

Brown HLF 7613

Version number: GHS 4.0
 Replaces version of: 09/22/2017 (GHS 3)

Date of compilation: 09/25/2017

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

1.1 Product identifier

Identification of the substance

C.I. Solvent Brown 43

CAS number

61116-28-7

Other means of identification

Item code(s)

D7613P

1.1.6.3 Dye classification:

Azo, metal complex

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

Identified uses

Industrial use
 Professional use
 Dye

Uses advised against

Not for use with foodstuffs, pharmaceutical products or cosmetics. This product is for industrial and professional use only, It is not intended for household use.

1.3 Details of the supplier of the safety data sheet

Robert Koch Industries, Inc.
 4770 N. Harback Road
 Bennett CO 80102 United States

Telephone: 1.303.644.3763

Telefax 1.303.644.3045

Normal business hours: Monday - Friday, 0800 - 1700 Mountain Time

e-mail: sales@kochcolor.com

Website: www.kochcolor.com

Competent person responsible for the safety data sheet

Mark Koch

e-mail (competent person)

sds@kochcolor.com

1.4 Emergency telephone number

Emergency information service

1.800.535.5053

Infotrac (24 hours)

Outside of USA or Canada, call +1-352-323-3500.

SECTION 2: Hazards identification

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard statement
B.cD	Combustible dust	Cat. Comb. Dust	OSHA003
A.4S	Skin sensitisation	Cat. 1B	H317

Remarks

For full text of H-phrases: see SECTION 16.

2.2 LABEL ELEMENTS

Labelling according to GHS

Signal word

Warning

Pictograms

GHS07, GHS09



Hazard statements

Hazard statements	
Code	Hazard statement
H317	May cause an allergic skin reaction.
OSHA003	May form combustible dust concentrations in air.

Precautionary statements

Precautionary statements - prevention

Code	Precautionary statements - prevention
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

Code	Precautionary statements - response
P302+P352	IF ON SKIN: Wash with plenty of water.
P321	Specific treatment (see on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Precautionary statements - disposal

Code	Precautionary statements - disposal
P501	Dispose of contents/container according to applicable federal, state, and local regulations.

2.3 Other hazards

May cause eye irritation. Dermal contact may temporarily color the skin due to dye characteristics.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance C.I. Solvent Brown 43
 CAS number 61116-28-7

Multi-Constituent Substances and Corresponding Classification

Name of substance	Identifier	wt%	Hazard class and category	Hazard statement	Pictograms
Chromate(1-), bis(2-(3-chlorophenyl)-2,4-dihydro-4-((2-hydroxy-5-(methylsulfonyl)phenyl)azo)-5-methyl-3H-pyrazol-3-onato(2-))-sodium	CAS No 51147-75-2 EC No 257-014-7	40 – 60	A.1O Acute Tox. 5 4.1A Aquatic Acute 2 4.1C Aquatic Chronic 2	H303 H401 H411	
Chromate(1-), bis(methyl N-(7-(hydroxy-kappaO)-8-(2-(2-(hydroxy-kappaO)-5-(methylsulfonyl)phenyl)diazonyl-kappaN1)-1-naphthalenyl)carbamato(2-))-sodium (1:1)	CAS No 71839-85-5 EC No 276-070-3	10 – 25	A.1O Acute Tox. 5 A.4S Skin Sens. 1B 4.1A Aquatic Acute 2 4.1C Aquatic Chronic 2	H303 H317 H401 H411	
Chromate(1-), (2-(3-chlorophenyl)-2,4-dihydro-4-((2-(hydroxy-kappaO)-5-(methylsulfonyl)phenyl)azo-kappaN1)-5-methyl-3H-pyrazol-3-onato(2-)-kappaO3)(methyl (7-(hydroxy-kappaO)-8-((2-(hydroxy-kappaO)-5-(methylsulfonyl)phenyl)azo-kappaN1)-1-naphthalenyl)carbamato(2-))-sodium	CAS No 70236-40-7 EC No 274-473-9	10 – 25	A.1O Acute Tox. 5 4.1A Aquatic Acute 2 4.1C Aquatic Chronic 2	H303 H401 H411	
Sodium Bicarbonate	CAS No 144-55-8 EC No 205-633-8	0.5 – 2	A.1O Acute Tox. 5	H303	

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 DESCRIPTION OF FIRST AID MEASURES

General notes

Remove contaminated clothing and launder before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

If inhalation of dust, fumes or vapor causes irritation, remove person to fresh air and keep comfortable. If irritation continues get medical attention.

