

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

1.1. Product identifier

Product form : Mixture
Product name : HCF® Black
Product code : 30103, 305C16, 354C16
Product group : Trade product
UFI : Add UFI

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Coating

1.2.2. Uses advised against

No additional information available

.3. Details of the supplier of the safety data sheet

Manufacturer

Plasti Dip International, Inc.
3920 Pheasant Ridge Drive
Blaine, MN 55449
Phone - (763) 785-2156

Distributor

Global Express
7 Indian Path
Millstone, NJ 08535
(732) 977-0605

EU Importer of Record

Info needed

1.4. Emergency telephone number

Manufacturer Emergency number

CHEMTREC: 1-800-424-9300 (US);
+1 703-741-5970 (International)

Distributor Emergency number

CHEMTREC: 1-800-424-9300 (US);
+1 703-741-5970 (International)

Importer Emergency number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Carcinogenicity Category 2 H351

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



GHS08

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H351 - Suspected of causing cancer.

Precautionary statements (CLP)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Butyl cellosolve	CAS-No.: 111-76-2 EC-No.: 203-905-0 EC Index-No.: 603-014-00-0	3 – 7	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Carbon black	CAS-No.: 1333-86-4 EC-No.: 215-609-9	1 – 5	Carc. 2, H351 STOT RE 1, H372

Full text of H- and EUH-statements: see section 16

SECTION 4: First Aid measures

4.1. Description of first aid measures

First-aid measures general	: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
First-aid measures after skin contact	: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention immediately.
First-aid measures after eye contact	: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
First-aid measures after ingestion	: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.

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

Symptoms/effects	: Suspected of causing cancer.
Symptoms/effects after inhalation	: May cause minor respiratory irritation.
Symptoms/effects after skin contact	: May cause minor skin irritation.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation.
Chronic symptoms	: Suspected of causing cancer.

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

No additional information available

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Foam. Dry chemical.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.
Explosion hazard : Product is not explosive.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion. Avoid contact with sprayed water - material slippery when wet.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
Other information : Material can splatter above 100 °C / 212 °F.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Prevent entry to sewers and public waters.
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Do not handle until all safety precautions have been read and understood. Use only in well-ventilated areas. Do not breathe mist, vapors. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep from freezing.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

Ammonium hydroxide (1336-21-6)

Finland - Occupational Exposure Limits

HTP (OEL TWA)	14 mg/m ³
	20 ppm
HTP (OEL STEL)	36 mg/m ³
	50 ppm

USA - ACGIH - Occupational Exposure Limits

Remark (ACGIH®)	OELs not established
-----------------	----------------------

Butyl cellosolve (111-76-2)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	98 mg/m ³
	20 ppm
IOEL STEL	246 mg/m ³
	50 ppm
Remark	Possibility of significant uptake through the skin

Austria - Occupational Exposure Limits

MAK (OEL TWA)	98 mg/m ³
	20 ppm
MAK (OEL STEL)	200 mg/m ³
	40 ppm
OEL chemical category	skin notation

Belgium - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	Skin, skin notation

Bulgaria - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butyl cellosolve (111-76-2)

OEL STEL	246 mg/m ³
	50 ppm

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	98 mg/m ³
	20 ppm
KGVI (OEL STEL)	246 mg/m ³
	50 ppm
OEL chemical category	skin notation

Cyprus - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	Skin-potential for cutaneous absorption

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	100 mg/m ³
OEL chemical category	Potential for cutaneous absorption

Czech Republic - Biological limit values

BLV	200 mg/g Kreatinin Parameter: Butoxyacetic acid - Medium: urine - Sampling time: end of shift at end of workweek (after hydrolysis) 0.17 mmol/mmol Creatinine Parameter: Butoxyacetic acid - Medium: urine - Sampling time: end of shift at end of workweek (after hydrolysis)
-----	---

Denmark - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	Potential for cutaneous absorption

Estonia - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	skin notation, Sensitizer

Finland - Occupational Exposure Limits

HTP (OEL TWA)	98 mg/m ³
	20 ppm
HTP (OEL STEL)	250 mg/m ³
	50 ppm
OEL chemical category	Potential for cutaneous absorption

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butyl cellosolve (111-76-2)

France - Occupational Exposure Limits

VME (OEL TWA)	49 mg/m ³ (restrictive limit)
	10 ppm (restrictive limit)
VLE (OEL C/STEL)	246 mg/m ³ (restrictive limit)
	50 ppm (restrictive limit)
OEL chemical category	Risk of cutaneous absorption

Germany - Occupational Exposure Limits (TRGS 900)

AGW (OEL TWA)	49 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	skin notation

Germany - Biological limit values (TRGS 903)

Biological limit value	150 mg/g Kreatinin Parameter: Butoxyacetic acid (after hydrolysis) - Medium: urine - Sampling time: for long-term exposures: at the end of the shift after several shifts
	150 mg/g Kreatinin Parameter: Butoxyacetic acid (after hydrolysis) - Medium: urine - Sampling time: end of shift

Gibraltar - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	skin notation

Greece - Occupational Exposure Limits

OEL TWA	120 mg/m ³
	25 ppm
OEL chemical category	skin - potential for cutaneous absorption

Hungary - Occupational Exposure Limits

AK (OEL TWA)	98 mg/m ³
CK (OEL STEL)	246 mg/m ³
OEL chemical category	Potential for cutaneous absorption

Ireland - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	Potential for cutaneous absorption

Italy - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butyl cellosolve (111-76-2)

	50 ppm
--	--------

OEL chemical category	skin - potential for cutaneous absorption
-----------------------	---

Latvia - Occupational Exposure Limits

OEL TWA	98 mg/m ³
---------	----------------------

	20 ppm
--	--------

OEL chemical category	skin - potential for cutaneous exposure
-----------------------	---

Lithuania - Occupational Exposure Limits

IPRV (OEL TWA)	50 mg/m ³
----------------	----------------------

	10 ppm
--	--------

TPRV (OEL STEL)	100 mg/m ³
-----------------	-----------------------

	20 ppm
--	--------

OEL chemical category	skin notation
-----------------------	---------------

Luxembourg - Occupational Exposure Limits

OEL TWA	98 mg/m ³
---------	----------------------

	20 ppm
--	--------

OEL STEL	246 mg/m ³
----------	-----------------------

	50 ppm
--	--------

OEL chemical category	Possibility of significant uptake through the skin
-----------------------	--

