SAFETY DATA SHEET

Version #: 06

Issue date: 05-29-2019 Revision date: 07-30-2023 Supersedes date: 06-25-2023

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

1.1. Product identifier

Trade name or designation

of the mixture

DEVCON® Wear Guard™ High Temp Hardener

Registration number

None. Synonyms SKU# 5322

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

Identified uses Not available. Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

ITW Performance Polymers Company Name

Bay 150 Address

Shannon Industrial Estate

Co. Clare Ireland V14 DF82

Contact Person Customer Service Telephone Number 353(61)771500

353(61)471285

customerservice.shannon@itwpp.com **Fmail**

Emergency Phone Number 44(0) 1235 239 670 (24 hours)

1.4. Emergency telephone number

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for

the Emergency Service.)

Austria National Poisons

Information Center

+431 406 4343 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Belgium National Poisons

Control Center

070 245 245 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Bulgaria National

Toxicological Information

Center

+359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Croatia Poisons Information Center +385 1 2348 342 (Hours of operation not provided. SDS/Product information may

not be available for the Emergency Service.)

Cyprus Poison Center

1401 (Available 24 hours a day. SDS/Product information may not be available

for the Emergency Service.)

Czech Republic National Poisons Information

Center

+420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Denmark National Poisons Control Center

+45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Estonia National Poisons

Information Center

16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)

Finland National Poison

Information Center

(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

France National Poisons Control Center

ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

1.4. Emergency telephone number

Greece Poison Information Centre

(0030) 2107793777 (Available 24 hours a day. SDS/Product information may not

be available for the Emergency Service.)

Hungary National Emergency Phone Number +36-80-201-199 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Iceland Poison Center

(+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be

available for the Emergency Service.)

Latvia Emergency medical

aid

+371 67042473 (Available 24 hours a day. SDS/Product information may not be

Latvia Poison and Drug Information Center

available for the Emergency Service.) +370 5 236 20 52 or +37068753378 (Hours of operation not provided.

Lithuania Neatidėliotina informacija apsinuodijus

SDS/Product information may not be available for the Emergency Service.)

Malta Accident and **Emergency Department**

2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Netherlands National Poisons Information Center (NVIC)

NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications)

Norway Norwegian Poison Information Center

22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Portugal Poison Center

800 250 250 (Available 24 hours a day. SDS/Product information may not be

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available for the Emergency Service.)

Romania Biroul RSI si Informare Toxicologica 021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be

available for the Emergency Service.)

Slovakia National Toxicological Information Center

+421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Spain Toxicology Information Service

+ 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

112 - and ask for Poison Information (Available 24 hours a day. SDS/Product

Sweden National Poison Information Center

information may not be available for the Emergency Service.)

Switzerland Tox Info Suisse

145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, oral Category 4 H302 - Harmful if swallowed. Skin corrosion/irritation Category 1B H314 - Causes severe skin burns

and eye damage.

Serious eye damage/eye irritation Category 1 H318 - Causes serious eye

damage.

Skin sensitization Category 1 H317 - May cause an allergic skin

reaction

Environmental hazards

Hazardous to the aquatic environment, Category 3 long-term aquatic hazard

H412 - Harmful to aquatic life with

long lasting effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

UFI:

Austria: 0880-F02M-Y008-AJ1V Belgium: 0880-F02M-Y008-AJ1V Bulgaria: 0880-F02M-Y008-AJ1V Croatia: 0880-F02M-Y008-AJ1V Cyprus: 0880-F02M-Y008-AJ1V

Czech Republic: 0880-F02M-Y008-AJ1V Denmark: 0880-F02M-Y008-AJ1V Estonia: 0880-F02M-Y008-AJ1V EU: 0880-F02M-Y008-AJ1V Finland: 0880-F02M-Y008-AJ1V France: 0880-F02M-Y008-AJ1V Germany: 0880-F02M-Y008-AJ1V Greece: 0880-F02M-Y008-AJ1V Hungary: 0880-F02M-Y008-AJ1V Iceland: 0880-F02M-Y008-AJ1V Ireland: 0880-F02M-Y008-AJ1V Italy: 0880-F02M-Y008-AJ1V Latvia: 0880-F02M-Y008-AJ1V Lithuania: 0880-F02M-Y008-AJ1V Luxembourg: 0880-F02M-Y008-AJ1V Malta: 0880-F02M-Y008-AJ1V Netherlands: 0880-F02M-Y008-AJ1V Norway: 0880-F02M-Y008-AJ1V