Following skin contact

Wash the affected area thoroughly with soap and water. Get medical attention if symptoms occur.

Following eye contact

Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. Get medical attention.

Following ingestion

IF SWALLOWED: Rinse mouth with water. DO NOT induce vomiting. Treat symptomatically. Get medical attention. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Individuals with pre-existing skin disorders, eye problems or impaired respiratory function may be more susceptible to the effects of this substance. Dermal contact may temporarily color the skin due to dye characteristics.

4.3 Indication of any immediate medical attention and special treatment needed

In case of any adverse symptoms following exposure, seek medical attention.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam, Carbon dioxide (CO₂), Dry chemical, Water

Unsuitable extinguishing media

Water jet, carbon dioxide (CO₂), avoid any method which will create dust clouds.

5.2 Special hazards arising from the substance or mixture

As with all organic dusts, fine particles suspended in air in critical proportions and in the presence of an ignition source may ignite and/or explode. Concentrated dust/air combinations may produce explosive conditions under certain parameters. Dust may be sensitive to ignition by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. As a precaution, implement standard safety measures for handling finely divided organic powders. Refer to Section 7.1.

5.2.1 Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), hydrogen chloride (HCl)

5.3 Advice for firefighters

Avoid hose streams or any method which will create dust clouds. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

Special protective equipment for firefighters

Boots. Footwear protecting against chemicals. Chemical resistant gloves. Chemical protection suit. Eye and face protection. Self-contained breathing apparatus (SCBA).

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

If spilled in an enclosed area, provide ventilation to reduce dusting conditions. When airborne dust is present, use spark-proof and explosion-proof equipment. To avoid inhalation of dust, wear an approved particulate respirator. Wear personal Protective Equipment (PPE) specified in Section 8 of this SDS.

6.2 Environmental precautions

Prevent spilled material from entering public sewer systems, rivers, lakes, streams and other surface waters. Retain all contaminated materials and rinse water and dispose of according to any applicable Federal, State or Local laws.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Contain spill. Wear proper personal protective clothing and equipment. Use care to avoid dust generation. Vacuum or sweep into a closed container for reuse or disposal. If vacuuming, use only an approved industrial vacuum. Place recovered waste into labeled, closed container(s). Store in a safe location to await disposal. Change contaminated clothing and launder before reuse.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Only vacuum cleaners containing no ignition sources may be used for combustible dusts. Use explosion-proof electric-ventilating/lighting equipment. Use only non-sparking tools. As with any chemical product, use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid drinking, tasting, swallowing or ingesting this product. Avoid routine inhalation of dust of any kind. Exercise care when emptying containers, sweeping, mixing or doing other tasks which can create dust. Wash contaminated clothing before reuse. Provide an eyewash fountain/kit in the work area. A safety shower is recommended. As a precaution to control dust explosion potential, implement the following safety measures: Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). In general, dust of organic materials is a static charge generator which may be ignited by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. Use spark-proof tools and equipment. Properly ground equipment. Good housekeeping and controlling of dusts are necessary for safe handling of product. Prevent accumulation of dust on floors, shelves, surface areas, equipment, containers etc.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry location with good ventilation. Store away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Protect from strong light.