Malta - Occupational Exposure Limits

OEL TWA	98 mg/m ³
---------	----------------------

	20 ppm
--	--------

OEL STEL	246 mg/m ³
----------	-----------------------

	50 ppm
--	--------

OEL chemical category	Possibility of significant uptake through the skin
-----------------------	--

Netherlands - Occupational Exposure Limits

TGG-8u (OEL TWA)	100 mg/m ³
------------------	-----------------------

	20.4 ppm
--	----------

TGG-15min (OEL STEL)	246 mg/m ³
----------------------	-----------------------

	50 ppm
--	--------

MAC chemical category	skin notation
-----------------------	---------------

Poland - Occupational Exposure Limits

NDS (OEL TWA)	98 mg/m ³
---------------	----------------------

NDSCh (OEL STEL)	200 mg/m ³
------------------	-----------------------

Portugal - Occupational Exposure Limits

OEL TWA	98 mg/m ³ (indicative limit value)
---------	---

	20 ppm (indicative limit value)
--	---------------------------------

OEL STEL	246 mg/m ³ (indicative limit value)
----------	--

	50 ppm (indicative limit value)
--	---------------------------------

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butyl cellosolve (111-76-2)

OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, skin - potential for cutaneous exposure indicative limit value
-----------------------	---

Romania - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	skin notation

Slovakia - Occupational Exposure Limits

NPHV (OEL TWA)	98 mg/m ³
	20 ppm
NPHV (OEL C)	246 mg/m ³
OEL chemical category	Potential for cutaneous absorption

Slovenia - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	Potential for cutaneous absorption

Spain - Occupational Exposure Limits

VLA-ED (OEL TWA)	98 mg/m ³ (indicative limit value)
	20 ppm (indicative limit value)
VLA-EC (OEL STEL)	245 mg/m ³
	50 ppm
OEL chemical category	skin - potential for cutaneous absorption

Spain - Biological limit values

BLV	200 mg/g Kreatinin Parameter: Butoxyacetic acid (with hydrolysis) - Medium: urine - Sampling time: end of shift (with hydrolysis)
-----	---

Sweden - Occupational Exposure Limits

NGV (OEL TWA)	50 mg/m ³
	10 ppm
KGV (OEL STEL)	246 mg/m ³
	50 ppm
OEL chemical category	skin notation

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	123 mg/m ³
	25 ppm
WEL STEL (OEL STEL)	246 mg/m ³
	50 ppm
WEL chemical category	Potential for cutaneous absorption

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butyl cellosolve (111-76-2)

Norway - Occupational Exposure Limits

Grenseverdi (OEL TWA)	50 mg/m ³
	10 ppm
Korttidsverdi (OEL STEL)	75 mg/m ³ (value calculated)
	20 ppm (value calculated)
OEL chemical category	skin notation

Switzerland - Occupational Exposure Limits

MAK (OEL TWA)	49 mg/m ³
	10 ppm
KZGW (OEL STEL)	98 mg/m ³
	20 ppm
OEL chemical category	skin notation

Switzerland - BAT (BLV)

BAT (BLV)	150 mg/g Kreatinin Parameter: 2-Butoxyacetic acid (after hydrolysis) - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures)
-----------	--

Turkey - Occupational Exposure Limits

OEL TWA	98 mg/m ³
	20 ppm
OEL STEL	246 mg/m ³
	50 ppm
OEL chemical category	skin notation

USA - ACGIH - Occupational Exposure Limits

Local name	2-Butoxyethanol (EGBE)
ACGIH® TLV® TWA	20 ppm
Remark (ACGIH®)	eye and upper respiratory tract irritation
ACGIH® chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Regulatory reference	ACGIH 2024

USA - ACGIH - Biological Exposure Indices

Local name	2-Butoxyethanol
BEI (BLV)	200 mg/g Kreatinin Parameter: Butoxyacetic acid with hydrolysis - Medium: urine - Sampling time: end of shift
Regulatory reference	ACGIH 2024

Carbon black (1333-86-4)

Belgium - Occupational Exposure Limits

OEL TWA	3 mg/m ³
---------	---------------------

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	3.5 mg/m ³
KGVI (OEL STEL)	7 mg/m ³

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon black (1333-86-4)

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	2 mg/m ³ (dust)
---------------	----------------------------

Denmark - Occupational Exposure Limits

OEL TWA	3.5 mg/m ³
OEL STEL	7 mg/m ³

Estonia - Occupational Exposure Limits

OEL TWA	3 mg/m ³
---------	---------------------

Finland - Occupational Exposure Limits

HTP (OEL TWA)	3.5 mg/m ³
HTP (OEL STEL)	7 mg/m ³

France - Occupational Exposure Limits

VME (OEL TWA)	3.5 mg/m ³
---------------	-----------------------

Greece - Occupational Exposure Limits

OEL TWA	3.5 mg/m ³
OEL STEL	7 mg/m ³

Hungary - Occupational Exposure Limits

AK (OEL TWA)	3 mg/m ³ (inhalable concentration (flying and fibrous powders))
--------------	--

Ireland - Occupational Exposure Limits

OEL TWA	3 mg/m ³ (inhalable fraction)
OEL STEL	15 mg/m ³ (calculated-inhalable fraction)

Poland - Occupational Exposure Limits

NDS (OEL TWA)	4 mg/m ³ (inhalable fraction)
---------------	--

Portugal - Occupational Exposure Limits

OEL TWA	3 mg/m ³ (inhalable fraction)
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Slovakia - Occupational Exposure Limits

NPHV (OEL TWA)	2 mg/m ³ (respirable fraction, 5% or less fibrogenic component) 10 mg/m ³ (respirable fraction, greater than 5% fibrogenic component) 10 mg/m ³ (total aerosol)
----------------	--

Spain - Occupational Exposure Limits

VLA-ED (OEL TWA)	3.5 mg/m ³
------------------	-----------------------

Sweden - Occupational Exposure Limits

NGV (OEL TWA)	3 mg/m ³ (inhalable fraction)
---------------	--

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³

Norway - Occupational Exposure Limits

Grenseverdi (OEL TWA)	3.5 mg/m ³
Korttidsverdi (OEL STEL)	7 mg/m ³ (value calculated)

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon black (1333-86-4)