Netherlands: 0880-F02M-Y008-AJ1V Norway: 0880-F02M-Y008-AJ1V Poland: 0880-F02M-Y008-AJ1V Portugal: 0880-F02M-Y008-AJ1V Romania: 0880-F02M-Y008-AJ1V Slovakia: 0880-F02M-Y008-AJ1V Slovenia: 0880-F02M-Y008-AJ1V Spain: 0880-F02M-Y008-AJ1V

Sweden: 0880-F02M-Y008-AJ1V

Contains: 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Hazard pictograms



Signal word Danger

Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P260 Do not breathe vapor.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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/hearing protection.

Response

P330 Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information

n None.

2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

 Chemical name
 %
 CAS-No. / EC No.
 REACH Registration No.
 Index No.

 3-aminomethyl-3,5,5-trimethylcyclohe xylamine
 90 - 100
 2855-13-2 2 220-666-8
 612-067-00-9

Classification: Acute Tox. 4;H302;(ATE: 1030 mg/kg bw), Acute Tox. 4;H312, Skin Corr. 1B;H314, Eye Dam. 1;H318, Skin Sens. 1;H317, Skin Sens. 1A;H317,

Aquatic Chronic 3;H412

Specific Concentration Limits: Skin Sens. 1A;H317: C ≥ 0.001 %

< 1

ethanol; ethyl alcohol 1 - < 3 64-17-5 - 603-002-00-5 200-578-6

Classification: Flam. Liq. 2;H225, Carc. 1A;H350, Aquatic Chronic 2;H411

Other components below reportable

levels

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated

clothing before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Call a physician

or poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and

delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Material name: DEVCON® Wear Guard™ High Temp Hardener 5322 Version #: 06 Revision date: 07-30-2023 Issue date: 05-29-2019 **Notes**

Special fire fighting procedures

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing

appropriate protective clothing.

For emergency responders

Keep unnecessary personnel away. Ensure adequate ventilation. Avoid breathing mist/vapors. Local authorities should be advised if significant spillages cannot be contained. Use personal

protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into

drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

sections

7.1. Precautions for safe

SECTION 7: Handling and storage

handling

Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see

Section 10 of the SDS).

7.3. Specific end use(s)

Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBI. II, no. 184/2001, as amended

Components	Туре	Value	
ethanol; ethyl alcohol (CAS 64-17-5)	Ceiling	3800 mg/m3	
		2000 ppm	
	MAK	1900 mg/m3	
		1000 ppm	

Belgium, OEL, Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1 -Chemical agents, as amended

Components	Туре	Value	
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1907 mg/m3	
·		1000 ppm	

Bulgaria. OELs. Ordinance No 13 on protection of workers against risks of exposure to chemical agents at work, as amended

Components	Туре	Value	
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1000 mg/m3	