Ventilation requirements

Use general and local ventilation to minimize airborne dust.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
US	chromium(III) compounds		Cr	PEL		0.5			29 CFR 1910.1000
US	particulates not otherwise regulated (PNOR)		i, dust	PEL	1,766	15			29 CFR 1910.1000
US	particulates not otherwise regulated (PNOR)		partml, r, dust	PEL	529.5	5			29 CFR 1910.1000

Notation

- Cr Calculated as Cr (chromium).
- dust As dust.
- i Inhalable fraction.
- partml Particles/ml.
- r Respirable fraction.
- STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.
- TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

8.2 Exposure controls

Appropriate engineering controls

Always provide effective exhaust ventilation to prevent the formation of a dust cloud and to draw dust away from workers so as to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below any applicable exposure limit(s) outlined in the SDS. In areas where airborne dust is likely, eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA.) (<http://www.acgih.org/home.htm>).

Individual protection measures (personal protective equipment)

Eye/face protection

Work with safety glasses.

Skin protection

• Hand protection

Wear protective gloves.

• Other protection measures

Use good laboratory/workplace procedures including personal protective clothing such as shoe covers, boots, lab coat, or apron. During prolonged use or when handling larger quantities protective coveralls with hoods are recommended. Have an eyewash fountain/kit present in the work area. A safety shower is recommended.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. If inhalation of dust, mist, or vapor is possible, wear an approved respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	solid (powder)
Colour	brown
Odour	slight

Other physical and chemical parameters

pH (value)	
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not applicable
Evaporation rate	not determined
Flammability (solid, gas)	this material is combustible, but will not ignite readily
Explosion limits of dust clouds	not determined
Vapour pressure	66.9 Pa at 20 °C
Density	not determined
Bulk density	0.55 – 0.75 g/cm ³
Relative density	Information on this property is not available.
Solubility(ies)	45 – 50 g/l (alcohol) 45 – 50 mg/cm ³ (toluene) 25 – 30 mg/cm ³ (ethyl acetate)
Water solubility	Insoluble (< 1 mg/l)
Solubility in alcohol	45 – 50 g/l
Solubility in ethyl acetate	25 – 30 mg/cm ³
Solubility in toluene	45 – 50 mg/cm ³

Partition coefficient n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	not relevant (solid matter)
Explosive properties	dust explosion hazards
Oxidising properties	none

9.2 Other information

VOC content	0 %
Solvent content	0 %
Solid content	100 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Avoid conditions that create dust.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents - strong acids - strong bases

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.1.3 Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

May be harmful if swallowed.

May be harmful in contact with skin.

Exposure route	Endpoint	Value	Species	Source
oral	LD50	4,000 mg/kg	rat	Sensient Intraplast Brown 2RL SDS March 3, 2015 Pg. 6

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

- OSHA Carcinogens (United States) (Substance) Not listed

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Information on likely routes of exposure

Inhalation. Ingestion. Dermal (skin contact). Eye contact.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	1.3 mg/l	zebra fish	Sensient Intraplast Brown 2RL SDS March 3, 2015 Pg. 7	96 h
EC50	>100 mg/l	freshwater algae	Sensient Intraplast Brown 2RL SDS March 3, 2015 Pg. 7	72 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

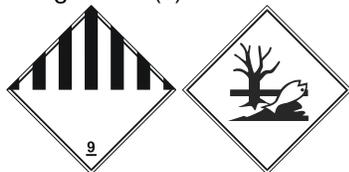
14.1	UN number	3077
14.2	UN proper shipping name	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: C.I. Solvent Brown 43), 9, III
14.3	Transport hazard class(es)	None
	Class	9 (environmentally hazardous)
14.4	Packing group	III (Substance presenting low danger)
14.5	Environmental hazards	Hazardous to the aquatic environment
14.6	Special precautions for user	There is no additional information.
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	

Information for each of the UN Model Regulations

14.8.1 • Transport of dangerous goods by road or rail (49 CFR US DOT)

Not regulated by US DOT for ground transport in non-bulk packagings.