USA - ACGIH - Occupational Exposure Limits

Local name	Carbon black
ACGIH® TLV® TWA	3 mg/m³ (I - Inhalable particulate matter)
Remark (ACGIH®)	TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH® chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Regulatory reference	ACGIH 2025

Sodium nitrite (7632-00-0)

Lithuania - Occupational Exposure Limits

NRV (OEL C)	0.1 mg/m³
-------------	-----------

USA - ACGIH - Occupational Exposure Limits

Remark (ACGIH®)	OELs not established
-----------------	----------------------

Acrylonitrile (107-13-1)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	1 mg/m³ (limit values shall apply from 5 April 2026)
	0.45 ppm (limit values shall apply from 5 April 2026)
Remark	Present (Substantial contribution to the total body burden via dermal exposure possible) Present (Dermal sensitisation: the substance can cause sensitisation of the skin)

Austria - Occupational Exposure Limits

TRK (OEL TWA)	4.5 mg/m³
	2 ppm
OEL chemical category	skin notation, Group A2 Carcinogen, Skin sensitizer

Belgium - Occupational Exposure Limits

OEL TWA	4.4 mg/m³
	2 ppm
OEL chemical category	Skin, Carcinogen

Bulgaria - Occupational Exposure Limits

OEL TWA	4.5 mg/m³
---------	-----------

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	4.4 mg/m³
	2 ppm
OEL chemical category	Carcinogen Category 1B, skin notation

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	2 mg/m³
OEL chemical category	Potential for cutaneous absorption, Sensitizer

Denmark - Occupational Exposure Limits

OEL TWA	4 mg/m³
	2 ppm
OEL STEL	8 mg/m³

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acrylonitrile (107-13-1)

	4 ppm
--	-------

OEL chemical category	Potential for cutaneous absorption
-----------------------	------------------------------------

Estonia - Occupational Exposure Limits

OEL TWA	4.5 mg/m ³
---------	-----------------------

	2 ppm
--	-------

OEL STEL	13 mg/m ³
----------	----------------------

	6 ppm
--	-------

OEL chemical category	skin notation, Carcinogenic substance
-----------------------	---------------------------------------

Finland - Occupational Exposure Limits

HTP (OEL TWA)	4.4 mg/m ³
---------------	-----------------------

	2 ppm
--	-------

HTP (OEL STEL)	8.8 mg/m ³
----------------	-----------------------

	4 ppm
--	-------

OEL chemical category	Potential for cutaneous absorption
-----------------------	------------------------------------

France - Occupational Exposure Limits

VME (OEL TWA)	4.5 mg/m ³
---------------	-----------------------

	2 ppm
--	-------

VLE (OEL C/STEL)	32.5 mg/m ³
------------------	------------------------

	15 ppm
--	--------

OEL chemical category	Carcinogen category 1B
-----------------------	------------------------

Greece - Occupational Exposure Limits

OEL TWA	4.5 mg/m ³
---------	-----------------------

	2 ppm
--	-------

OEL chemical category	skin - potential for cutaneous absorption
-----------------------	---

Hungary - Occupational Exposure Limits

AK (OEL TWA)	4.3 mg/m ³
--------------	-----------------------

OEL chemical category	Carc. 1B - Presumed Carcinogen
-----------------------	--------------------------------

Ireland - Occupational Exposure Limits

OEL TWA	4.5 mg/m ³
---------	-----------------------

	2 ppm
--	-------

OEL STEL	13.5 mg/m ³ (calculated)
----------	-------------------------------------

	6 ppm (calculated)
--	--------------------

OEL chemical category	Carc1B, Sensitizer, Potential for cutaneous absorption
-----------------------	--

Latvia - Occupational Exposure Limits

OEL TWA	0.5 mg/m ³
---------	-----------------------

Lithuania - Occupational Exposure Limits

IPRV (OEL TWA)	4.5 mg/m ³
----------------	-----------------------

	2 ppm
--	-------

TPRV (OEL STEL)	13 mg/m ³
-----------------	----------------------

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acrylonitrile (107-13-1)

	6 ppm
--	-------

OEL chemical category	Carcinogen
-----------------------	------------

Poland - Occupational Exposure Limits

NDS (OEL TWA)	2 mg/m ³
---------------	---------------------

NDSCh (OEL STEL)	10 mg/m ³
------------------	----------------------

Portugal - Occupational Exposure Limits

OEL TWA	2 ppm
---------	-------

OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, skin - potential for cutaneous exposure
-----------------------	--

Romania - Occupational Exposure Limits

OEL TWA	5 mg/m ³
---------	---------------------

2.3 ppm

OEL STEL	10 mg/m ³
----------	----------------------

4.6 ppm

OEL chemical category	C1B, skin notation
-----------------------	--------------------

Slovenia - Occupational Exposure Limits

OEL TWA	7 mg/m ³
---------	---------------------

3 ppm

OEL STEL	28 mg/m ³
----------	----------------------

12 ppm

OEL chemical category	Category 1B, Potential for cutaneous absorption
-----------------------	---

Spain - Occupational Exposure Limits

VLA-ED (OEL TWA)	4.4 mg/m ³ (manufacturing, commercialization and use restrictions according to REACH)
------------------	--

2 ppm (manufacturing, commercialization and use restrictions according to REACH)
--

OEL chemical category	C1B, Sensitizer, skin - potential for cutaneous absorption
-----------------------	--

Sweden - Occupational Exposure Limits

NGV (OEL TWA)	4.5 mg/m ³
---------------	-----------------------

2 ppm

KGV (OEL STEL)	13 mg/m ³
----------------	----------------------

6 ppm

OEL chemical category	skin notation, Carcinogen
-----------------------	---------------------------

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	4.4 mg/m ³
-------------------	-----------------------

2 ppm

WEL STEL (OEL STEL)	13.2 mg/m ³ (calculated)
---------------------	-------------------------------------

6 ppm (calculated)

WEL chemical category	Potential for cutaneous absorption, Capable of causing cancer and/or heritable genetic damage
-----------------------	---

Norway - Occupational Exposure Limits

Grønseverdi (OEL TWA)	4 mg/m ³
-----------------------	---------------------

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acrylonitrile (107-13-1)

	2 ppm
Korttidsverdi (OEL STEL)	8 mg/m ³ (value calculated)
	4 ppm (value calculated)
OEL chemical category	skin notation, Carcinogen

