-67-7	titanium dioxide	30 mg/m ³
139-33-3	Disodium EDTA	11 mg/m ³
90-15-3	1-naphthol	2.2 mg/m ³

· **PAC-2:**

57-55-6	Propylene glycol	1,300 mg/m ³
141-43-5	2-aminoethanol	170 ppm
108-46-3	resorcinol	28 ppm
591-27-5	3-aminophenol	33 mg/m ³
	Natriumsulfit	120 mg/m ³
9005-00-9	Steareth-2	63 mg/m ³
1310-73-2	sodium hydroxide	5 mg/m ³
13463-67-7	titanium dioxide	330 mg/m ³
139-33-3	Disodium EDTA	120 mg/m ³
90-15-3	1-naphthol	25 mg/m ³

· **PAC-3:**

57-55-6	Propylene glycol	7,900 mg/m ³
141-43-5	2-aminoethanol	1,000 ppm
108-46-3	resorcinol	170 ppm
591-27-5	3-aminophenol	200 mg/m ³
	Natriumsulfit	710 mg/m ³

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 3)

9005-00-9	Steareth-2	380 mg/m ³
1310-73-2	sodium hydroxide	50 mg/m ³
13463-67-7	titanium dioxide	2,000 mg/m ³
139-33-3	Disodium EDTA	730 mg/m ³
90-15-3	1-naphthol	450 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class:** 12
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
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.

57-55-6 Propylene glycol	
WEEL	Long-term value: 10 mg/m ³
141-43-5 2-aminoethanol	
PEL	Long-term value: 6 mg/m ³ , 3 ppm
REL	Short-term value: 15 mg/m ³ , 6 ppm Long-term value: 8 mg/m ³ , 3 ppm
TLV	Short-term value: 6 ppm Long-term value: 3 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: *Natural Instincts 4W Dark Warm Brown - MAR*

(Contd. of page 4)

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** *Protective work clothing*

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value at 20 °C (68 °F):** 10.5

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Auto igniting:** 371 °C (699.8 °F)

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 5)

Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	11.5 %
Water:	77.3 %
VOC content:	3.50 %
	35.0 g/l / 0.29 lb/gal
Solids content:	6.2 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:

57-55-6 Propylene glycol

Oral	LD50	20,000 mg/kg (rat)
Dermal	LD50	20,800 mg/kg (rabbit)

141-43-5 2-aminoethanol

Oral	LD50	1,089 mg/kg (rat) (bw (Similar to OECD 401; standard acute method; ra)
Dermal	LD50	1,000 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/l (rat)

337906-36-2 1,4-Diamino-2-(methoxymethyl)-benzene

Oral	LD50	>150 mg/kg (rat) (bw (Guideline not indicated; rat; weight of eviden)
------	------	---

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 6)

Dermal	LD50	431 mg/kg (rabbit) (bw (Calculated value; kinetic based calculation; r)
Inhalative	LC50/4 h	1.27 mg/l (rat)
178949-82-1 L-Aspartic acid, N,N'-1,2-ethanediybis-, sodium salt (1:3)		
Oral	LD50	>2,000 mg/kg (rat) (bw (//OECD 401))
Dermal	LD50	>2,000 mg/kg (rabbit) (bw (//OECD 402))
Inhalative	LC50/4 h	>1.49 mg/l (rat) (air (//OECD 403))
608-25-3 2-methylresorcinol		
Oral	LD50	200 mg/kg (rat)
123-30-8 4-aminophenol		
Oral	LD50	500 mg/kg (rat)
Dermal	LD50	>8,000 mg/kg (rabbit) (bw (//US EPA OPPTS 870.1200))
13463-67-7 titanium dioxide		
Oral	LD50	>5,000 mg/kg (rat) (bw (OECD 425))
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>3.43 mg/l (rat) (air (OECD 403))

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

108-46-3	resorcinol	3
13463-67-7	titanium dioxide	2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Danger to drinking water if even extremely small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 7)

- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | |
| · DOT, IMDG, IATA | not regulated |
| · UN proper shipping name | |
| · DOT, IMDG, IATA | not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | not regulated |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | not regulated |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7732-18-5	water, distilled, conductivity or of similar purity	ACTIVE
57-55-6	Propylene glycol	ACTIVE
141-43-5	2-aminoethanol	ACTIVE
67762-27-0	Cetearyl Alcohol	ACTIVE
178949-82-1	L-Aspartic acid, N,N'-1,2-ethanediybis-, sodium salt (1:3)	ACTIVE

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 8)

108-46-3	resorcinol	ACTIVE
608-25-3	2-methylresorcinol	ACTIVE
77-92-9	citric acid	ACTIVE
591-27-5	3-aminophenol	ACTIVE
	Natriumsulfit	ACTIVE
123-30-8	4-aminophenol	ACTIVE
2197-63-9	1-Hexadecanol, 1,1'-(hydrogen phosphate)	ACTIVE
50-81-7	ascorbic acid	ACTIVE
9005-00-9	Steareth-2	ACTIVE
11138-66-2	Xanthan Gum	ACTIVE
1310-73-2	sodium hydroxide	ACTIVE
13463-67-7	titanium dioxide	ACTIVE
139-33-3	Disodium EDTA	ACTIVE
2835-95-2	5-amino-o-cresol	ACTIVE
90-15-3	1-naphthol	ACTIVE
7695-91-2	Tocopheryl Acetate	ACTIVE
106-24-1	geraniol	ACTIVE
5392-40-5	Citral	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

13463-67-7 titanium dioxide

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

108-46-3	resorcinol	A4
13463-67-7	titanium dioxide	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7 titanium dioxide

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 9)

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

2-aminoethanol
 1,4-Diamino-2-(methoxymethyl)-benzene
 2-methylresorcinol
 4-aminophenol

· **Hazard statements**

Causes skin irritation.
 Causes serious eye damage.
 May cause an allergic skin reaction.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves / eye protection / face protection.
 If on skin: Wash with plenty of water.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Immediately call a poison center/doctor.
 Specific treatment (see on this label).
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Abteilung Umweltschutz

· **Contact:** Hr. Dr. Speckbacher

· **Date of preparation / last revision** 03/27/2023

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Printing date 03/27/2023

Reviewed on 03/27/2023

Trade name: Natural Instincts 4W Dark Warm Brown - MAR

(Contd. of page 10)

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Sensitization - Skin 1: Skin sensitisation – Category 1

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/17/2021

Reviewed on 10/04/2017

1 Identification

- **Product identifier**
- **Trade name:** Natural Instinct 12 volume Oil developer
- **Article number:** 99210002864, 315000014133
- **Application of the substance / the mixture**
Hair color developer
Cosmetic product
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Wella International Operations Switzerland Sàrl, Chemin Louis-Hubert 1-3, 1213 Petit-Lancy, Switzerland
- **Information department:** Wella SDS Info Team
- **Emergency telephone number:**
CHEMTREC Emergency number: +1-703-527-3887
CHEMTREC US/NA Emergency number(toll free): 800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).
-
- **Label elements**
 - **GHS label elements** Void
 - **Hazard pictograms** Void
 - **Signal word** Void
 - **Hazard statements** Void
 - **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

7722-84-1	hydrogen peroxide solution	>2.5-<5%
-----------	----------------------------	----------

4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

US

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/17/2021

Reviewed on 10/04/2017

Trade name: Natural Instinct 12 volume Oil developer

(Contd. of page 1)

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:

7722-84-1	hydrogen peroxide solution	10 ppm
7664-38-2	Phosphoric Acid	3 mg/m ³
2809-21-4	1-hydroxyethane-1,1-diylbis(phosphonic acid)	7.2 mg/m ³

· PAC-2:

7722-84-1	hydrogen peroxide solution	50 ppm
7664-38-2	Phosphoric Acid	30 mg/m ³
2809-21-4	1-hydroxyethane-1,1-diylbis(phosphonic acid)	79 mg/m ³

· PAC-3:

7722-84-1	hydrogen peroxide solution	100 ppm
7664-38-2	Phosphoric Acid	150 mg/m ³
2809-21-4	1-hydroxyethane-1,1-diylbis(phosphonic acid)	480 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** 12
- **Specific end use(s)** No further relevant information available.