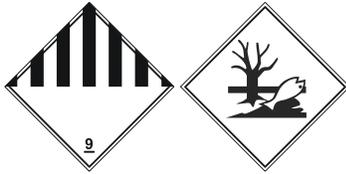
Index number	3077
Class	9
Packing group	III
Danger label(s)	9 + "fish and tree"



Environmental hazards	yes (hazardous to water)
Special provisions (SP)	8, 146, 335, A112, B54, B120, IB8, IP3, N20, T1, TP33
ERG No	171

14.8.2 • Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

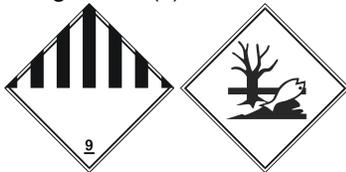
UN number	3077
Proper shipping name	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: C.I. Solvent Brown 43), 9, III, (-)
Class	9
Classification code	M7
Danger label(s)	9 + "fish and tree"



Environmental hazards yes (acute aquatic hazard)
Special provisions (SP) 274, 335, 375, 601
Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg
Tunnel restriction code (TRC) -
Hazard identification No 90

14.8.4 • International Maritime Dangerous Goods Code (IMDG)

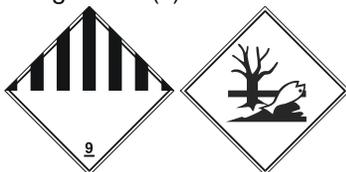
UN number 3077
Proper shipping name UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: C.I. Solvent Brown 43), 9, III
Class 9
Marine pollutant yes (hazardous to the aquatic environment)
Packing group III
Danger label(s) 9 + "fish and tree"



Special provisions (SP) 274, 335, 966, 967, 969
Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg
EmS F-A, S-F
Stowage category A

14.8.5 • International Civil Aviation Organization (ICAO-IATA/DGR)

UN number 3077
Proper shipping name UN3077, Environmentally hazardous substance, solid, n.o.s., (contains: C.I. Solvent Brown 43), 9, III
Class 9
Environmental hazards yes (hazardous to water)
Packing group III
Danger label(s) 9 + "fish and tree"



Special provisions (SP) A97, A158, A179, A197
Excepted quantities (EQ) E1
Limited quantities (LQ) 30 kg

SECTION 15: Regulatory information

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

15.1.2 NATIONAL REGULATIONS (UNITED STATES)

Toxic Substance Control Act (TSCA) Substance is listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304) none of the ingredients are listed

Specific Toxic Chemical Listings (EPCRA Section 313): contains chromium III (CAS# 7440-47-3) as an integral part of a dye molecule; percent by weight of total product: 5.19 – 5.88 %
 This product contains chromium (III) compounds that comprise 90-96% of this product by weight. CAS# 51147-75-2, CAS# 71839-85-5, CAS# 70236-40-7.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) Not listed

Clean Air Act Not listed

Drug precursors, Controlled Substances Act (21 U.S.C. § 802) Not listed

Industry or sector specific available guidance(s)

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response

Category	Degree of hazard	Description
Flammability	1	Material that must be preheated before ignition can occur.
Health	2	Material that, under emergency conditions, can cause temporary incapacitation or residual injury.
Instability	0	Material that is normally stable, even under fire conditions.
Special hazard		

Right to Know Hazardous Substance List Not listed

Proposition 65 List of chemicals Not listed substance

15.1.3 Relevant European Union (EU) safety, health and environmental provisions

15.1.3. Classification according to GHS (1272/2008/EC, CLP)

Hazard class	Category	Hazard class and category
skin sensitisation	1B	(Skin Sens. 1B)
hazardous to the aquatic environment - chronic hazard	2	(Aquatic Chronic 2)

National inventories

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

AICS	Australian Inventory of Chemical Substances.
CICR	Chemical Inventory and Control Regulation.
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS).
DSL	Domestic Substances List (DSL).
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP).
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China.
INSQ	National Inventory of Chemical Substances.
KECI	Korea Existing Chemicals Inventory.
NDSL	Non-domestic Substances List (NDSL).
NZIoC	New Zealand Inventory of Chemicals.
PICCS	Philippine Inventory of Chemicals and Chemical Substances.
REACH Reg.	REACH registered substances.
TCSI	Taiwan Chemical Substance Inventory.
TSCA	Toxic Substance Control Act.