Switzerland - Occupational Exposure Limits

MAK (OEL TWA)	4.5 mg/m ³
	2 ppm
KZGW (OEL STEL)	4.5 mg/m ³
	2 ppm
OEL chemical category	Sensitizer, skin notation, Category C1B carcinogen

USA - ACGIH - Occupational Exposure Limits

Local name	Acrylonitrile
ACGIH® TLV® TWA	1.3 mg/m ³
	2 ppm
Remark (ACGIH®)	TLV® Basis: CNS impair; LRT irr. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH® chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route
Regulatory reference	ACGIH 2024

2-Ethylhexyl acrylate (103-11-7)

Austria - Occupational Exposure Limits

MAK (OEL TWA)	82 mg/m ³
	10 ppm
MAK (OEL STEL)	82 mg/m ³
	10 ppm
OEL C	82 mg/m ³
	10 ppm
OEL chemical category	Skin sensitizer

Germany - Occupational Exposure Limits (TRGS 900)

AGW (OEL TWA)	38 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	5 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	Skin sensitization

Latvia - Occupational Exposure Limits

OEL TWA	1 mg/m ³
---------	---------------------

Poland - Occupational Exposure Limits

NDS (OEL TWA)	35 mg/m ³
NDSCh (OEL STEL)	70 mg/m ³

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2-Ethylhexyl acrylate (103-11-7)

Slovenia - Occupational Exposure Limits

OEL TWA	38 mg/m ³
	5 ppm
OEL STEL	38 mg/m ³
	5 ppm

Switzerland - Occupational Exposure Limits

MAK (OEL TWA)	38 mg/m ³ (aerosol, vapour)
	5 ppm (aerosol, vapour)
KZGW (OEL STEL)	38 mg/m ³ (aerosol, vapour)
	5 ppm (aerosol, vapour)
OEL chemical category	Sensitizer

USA - ACGIH - Occupational Exposure Limits

Remark (ACGIH®)	OELs not established
-----------------	----------------------

1,4-Dioxane (123-91-1)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	73 mg/m ³
IOEL TWA	20 ppm

Austria - Occupational Exposure Limits

MAK (OEL TWA)	73 mg/m ³
MAK (OEL TWA)	20 ppm
MAK (OEL STEL)	146 mg/m ³
MAK (OEL STEL)	40 ppm
OEL chemical category	skin notation, Group B Carcinogen

Belgium - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm
OEL chemical category	Skin

Bulgaria - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	73 mg/m ³
GVI (OEL TWA)	20 ppm

Cyprus - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	70 mg/m ³
OEL chemical category	Potential for cutaneous absorption

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1,4-Dioxane (123-91-1)

Denmark - Occupational Exposure Limits

OEL TWA	36 mg/m ³
OEL TWA	10 ppm
OEL STEL	72 mg/m ³
OEL STEL	20 ppm
OEL chemical category	Potential for cutaneous absorption

Estonia - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Finland - Occupational Exposure Limits

HTP (OEL TWA)	36 mg/m ³
HTP (OEL TWA)	10 ppm
HTP (OEL STEL)	150 mg/m ³
HTP (OEL STEL)	40 ppm
OEL chemical category	Potential for cutaneous absorption

France - Occupational Exposure Limits

VME (OEL TWA)	73 mg/m ³ (restrictive limit)
VME (OEL TWA)	20 ppm (restrictive limit)
VLE (OEL C/STEL)	140 mg/m ³ (restrictive limit: this value is not set by regulation and comes from a circular published by the Ministry of Labor.)
VLE (OEL C/STEL)	40 ppm (restrictive limit: this value is not set by regulation and comes from a circular published by the Ministry of Labor.)
OEL chemical category	Carcinogen category 1B

Germany - Occupational Exposure Limits (TRGS 900)

AGW (OEL TWA)	73 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
AGW (OEL TWA)	20 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	skin notation

Germany - Biological limit values (TRGS 903)

Biological limit value	200 mg/g Kreatinin Parameter: 2-Hydroxyethoxyacetic acid - Medium: urine - Sampling time: end of shift
------------------------	--

Gibraltar - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Greece - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Hungary - Occupational Exposure Limits

AK (OEL TWA)	73 mg/m ³
OEL chemical category	Potential for cutaneous absorption

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1,4-Dioxane (123-91-1)

Ireland - Occupational Exposure Limits

OEL TWA	73 mg/m ³ (technical grade)
OEL TWA	20 ppm (technical grade)
OEL STEL	219 mg/m ³ (calculated)
OEL STEL	60 ppm (calculated)
OEL chemical category	Potential for cutaneous absorption technical grade

Italy - Occupational Exposure Limits

OEL chemical category	skin - potential for cutaneous absorption
-----------------------	---

Latvia - Occupational Exposure Limits

OEL TWA	20 mg/m ³
OEL TWA	5.5 ppm

Lithuania - Occupational Exposure Limits

IPRV (OEL TWA)	35 mg/m ³
IPRV (OEL TWA)	10 ppm
TPRV (OEL STEL)	90 mg/m ³
TPRV (OEL STEL)	25 ppm
OEL chemical category	Carcinogen

Luxembourg - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Malta - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

Netherlands - Occupational Exposure Limits

TGG-8u (OEL TWA)	20 mg/m ³
TGG-8u (OEL TWA)	5.5 ppm

Poland - Occupational Exposure Limits

NDS (OEL TWA)	50 mg/m ³
---------------	----------------------

Portugal - Occupational Exposure Limits

OEL TWA	73 mg/m ³ (indicative limit value)
OEL TWA	20 ppm (indicative limit value)
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, skin - potential for cutaneous exposure

Romania - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm
OEL chemical category	C2, skin notation