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/17/2021

Reviewed on 10/04/2017

Trade name: Natural Instinct 12 volume Oil developer

(Contd. of page 2)

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

7722-84-1 hydrogen peroxide solution

PEL Long-term value: 1.4 mg/m³, 1 ppm

REL Long-term value: 1.4 mg/m³, 1 ppm

TLV Long-term value: 1.4 mg/m³, 1 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

· **Breathing equipment:** Not required.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Color: White

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 2.6

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/17/2021

Reviewed on 10/04/2017

Trade name: *Natural Instinct 12 volume Oil developer*

(Contd. of page 3)

· Danger of explosion:	<i>Product does not present an explosion hazard.</i>
· Explosion limits:	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
· Vapor pressure:	<i>Not determined.</i>
· Density:	<i>Not determined.</i>
· Relative density	<i>Not determined.</i>
· Vapor density	<i>Not determined.</i>
· Evaporation rate	<i>Not determined.</i>
· Solubility in / Miscibility with	
Water:	<i>Not miscible or difficult to mix.</i>
· Partition coefficient (n-octanol/water):	<i>Not determined.</i>
· Viscosity:	
Dynamic:	<i>Not determined.</i>
Kinematic:	<i>Not determined.</i>
· Solvent content:	
Water:	<i>86.2 %</i>
VOC content:	<i>0.00 %</i>
	<i>0.0 g/l / 0.00 lb/gal</i>
· Other information	<i>No further relevant information available.</i>

10 Stability and reactivity

- **Reactivity** *No further relevant information available.*
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **Possibility of hazardous reactions** *No dangerous reactions known.*
- **Conditions to avoid** *No further relevant information available.*
- **Incompatible materials:** *No further relevant information available.*
- **Hazardous decomposition products:** *No dangerous decomposition products known.*

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
7722-84-1 hydrogen peroxide solution		
Oral	LD50	693.7 mg/kg (rat) (bw (OECD 401))
Dermal	LD50	>2000 mg/kg (rabbit) (bw)
Inhalative	LC50/4 h	11 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** *No irritant effect.*
- **on the eye:** *No irritating effect.*
- **Sensitization:** *No sensitizing effects known.*

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/17/2021

Reviewed on 10/04/2017

Trade name: Natural Instinct 12 volume Oil developer

(Contd. of page 4)

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

7722-84-1 hydrogen peroxide solution	3
--------------------------------------	---

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:** Smaller quantities can be disposed of with household waste.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **DOT, ADN, IMDG, IATA** not regulated

· **UN proper shipping name**

· **DOT, ADN, IMDG, IATA** not regulated

· **Transport hazard class(es)**

· **DOT, ADN, IMDG, IATA**

· **Class** not regulated

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/17/2021

Reviewed on 10/04/2017

Trade name: Natural Instinct 12 volume Oil developer

(Contd. of page 6)

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Abteilung Umweltschutz

· **Contact:** Hr. Dr. Speckbacher

· **Date of preparation / last revision** 01/17/2021 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

1 Identification

- **Product identifier**
- **Trade name:** Clairol Professional Pro Color Conditioner
- **Article number:** 90816744, 315000010173
- **Application of the substance / the mixture**
Hair care products
Cosmetic product
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Wella International Operations Switzerland Sàrl, Chemin Louis-Hubert 1-3, 1213 Petit-Lancy, Switzerland
- **Information department:** Wella SDS Info Team
- **Emergency telephone number:**
CHEMTREC Emergency number: +1-704-741-5970
CHEMTREC: +1 703-741-5970

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

831241-93-1	Siloxanes and Silicones, 3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me, [(hydroxydimethylsilyl)oxy]- and [(methoxydimethylsilyl)oxy]-terminated	>2.5-<10%
7651-02-7	N-[3-(dimethylamino)propyl]stearamide	≥1-≤2.5%

4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 1)

- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

112-92-5	octadecan-1-ol	5.4 ppm
36653-82-4	1-Hexadecanol	1.6 mg/m ³
100-51-6	Benzyl alcohol	30 ppm
120-51-4	Benzyl benzoate	5.7 mg/m ³
60-00-4	edetic acid	4.1 mg/m ³
10377-60-3	magnesium nitrate	30 mg/m ³
91-64-5	Coumarin	0.88 mg/m ³
5989-27-5	Limonene	15 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	0.6 mg/m ³
7786-30-3	Magnesium chloride (MgCl ₂)	11 mg/m ³

· **PAC-2:**

112-92-5	octadecan-1-ol	60 ppm
36653-82-4	1-Hexadecanol	18 mg/m ³
100-51-6	Benzyl alcohol	52 ppm
120-51-4	Benzyl benzoate	63 mg/m ³
60-00-4	edetic acid	45 mg/m ³
10377-60-3	magnesium nitrate	330 mg/m ³
91-64-5	Coumarin	9.7 mg/m ³
5989-27-5	Limonene	67 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	6.6 mg/m ³
7786-30-3	Magnesium chloride (MgCl ₂)	120 mg/m ³

· **PAC-3:**

112-92-5	octadecan-1-ol	360 ppm
----------	----------------	---------

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 2)

36653-82-4	1-Hexadecanol	110 mg/m ³
100-51-6	Benzyl alcohol	740 ppm
120-51-4	Benzyl benzoate	380 mg/m ³
60-00-4	edetic acid	200 mg/m ³
10377-60-3	magnesium nitrate	2,000 mg/m ³
91-64-5	Coumarin	58 mg/m ³
5989-27-5	Limonene	170 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	40 mg/m ³
7786-30-3	Magnesium chloride (MgCl ₂)	550 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** 12
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 3)

- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Viscous
Color:	Whitish
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value at 20 °C (68 °F):** 3.5-5

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

· Solvent content:

Organic solvents:	0.4 %
Water:	83.8 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal

Solids content: 7.9 %

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 4)

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

91-64-5	Coumarin	3
5989-27-5	Limonene	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 5)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|-----------------|
| · UN-Number | |
| · DOT, IMDG, IATA | not regulated |
| · UN proper shipping name | |
| · DOT, IMDG, IATA | not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | not regulated |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | not regulated |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7732-18-5	water, distilled, conductivity or of similar purity	ACTIVE
112-92-5	octadecan-1-ol	ACTIVE
36653-82-4	1-Hexadecanol	ACTIVE
7651-02-7	N-[3-(dimethylamino)propyl]stearamide	ACTIVE

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 6)

56-86-0	glutamic acid	ACTIVE
100-51-6	Benzyl alcohol	ACTIVE
77-92-9	citric acid	ACTIVE
120-51-4	Benzyl benzoate	ACTIVE
60-00-4	edetic acid	ACTIVE
71-00-1	histidine	ACTIVE
7647-14-5	sodium chloride	ACTIVE
8001-31-8	Cocos Nucifera (Coconut) Oil	ACTIVE
101-86-0	Hexyl cinnamal	ACTIVE
78-70-6	Linalool	ACTIVE
10377-60-3	magnesium nitrate	ACTIVE
106-22-9	Citronellol	ACTIVE
68988-56-7	Silicic acid, sodium salt, reaction products with chlorotrimethylsilane and iso-Pr alc.	ACTIVE
91-64-5	Coumarin	ACTIVE
118-58-1	benzyl salicylate	ACTIVE
127-51-5	alpha-iso-Methylionone	ACTIVE
5989-27-5	Limonene	ACTIVE
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	ACTIVE
7786-30-3	Magnesium chloride (MgCl ₂)	ACTIVE
2682-20-4	2-methyl-2H-isothiazol-3-one	ACTIVE
106-24-1	geraniol	ACTIVE
5392-40-5	Citral	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** Void

· **Hazard pictograms** Void

· **Signal word** Void

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/25/2021

Reviewed on 06/18/2019

Trade name: Clairol Professional Pro Color Conditioner

(Contd. of page 7)

- **Hazard statements** Void
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Abteilung Umweltschutz
- **Contact:** Hr. Dr. Speckbacher
- **Date of preparation / last revision** 11/25/2021 / -

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit