

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

1 Identification

Product identifier

Product name: Shipping Fluid

Article number: I-4900-L Application of the substance / the mixture: Printing inks

Details of the supplier of the safety data sheet Direct Color Systems 99 Hammer Mill Rd. Rocky Hill, CT 06067-USA Manufacturer/Supplier: Direct Color Systems 99 Hammer Mill Rd. Rocky Hill, CT 06067-USA Emergency telephone number US: 24/7 CHEMTREC 1-800-424-9300 Emergency telephone number International: 24/7 CHEMTREC +1 703-527-3887

2 Hazard(s) identification

Classification of the substance or mixture

Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye 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



Signal word Warning

Hazard-determining components of labeling: hexamethylene diacrylate Neopentylglycol(PO)2 Diacrylate Hazard statements Causes skin irritation. Causes serious eye irritation. 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.

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

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.

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

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

Additional information:

49.5 % of the mixture consists of component(s) of unknown toxicity.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

13048-33-4 hexamethylene diacrylate	25 - 50%
Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1, H317	
84170-74-1 Neopentylglycol(PO)2 Diacrylate	25 - 50%
Sensitization - Skin 1, H317	

4 First-aid measures

Description of first aid measures

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. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult 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.

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 product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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.

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.

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 constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

13048-33-4 hexamethylene diacrylate

WEEL Long-term value: 1 mg/m³

DSEN 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 eyes and skin.

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

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

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

9 Physical and chemical properties

Information on basic physical and cher General Information Appearance:	nical properties
Form: Color: Odor: Odor threshold:	Liquid According to product specification Characteristic Not determined.
pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. Undetermined.
Flash point:	> 100 °C (> 212 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Vapor pressure at 50 °C (122 °F):	0 hPa
Density: Relative density Vapor density Evaporation rate	Not determined. Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water	:): Not determined.

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid	
------------------------------	--

Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
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:

13048-33-4 hexamethylene diacrylate

Oral LD50 > 5,000 mg/kg (rat)

Dermal LD50 > 3,000 mg/kg (rab)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

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 <u>IARC (International Agency for Research on Cancer)</u>

100-41-4 ethylbenzene: 2B

127-19-5 N,N-dimethylacetamide: 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.

US

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

Ecotoxical effects:
Remark: Toxic for fish
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.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
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:

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 not regulated IMDG, IATA UN3082 UN proper shipping name DOT not regulated IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate, Neopentylglycol(PO)2 Diacrylate), MARINE POLLUTANT IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hexamethylene diacrylate, Neopentylglycol(PO)2 Diacrylate) Transport hazard class(es) DOT Class not regulated IMDG, IATA Class 9 Miscellaneous dangerous substances and articles Label 9 **Packing group** DOT not regulated IMDG, IATA Ш **Environmental hazards:** Marine pollutant: Symbol (fish and tree) Special marking (IATA): Symbol (fish and tree) Special precautions for user

Warning: Miscellaneous dangerous substances and articles

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

code): 90
F-A.S-F
A
Not applicable.
5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE
LIQUID, N.O.S. (HEXAMETHYLENE DIACRYLATE
NEOPENTYLGLYCOL(PO)2 DIACRYLATE), 9, III

15 Regulatory information

afety, health and environmental regulations/legislation specific for the substance or mixture
o further relevant information available.
SARA
Section 355 (extremely hazardous substances):
Ione of the ingredients is listed. Section 313 (Specific toxic chemical listings):
Ione of the ingredients is listed. TSCA (Toxic Substances Control Act):
Il components have the value ACTIVE.
Hazardous Air Pollutants
00-41-4 ethylbenzene
Proposition 65
Chemicals known to cause cancer:
00-41-4 ethylbenzene
27-19-5 N,N-dimethylacetamide
Chemicals known to cause reproductive toxicity for females:
one of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males:
27-19-5 N,N-dimethylacetamide
Chemicals known to cause developmental toxicity:
27-19-5 N,N-dimethylacetamide
Carcinogenic categories
EPA (Environmental Protection Agency)
00-41-4 ethylbenzene: D
TLV (Threshold Limit Value)
00-41-4 ethylbenzene: A3
27-19-5 N,N-dimethylacetamide: A4
NIOSH-Ca (National Institute for Occupational Safety and Health)
one of the ingredients is listed.
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

Hazard pictograms



Signal word Warning

Hazard-determining components of labeling:

hexamethylene diacrylate

Neopentylglycol(PO)2 Diacrylate

Hazard statements

Causes skin irritation.

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

May cause an anergic 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.

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

If eye irritation persists: 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.

Relevant phrases

H315 Causes skin irritation.

- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

Contact:

Date of preparation / last revision 09/10/2021

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)

- 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

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Printing date 08/15/2023

Version: 1.2

Reviewed on 09/10/2021

Product name: Shipping Fluid

REL: Recommended Exposure Limit Skin Irritation 2: Skin corrosion/irritation – Category 2 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A Sensitization - Skin 1: Skin sensitisation – Category 1 * Data compared to the previous version altered.