Slovakia - Occupational Exposure Limits

NPHV (OEL TWA)	73 mg/m ³
----------------	----------------------

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1,4-Dioxane (123-91-1)	
NPHV (OEL TWA)	20 ppm
NPHV (OEL C)	146 mg/m ³
Slovenia - Occupational Exposure Limits	
OEL TWA	73 mg/m ³
OEL TWA	20 ppm
OEL STEL	146 mg/m ³
OEL STEL	40 ppm
OEL chemical category	Category 2, Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	73 mg/m ³ (indicative limit value)
VLA-ED (OEL TWA)	20 ppm (indicative limit value)
OEL chemical category	C1B
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	35 mg/m ³
NGV (OEL TWA)	10 ppm
KGV (OEL STEL)	90 mg/m ³
KGV (OEL STEL)	25 ppm
OEL chemical category	Carcinogen
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	91 mg/m ³
WEL TWA (OEL TWA)	25 ppm
WEL STEL (OEL STEL)	366 mg/m ³
WEL STEL (OEL STEL)	100 ppm
WEL chemical category	Potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	18 mg/m ³
Grenseverdi (OEL TWA)	5 ppm
Korttidsverdi (OEL STEL)	36 mg/m ³ (value from the regulation)
Korttidsverdi (OEL STEL)	10 ppm (value from the regulation)
OEL chemical category	skin notation, Carcinogen
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	72 mg/m ³
MAK (OEL TWA)	20 ppm
KZGW (OEL STEL)	144 mg/m ³
KZGW (OEL STEL)	40 ppm
OEL chemical category	skin notation, Category C2 carcinogen
Switzerland - BAT (BLV)	
BAT (BLV)	400 mg/g Kreatinin Parameter: 2-Hydroxy-ethoxyacetic acid - Medium: urine - Sampling time: end of shift Parameter: 2-Hydroxy-ethoxyacetic acid - Medium: urine - Sampling time: end of shift

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1,4-Dioxane (123-91-1)

Turkey - Occupational Exposure Limits

OEL TWA	73 mg/m ³
OEL TWA	20 ppm

USA - ACGIH - Occupational Exposure Limits

Local name	1,4-Dioxane
ACGIH® TLV® TWA	72 mg/m ³
ACGIH® TLV® TWA	20 ppm
Remark (ACGIH®)	TLV® Basis: Liver dam. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH® chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route
Regulatory reference	ACGIH 2025

Acetaldehyde (75-07-0)

Austria - Occupational Exposure Limits

MAK (OEL TWA)	90 mg/m ³
	50 ppm
MAK (OEL STEL)	90 mg/m ³
	50 ppm
OEL C	90 mg/m ³
	50 ppm
OEL chemical category	Group B Carcinogen

Belgium - Occupational Exposure Limits

OEL TWA	25 ppm
---------	--------

Bulgaria - Occupational Exposure Limits

OEL TWA	30 mg/m ³
OEL STEL	200 mg/m ³

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	37 mg/m ³
	20 ppm
KGVI (OEL STEL)	92 mg/m ³
	50 ppm

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	50 mg/m ³
---------------	----------------------

Denmark - Occupational Exposure Limits

OEL C	45 mg/m ³
	25 ppm

Estonia - Occupational Exposure Limits

OEL TWA	45 mg/m ³
	25 ppm

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acetaldehyde (75-07-0)

OEL STEL	90 mg/m ³
	50 ppm
OEL chemical category	Carcinogenic substance

Finland - Occupational Exposure Limits

HTP (OEL STEL)	46 mg/m ³
	25 ppm

France - Occupational Exposure Limits

VME (OEL TWA)	180 mg/m ³
	100 ppm
OEL chemical category	Carcinogen category 1B, Mutagen category 2

Germany - Occupational Exposure Limits (TRGS 900)

AGW (OEL TWA)	91 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	50 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)

Greece - Occupational Exposure Limits

OEL TWA	180 mg/m ³
	100 ppm
OEL STEL	270 mg/m ³
	150 ppm

Hungary - Occupational Exposure Limits

AK (OEL TWA)	45 mg/m ³
CK (OEL STEL)	45 mg/m ³

Ireland - Occupational Exposure Limits

OEL STEL	45 mg/m ³
	25 ppm

Latvia - Occupational Exposure Limits

OEL TWA	5 mg/m ³
---------	---------------------

Lithuania - Occupational Exposure Limits

IPRV (OEL TWA)	45 mg/m ³
	25 ppm
TPRV (OEL STEL)	90 mg/m ³
	50 ppm
OEL chemical category	Carcinogen

Netherlands - Occupational Exposure Limits

TGG-8u (OEL TWA)	37 mg/m ³
	20 ppm
TGG-15min (OEL STEL)	92 mg/m ³
	50 ppm

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acetaldehyde (75-07-0)

Poland - Occupational Exposure Limits

NDSP (OEL C)	45 mg/m ³
--------------	----------------------

Portugal - Occupational Exposure Limits

OEL C	25 ppm
OEL chemical category	A2 - Suspected Human Carcinogen

Romania - Occupational Exposure Limits

OEL TWA	90 mg/m ³
	50 ppm
OEL STEL	180 mg/m ³
	100 ppm

Slovakia - Occupational Exposure Limits

NPHV (OEL TWA)	91 mg/m ³
	50 ppm

Slovenia - Occupational Exposure Limits

OEL TWA	91 mg/m ³
	50 ppm
OEL STEL	91 mg/m ³
	50 ppm
OEL chemical category	Category 2

Spain - Occupational Exposure Limits

VLA-EC (OEL STEL)	46 mg/m ³
	25 ppm
OEL chemical category	C1B

Sweden - Occupational Exposure Limits

NGV (OEL TWA)	45 mg/m ³
	25 ppm
KGV (OEL STEL)	90 mg/m ³
	50 ppm
OEL chemical category	Carcinogen

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	37 mg/m ³
	20 ppm
WEL STEL (OEL STEL)	92 mg/m ³
	50 ppm
WEL chemical category	Capable of causing cancer and/or heritable genetic damage

Norway - Occupational Exposure Limits

Grenseverdi (OEL TWA)	45 mg/m ³
	25 ppm
Kortidsverdi (OEL STEL)	67.5 mg/m ³ (value calculated)

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acetaldehyde (75-07-0)

	37.5 ppm (value calculated)
OEL chemical category	Carcinogen

Switzerland - Occupational Exposure Limits

MAK (OEL TWA)	90 mg/m ³
	50 ppm
KZGW (OEL STEL)	90 mg/m ³
	50 ppm
OEL chemical category	Category C2 carcinogen

USA - ACGIH - Occupational Exposure Limits

Local name	Acetaldehyde
ACGIH® TLV® C	25 ppm
Remark (ACGIH®)	TLV® Basis: Eye & URT irr. Notations: A2 (Suspected Human Carcinogen)
ACGIH® chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2023