SECTION 16: Other information

16.1 Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1.6.3		Dye classification: Azo, metal complex	yes
2.1		Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): change in the listing (table)	yes
2.1	Hazards not otherwise classified		yes
2.1		Hazards not otherwise classified: change in the listing (table)	yes
2.2	Pictograms: Not required	Pictograms	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2		Pictograms: change in the listing (table)	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.2		Precautionary statements - response: change in the listing (table)	yes
5.2.1	Hazardous combustion products: nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO ₂)	Hazardous combustion products: nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO ₂), hydrogen chloride (HCl)	yes
7.2	Packaging compatibilities: Only packagings which are approved (e.g. acc. to DOT) may be used.		yes
9.1	Vapour pressure: not determined	Vapour pressure: 66.9 Pa at 20 °C	yes
9.1	Density: 0.55 – 0.75 g/cm ³ at 20 °C	Density: not determined	yes
9.1		Bulk density: 0.55 – 0.75 g/cm ³	yes
9.1		Relative density: Information on this property is not available.	yes
9.2		VOC content: 0 %	yes
9.2		Solvent content: 0 %	yes
11.1.3	Respiratory or skin sensitisation: Shall not be classified as a respiratory or skin sensitiser.	Respiratory or skin sensitisation: May cause an allergic skin reaction.	yes
12.1	Toxicity: Toxic to aquatic life with long lasting effects.	Toxicity: Shall not be classified as hazardous to the aquatic environment.	yes
12.1	Aquatic toxicity (chronic): May cause long-term adverse effects in the aquatic environment.		yes
14.2	UN proper shipping name: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (C.I. Solvent Brown 43), 9, III	UN proper shipping name: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: C.I. Solvent Brown 43), 9, III	yes
14.8.1	• Transport of dangerous goods by road or rail (49 CFR US DOT)	• Transport of dangerous goods by road or rail (49 CFR US DOT): Not regulated by US DOT for ground transport in non-bulk packagings.	yes
14.8.1	Proper shipping name: UN3077, Environmentally hazardous substance, solid, n.o.s., (C.I. Solvent Brown 43), 9, III		yes
14.8.2	Proper shipping name: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (C.I. Solvent Brown 43), 9, III, (-)	Proper shipping name: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: C.I. Solvent Brown 43), 9, III, (-)	yes
14.8.4	Proper shipping name: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (C.I. Solvent Brown 43), 9, III	Proper shipping name: UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (contains: C.I. Solvent Brown 43), 9, III	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.8.5	Proper shipping name: UN3077, Environmentally hazardous substance, solid, n.o.s., (C.I. Solvent Brown 43), 9, III	Proper shipping name: UN3077, Environmentally hazardous substance, solid, n.o.s., (contains: C.I. Solvent Brown 43), 9, III	yes
15.1.2	Toxic Substance Control Act (TSCA)	Toxic Substance Control Act (TSCA): Substance is listed	yes
15.1.2	Specific Toxic Chemical Listings (EPCRA Section 313): contains chromium III (CAS# 7440-47-3) as an integral part of a dye molecule; percent by weight of total product: chromium:5.19 – 5.88 % This product contains chromium (III) compounds that comprise 90-96% of this product by weight. CAS# 51147-75-2, CAS# 71839-85-5, CAS# 70236-40-7.	Specific Toxic Chemical Listings (EPCRA Section 313): contains chromium III (CAS# 7440-47-3) as an integral part of a dye molecule; percent by weight of total product: 5.19 – 5.88 % This product contains chromium (III) compounds that comprise 90-96% of this product by weight. CAS# 51147-75-2, CAS# 71839-85-5, CAS# 70236-40-7.	yes
15.1.2		NFPA® 704: change in the listing (table)	yes
15.1.3.1		Classification according to GHS (1272/2008/EC, CLP): change in the listing (table)	yes
15.1.3.1		National inventories: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations

Abbr.	Descriptions of used abbreviations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA® 704	National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response
NLP	No-Longer Polymer
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Workplace exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200
- 49 CFR § 172.101 Hazardous Materials Table (DOT)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H303	May be harmful if swallowed
H317	May cause an allergic skin reaction
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
OSHA003	May form combustible dust concentrations in air

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