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended Components **Type** Value ethanol; ethyl alcohol (CAS MAC 1900 mg/m3 64-17-5) 1000 ppm Czech Republic. Occupational exposure limit values of chemicals at work (Decree on protection of health at work, 361/2007, Annex 2, Part A & Annex 3, Part A, as amended) Components **Type** Value ethanol; ethyl alcohol (CAS Ceiling 3000 mg/m3 64-17-5) **TWA** 1000 mg/m3 Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, Annex 2 Components Value Type TLV 1900 mg/m3 ethanol; ethyl alcohol (CAS 64-17-5) 1000 ppm Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended Components **Type** Value ethanol; ethyl alcohol (CAS STEL 1900 mg/m3 64-17-5) 1000 ppm **TWA** 1000 mg/m3 500 ppm Finland. HTP-arvot, App 3., Binding Limit Values, Social Affairs and Ministry of Health Components Value Type ethanol; ethyl alcohol (CAS STEL 2500 mg/m3 64-17-5) 1300 ppm **TWA** 1900 mg/m3 1000 ppm France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984 Components Value Type VLE 9500 mg/m3 ethanol; ethyl alcohol (CAS 64-17-5) Regulatory status: Indicative limit (VL) 5000 ppm Regulatory status: Indicative limit (VL) **VME** 1900 mg/m3 Regulatory status: Indicative limit (VL) 1000 ppm Regulatory status: Indicative limit (VL) Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as updated Components Value **Type** ethanol; ethyl alcohol (CAS **TWA** 380 mg/m3 64-17-5) 200 ppm Germany, TRGS 900, Limit Values in the Ambient Air at the Workplace Components Value **Type**

AGW

380 mg/m3

200 ppm

ethanol; ethyl alcohol (CAS

64-17-5)

Components	Туре	Value
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1900 mg/m3
,		1000 ppm
Hungary. OELs. Decree on protect Components	ion of workers exposed to ch Type	nemical agents (5/2020. (II.6)), Annex 1&2, as amended Value
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	3800 mg/m3
	TWA	1900 mg/m3
celand. OELs. Regulation 390/200 Components	9 on Pollution Limits and Me Type	asures to Reduce Pollution at the Workplace, as amende Value
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1900 mg/m3
- ',		1000 ppm
Ireland. OELVs, Schedules 1 & 2, 0 Components	Code of Practice for Chemica Type	Agents and Carcinogens Regulations Value
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1000 ppm
italy. OELs (Legislative Decree n.8 Components	1, 9 April 2008), as amended Type	Value
ethanol; ethyl alcohol (CAS	STEL	1000 ppm
64-17-5)	SILL	1000 ββιίι
Latvia. OELs. Occupational Expos 1), as amended	ure Limits of Chemical Subst	ances at Workplace (Reg. No. 325/ 2007, L.V. 80, Annex
Components	Туре	Value
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1000 mg/m3
	oosure Limit Values for Chem	nical Substances (Hygiene Norm HN 23:2011; Order No.
V-824/A1-389), as amended Components	Туре	Value
ethanol; ethyl alcohol (CAS	STEL	1900 mg/m3
64-17-5)		1000 ppm
	TWA	1000 ppm 1000 mg/m3
	IVVA	500 ppm
Netherlands. OELs per Annex XIII	of Working Conditions Regul	ation (Staatscourant no. 252, 29 December 2006), as
amended Components	Туре	Value
ethanol; ethyl alcohol (CAS	STEL	1900 mg/m3
64-17-5)	TWA	260 mg/m3
Norway. Regulation No. 1358 on M		Physical and Chemical Factors in Work Environment an
Infection Groups for Biological Fa	ctors, as amended	Value
Components otherel: other alcohol (CAS	Type TLV	
ethanol; ethyl alcohol (CAS 64-17-5)	I L V	950 mg/m3
		500 ppm
	centrations and intensities o	f harmful factors in the work environment (Dz.U.Poz.
1286/2018, Annex 1)		
1286/2018, Annex 1) Components	Туре	Value