Ethylene oxide (75-21-8)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	1.8 mg/m ³
	1 ppm
Remark	Present (Substantial contribution to the total body burden via dermal exposure possible)

Austria - Occupational Exposure Limits

TRK (OEL TWA)	1.8 mg/m ³
	1 ppm
OEL chemical category	skin notation, Group A2 Carcinogen

Belgium - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm
OEL chemical category	Skin, Carcinogen, skin notation significant contribution to the total accumulation in the body through skin exposure is possible

Bulgaria - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	1.8 mg/m ³
	1 ppm
OEL chemical category	Carcinogen Category 1B, skin notation significant contribution to the total body load possible exposure through the skin, Mutagen Category 1B

Cyprus - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Ethylene oxide (75-21-8)	
OEL chemical category	Skin-potential for cutaneous absorption
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	1 mg/m ³
OEL chemical category	Potential for cutaneous absorption
Czech Republic - Biological limit values	
BLV	Parameter: N-(2-Hydroxyethyl)valine - Medium: blood - Sampling time: discretionary (in Globin) Parameter: N-(2-Hydroxyethyl)valine - Medium: blood - Sampling time: discretionary (in Globin)
Denmark - Occupational Exposure Limits	
OEL TWA	1.8 mg/m ³
	1 ppm
OEL STEL	3.6 mg/m ³
	2 ppm
OEL chemical category	Potential for cutaneous absorption
Estonia - Occupational Exposure Limits	
OEL TWA	1.8 mg/m ³
	1 ppm
OEL STEL	9 mg/m ³
	5 ppm
OEL chemical category	skin notation, Carcinogenic substance
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	1.8 mg/m ³
	1 ppm
OEL chemical category	Potential for cutaneous absorption
France - Occupational Exposure Limits	
VME (OEL TWA)	1.8 mg/m ³ (restrictive limit)
	1 ppm (restrictive limit)
OEL chemical category	Carcinogen category 1B, Reproductive Toxin category 1B, Mutagen category 1B, Risk of cutaneous absorption
Greece - Occupational Exposure Limits	
OEL TWA	1.8 mg/m ³
	1 ppm
OEL chemical category	skin - potential for cutaneous absorption
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	1.8 mg/m ³
OEL chemical category	Sensitizer, Potential for cutaneous absorption, Carc. 1B - Presumed Carcinogen, Muta1B
Ireland - Occupational Exposure Limits	
OEL TWA	1.8 mg/m ³
	1 ppm

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Ethylene oxide (75-21-8)

OEL STEL	5.4 mg/m ³ (calculated)
	3 ppm (calculated)
OEL chemical category	Carc1B, Potential for cutaneous absorption

Italy - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm
OEL chemical category	skin - potential for cutaneous absorption

Latvia - Occupational Exposure Limits

OEL TWA	1 mg/m ³
	0.55 ppm
OEL chemical category	skin - potential for cutaneous exposure

Lithuania - Occupational Exposure Limits

IPRV (OEL TWA)	1.8 mg/m ³
	1 ppm
TPRV (OEL STEL)	9 mg/m ³
	5 ppm
OEL chemical category	Mutagen, Carcinogen, skin notation

Netherlands - Occupational Exposure Limits

TGG-8u (OEL TWA)	0.84 mg/m ³
	0.46 ppm
MAC chemical category	skin notation

Poland - Occupational Exposure Limits

NDS (OEL TWA)	1 mg/m ³
---------------	---------------------

Portugal - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm
OEL chemical category	A2 - Suspected Human Carcinogen, skin - potential for cutaneous exposure indicative limit value

Romania - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm
OEL chemical category	C1B, skin notation

Slovenia - Occupational Exposure Limits

OEL TWA	1.8 mg/m ³
	1 ppm
OEL chemical category	Category 1B, Potential for cutaneous absorption

Spain - Occupational Exposure Limits

VLA-ED (OEL TWA)	1.8 mg/m ³ (carcinogenic agent with a binding limit value included in annex III of Royal Decree 665/1997 and its subsequent amendments)
------------------	--

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Ethylene oxide (75-21-8)

	1 ppm (carcinogenic agent with a binding limit value included in annex III of Royal Decree 665/1997 and its subsequent amendments)
--	--

OEL chemical category	C1B, M1B, TR1B, skin - potential for cutaneous absorption
-----------------------	---

Sweden - Occupational Exposure Limits

NGV (OEL TWA)	1.8 mg/m ³
	1 ppm
KGV (OEL STEL)	9 mg/m ³
	5 ppm
OEL chemical category	skin notation, Carcinogen

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	9.2 mg/m ³
	5 ppm
WEL STEL (OEL STEL)	5.4 mg/m ³ (calculated)
	3 ppm (calculated)
WEL chemical category	Potential for cutaneous absorption, Capable of causing cancer and/or heritable genetic damage

Norway - Occupational Exposure Limits

Grenseverdi (OEL TWA)	1.8 mg/m ³
	1 ppm
Korttidsverdi (OEL STEL)	3.6 mg/m ³ (value calculated)
	3 ppm (value calculated)
OEL chemical category	skin notation, Carcinogen

Switzerland - Occupational Exposure Limits

MAK (OEL TWA)	1.8 mg/m ³
	1 ppm
OEL chemical category	skin notation, Category C1B carcinogen, Category 1B mutagen

USA - ACGIH - Occupational Exposure Limits

Local name	Ethylene oxide
ACGIH® TLV® TWA	1 ppm
Remark (ACGIH®)	TLV® Basis: Cancer; CNS impair. Notations: A2 (Suspected Human Carcinogen)
ACGIH® chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2024

USA - ACGIH - Biological Exposure Indices

Local name	Ethylene oxide
BEI (BLV)	5000 pmol/g Globin Parameter: N-(2-hydroxyethyl)valine (HEV) - Medium: hemoglobin adducts - Sampling time: Not critical - Notations: Ns 5 µg/g Kreatinin Parameter: S-(2-hydroxyethyl)mercapturic acid (HEMA) - Medium: urine - Sampling time: End of shift - Notations: Pop, Ns
Remark	The value of HEV hemoglobin adducts applies to workers having representative Ethylene oxide exposure during the previous 120 days
Regulatory reference	ACGIH 2024

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)

USA - ACGIH - Occupational Exposure Limits

Remark (ACGIH®)	OELs not established
-----------------	----------------------

Silica, amorphous, precipitated and gel (112926-00-8)

Austria - Occupational Exposure Limits

MAK (OEL TWA)	4 mg/m ³ inhalable aerosol
---------------	---------------------------------------

Belgium - Occupational Exposure Limits

OEL TWA	10 mg/m ³
---------	----------------------

Bulgaria - Occupational Exposure Limits

OEL TWA	10 mg/m ³ (inhalable fraction (free Silicon dioxide, amorphous, synthetic, derived from sedimentation processes))
---------	--

Denmark - Occupational Exposure Limits

OEL TWA	2 mg/m ³ inhalable aerosol
OEL STEL	4 mg/m ³ inhalable aerosol

Finland - Occupational Exposure Limits

HTP (OEL TWA)	5 mg/m ³
---------------	---------------------

Germany - Occupational Exposure Limits (TRGS 900)

AGW (OEL TWA)	4 mg/m ³
---------------	---------------------

Ireland - Occupational Exposure Limits

OEL TWA	6 mg/m ³ inhalable aerosol 2.4 mg/m ³ respirable aerosol
---------	--

Latvia - Occupational Exposure Limits

OEL TWA	1 mg/m ³
---------	---------------------

Poland - Occupational Exposure Limits

NDS (OEL TWA)	10 mg/m ³ (inhalable fraction) 2 mg/m ³ (respirable fraction)
---------------	--

United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA)	6 mg/m ³ inhalable aerosol 2.4 mg/m ³ respirable aerosol
-------------------	--

Switzerland - Occupational Exposure Limits

MAK (OEL TWA)	4 mg/m ³ inhalable aerosol
---------------	---------------------------------------

Sodium nitrate (7631-99-4)

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	6 mg/m ³ (dust)
---------------	----------------------------

USA - ACGIH - Occupational Exposure Limits

Remark (ACGIH®)	OELs not established
-----------------	----------------------

Sodium carbonate (497-19-8)

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	5 mg/m ³
---------------	---------------------

Romania - Occupational Exposure Limits

OEL TWA	1 mg/m ³
OEL STEL	3 mg/m ³

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Sodium carbonate (497-19-8)

USA - ACGIH - Occupational Exposure Limits

Remark (ACGIH®)	OELs not established
-----------------	----------------------

Acrylamide (79-06-1)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	0.1 mg/m ³
Remark	Present (Substantial contribution to the total body burden via dermal exposure possible)

Austria - Occupational Exposure Limits

TRK (OEL TWA)	0.06 mg/m ³ (with the aid of solid Acrylamide-inhalable fraction) 0.03 mg/m ³ (all others-inhalable fraction)
OEL chemical category	skin notation, Group A2 Carcinogen, Skin sensitizer

Belgium - Occupational Exposure Limits

OEL TWA	0.03 mg/m ³
OEL chemical category	Skin, Carcinogen, skin notation significant contribution to the total accumulation in the body through skin exposure is possible

Bulgaria - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
---------	-----------------------

Croatia - Occupational Exposure Limits

GVI (OEL TWA)	0.1 mg/m ³
OEL chemical category	Carcinogen Category 1B, skin notation, Mutagen Category 1B

Cyprus - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL chemical category	Skin-potential for cutaneous absorption

Czech Republic - Occupational Exposure Limits

PEL (OEL TWA)	0.1 mg/m ³ (7)
OEL chemical category	Potential for cutaneous absorption, Sensitizer

Denmark - Occupational Exposure Limits

OEL TWA	0.03 mg/m ³
OEL STEL	0.06 mg/m ³
OEL chemical category	Potential for cutaneous absorption

Estonia - Occupational Exposure Limits

OEL TWA	0.03 mg/m ³
OEL STEL	0.1 mg/m ³
OEL chemical category	skin notation, Carcinogenic substance

Finland - Occupational Exposure Limits

HTP (OEL TWA)	0.03 mg/m ³ 0.1 mg/m ³ (may cause sensitization)
OEL chemical category	Potential for cutaneous absorption

France - Occupational Exposure Limits

VME (OEL TWA)	0.1 mg/m ³ (restrictive limit)
---------------	---

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acrylamide (79-06-1)

OEL chemical category	Carcinogen category 1B, Reproductive Toxin category 2, Mutagen category 1B, Risk of cutaneous absorption
-----------------------	--

Greece - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL chemical category	skin - potential for cutaneous absorption

Hungary - Occupational Exposure Limits

AK (OEL TWA)	0.1 mg/m ³
OEL chemical category	Potential for cutaneous absorption, Carc. 1B - Presumed Carcinogen

Ireland - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL STEL	0.3 mg/m ³ (calculated)
OEL chemical category	Carc1B, Potential for cutaneous absorption

Italy - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL chemical category	skin - potential for cutaneous absorption

Latvia - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL chemical category	skin - potential for cutaneous exposure

Lithuania - Occupational Exposure Limits

IPRV (OEL TWA)	0.03 mg/m ³
TPRV (OEL STEL)	0.1 mg/m ³
OEL chemical category	Reproductive toxin, Mutagen, Carcinogen, skin notation

Netherlands - Occupational Exposure Limits

TGG-8u (OEL TWA)	0.1 mg/m ³
MAC chemical category	skin notation

Poland - Occupational Exposure Limits

NDS (OEL TWA)	0.07 mg/m ³
---------------	------------------------

Portugal - Occupational Exposure Limits

OEL TWA	0.03 mg/m ³ (inhalable fraction; vapor)
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, skin - potential for cutaneous exposure indicative limit value

Romania - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL chemical category	C1B, skin notation

Slovenia - Occupational Exposure Limits

OEL TWA	0.1 mg/m ³
OEL chemical category	Category 2, Category 1B, Potential for cutaneous absorption

Spain - Occupational Exposure Limits

VLA-ED (OEL TWA)	0.03 mg/m ³ (manufacturing, commercialization and use restrictions according to REACH-inhalable fraction and vapor)
------------------	--

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acrylamide (79-06-1)	
OEL chemical category	C1B, M1B, Sensitizer, skin - potential for cutaneous absorption
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	0.03 mg/m³
KGV (OEL STEL)	0.1 mg/m³
OEL chemical category	skin notation, Carcinogen
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	0.1 mg/m³
WEL STEL (OEL STEL)	0.3 mg/m³ (calculated)
WEL chemical category	Potential for cutaneous absorption, Capable of causing cancer and/or heritable genetic damage
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	0.03 mg/m³
Korttidsverdi (OEL STEL)	0.09 mg/m³ (value calculated)
OEL chemical category	skin notation, Carcinogen, Potential mutagen
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	0.03 mg/m³ (inhalable dust)
OEL chemical category	Sensitizer, skin notation, Category C1B carcinogen, Category 2 reproductive toxin, Category 1B mutagen
USA - ACGIH - Occupational Exposure Limits	
Local name	Acrylamide
ACGIH® TLV® TWA	0.03 mg/m³ (inhalable fraction and vapor)
Remark (ACGIH®)	TLV® Basis: CNS & PNS impair; cancer. Notations: Skin; DSEN; A2 (Suspected Human Carcinogen)
ACGIH® chemical category	Suspected Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route, dermal sensitizer
Regulatory reference	ACGIH 2024
USA - ACGIH - Biological Exposure Indices	
Local name	Acrylamide
BEI (BLV)	Parameter: N-(2-Carbamoylethyl)valine - Medium: blood - Sampling time: not critical (after 120 days of representative work/exposure to Acrylamide, background) 800 µg/g Kreatinin Parameter: S-(2-Carbamoylethyl)mercapturic acid - Medium: urine - Sampling time: end of shift (background)
Remark	The value of CbEV: after 120 days of representative work/exposure to acrylamide
Regulatory reference	ACGIH 2024

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective goggles. Protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles [EN 166]

8.2.2.2. Skin protection

Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure. [EN 14605:2005 and EN 13034:2005]

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

8.2.2.3. Respiratory protection

Respiratory protection:

Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Black.
Appearance	: Syrupy liquid.
Odor	: Ammonia-like.
Odor threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosion limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 67 °C (152.6 °F) (Butyl cellosolve value)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapor pressure	: Not available
Vapor pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapor density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Butyl cellosolve (111-76-2)

LD50 oral rat	470 mg/kg (Source: NLM_CIP)
LD50 oral	1750 mg/kg body weight

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butyl cellosolve (111-76-2)

LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg (Source: OECD_SIDS)
LD50 dermal	1100 mg/kg body weight
LC50 Inhalation - Rat	3 mg/l/4h
LC50 Inhalation - Rat [ppm]	486 ppm/4h

Carbon black (1333-86-4)

LD50 oral rat	> 15400 mg/kg
LD50 dermal rat	> 2000 mg/kg (Source: ECHA)
LD50 dermal rabbit	> 3 g/kg
LC50 Inhalation - Rat	> 4.6 mg/m ³ (Exposure time: 4 h Source: ECHA_API)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

Carbon black (1333-86-4)

IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: No information available.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Butyl cellosolve (111-76-2)

LC50 - Fish [1]	1490 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
LC50 - Fish [2]	2950 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus Source: IUCLID)
EC50 - Crustacea [1]	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	911 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1840 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d'

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon black (1333-86-4)

LC50 - Fish [1]	> 1000 mg/l Source: NITE
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 10000 mg/l Test organisms (species):
ErC50 algae	> 10000 mg/l Source: EHCA

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulative potential No information available.

12.4. Mobility in soil

Ecology - soil No information available.

12.5. Results of PBT and vPvB assessment

Component	
1,4-Dioxane (123-91-1)	PBT: not yet assessed vPvB: not yet assessed
Acrylamide (79-06-1)	This substance/mixture does not meet the PBT criteria of REACH, annex XIII This substance/mixture does not meet the vPvB criteria of REACH, annex XIII

12.6. Endocrine disrupting properties

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without a permit.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : Not regulated
UN-No. (IMDG) : Not regulated
UN-No. (IATA) : Not regulated
UN-No. (ADN) : Not regulated
UN-No. (RID) : Not regulated

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: Not regulated
----------------------------------	-----------------

IMDG

Transport hazard class(es) (IMDG)	: Not regulated
-----------------------------------	-----------------

IATA

Transport hazard class(es) (IATA)	: Not regulated
-----------------------------------	-----------------

ADN

Transport hazard class(es) (ADN)	: Not regulated
----------------------------------	-----------------

RID

Transport hazard class(es) (RID)	: Not regulated
----------------------------------	-----------------

14.4. Packing group

Packing group (ADR)	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated
Packing group (ADN)	: Not regulated
Packing group (RID)	: Not regulated

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No

14.6. Special precautions for user

Overland transport

Not regulated for transport

Transport by sea (IMDG)

Not regulated for transport

Air transport (IATA)

Not regulated for transport

Inland waterway transport

Not regulated for transport

Rail transport

Not regulated for transport

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains substance(s) listed on the PIC list

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.2. National regulations

All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb. 2019, as amended Feb. 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA

Germany

Water hazard class (WGK) : WGK 1, slightly hazardous to water (Classification according to AwSV, Annex 1)

Override matching entry (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Acrylonitrile, 1,4-Dioxane, Acetaldehyde, Ethylene oxide, Distillates, petroleum, hydrotreated heavy naphthenic, Acrylamide are listed

SZW-lijst van mutagene stoffen : Ethylene oxide, Distillates, petroleum, hydrotreated heavy naphthenic, Acrylamide are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : Ethylene oxide, Acrylamide are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : Ethylene oxide is listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-phrases

Carc. 2	Carcinogenicity Category 2
H351	Suspected of causing cancer.

Abbreviations and acronyms

ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
ED	Endocrine disrupting properties

HCF® Black

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms

EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STOT	Specific target organ toxicity
TRGS	Technical Rules for Hazardous Substances
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Data sources : Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
Classification for the USA in accordance with 29 CFR 1910.1200 (2024).
Classification for the EU in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
ECHA (European Chemicals Agency).

Training advice : Normal use of this product shall imply use in accordance with the instructions for use and corresponding product packaging.

Indication of changes:
Revision 1.0: New SDS Created.
Revision 2.0: SDS Composition Updated
Revision 3.0: SDS Composition Updated
Revision 4.0: SDS Composition Updated

Other information : Author: WJS

SDS prepared for Plasti Dip International, Inc. by:
Pace Analytical Services, Inc.
Product Regulatory Services Group
1800 Elm Street
Minneapolis, MN 55414
United States
612-656-1175
paceSDS@pacelabs.com

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]	Classification procedure
Carcinogenicity, Category 2	Specific concentration limit

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.