	Туре	Value
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	1000 ppm
Romania. OELs. Limit Values of Camended)	Chemical Agents at Workplace (Regulati	on 1.218/2006, M.O 845, Annex 1, 3&4, as
Components	Туре	Value
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	9500 mg/m3
		5000 ppm
	TWA	1900 mg/m3
		1000 ppm
Slovakia. OELs. Maximum permis Annex 1, Table 1, as amended)	sible exposure limits for chemical factor	ors in workplace air (Regulation No 355/2006,
Components	Туре	Value
ethanol; ethyl alcohol (CAS 64-17-5)	STEL	1920 mg/m3
		1000 ppm
	TWA	960 mg/m3
		500 ppm
Slovenia. OELs. Occupational Ex due to Exp. to Chemicals at Work		ce (Reg. on Protection of Workers from Risks
Components	Туре	Value
ethanol; ethyl alcohol (CAS 64-17-5)	TWA	960 mg/m3
,		500 ppm
Spain. OELS. INSST, Limites de E (VLAs) Components		ímicos, Table 1-Valores Límites Ambientales Value
Components	Туре	value
	STEL	1910 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5)		1910 mg/m3
ethanol; ethyl alcohol (CAS		
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E	STEL	1910 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended	STEL nvironment Authority (AV), Occupation	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components	STEL nvironment Authority (AV), Occupation Type	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended	STEL nvironment Authority (AV), Occupation	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS	STEL nvironment Authority (AV), Occupation Type	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS	STEL nvironment Authority (AV), Occupation Type	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS	STEL nvironment Authority (AV), Occupation Type STEL	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5)	nvironment Authority (AV), Occupations Type STEL TWA	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5)	STEL nvironment Authority (AV), Occupation Type STEL	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte an	NOTEL Type STEL TWA Tybeitsplatz: Aktuelle MAK-Werte	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte an Components ethanol; ethyl alcohol (CAS	nvironment Authority (AV), Occupations Type STEL TWA n Arbeitsplatz: Aktuelle MAK-Werte Type	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte an Components ethanol; ethyl alcohol (CAS	nvironment Authority (AV), Occupations Type STEL TWA n Arbeitsplatz: Aktuelle MAK-Werte Type	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm Value 1920 mg/m3
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte an Components ethanol; ethyl alcohol (CAS	Note of the state	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm Value 1920 mg/m3 1000 ppm
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte ar Components ethanol; ethyl alcohol (CAS 64-17-5)	Note of the state	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm Value 1920 mg/m3 1000 ppm 960 mg/m3 500 ppm
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte and Components ethanol; ethyl alcohol (CAS 64-17-5) UK. OELs. Workplace Exposure L Components ethanol; ethyl alcohol (CAS 64-17-5)	Note that the state of the stat	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm Value 1920 mg/m3 1000 ppm 960 mg/m3 500 ppm
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte and Components ethanol; ethyl alcohol (CAS 64-17-5) UK. OELs. Workplace Exposure L Components	Note that the state of the stat	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm Value 1920 mg/m3 1000 ppm 960 mg/m3 500 ppm n 2020)), Table 1 Value
ethanol; ethyl alcohol (CAS 64-17-5) Sweden. OELs (Annex 1). Work E amended Components ethanol; ethyl alcohol (CAS 64-17-5) Switzerland. SUVA Grenzwerte an Components ethanol; ethyl alcohol (CAS 64-17-5) UK. OELs. Workplace Exposure L Components ethanol; ethyl alcohol (CAS 64-17-5)	Note that the state of the stat	1910 mg/m3 1000 ppm al Exposure Limit Values (AFS 2018:1), as Value 1900 mg/m3 1000 ppm 1000 mg/m3 500 ppm Value 1920 mg/m3 1000 ppm 960 mg/m3 500 ppm n 2020)), Table 1 Value 1920 mg/m3 1000 ppm

Derived no effect levels

(DNELs)

Not available.

Predicted no effect concentrations (PNECs)

Not available.

Exposure guidelines

Netherlands OELs (binding): Skin designation

ethanol; ethyl alcohol (CAS 64-17-5)

Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering

controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General informationUse personal protective equipment as required. Personal protection equipment should be chosen

according to the CEN standards and in discussion with the supplier of the personal protective

equipment.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Face shield is

recommended.

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

- Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Keep away from food and drink. Always observe good personal hygiene measures, such as

washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing

should not be allowed out of the workplace.

Environmental exposure

controls

Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable

levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquid.FormLiquid.ColorBlack.

Odor Slight. Amine

Melting point/freezing point 50 °F (10 °C) estimated Boiling point or initial boiling 476,6 °F (247 °C) estimated

point and boiling range

Flammability Not applicable.

Flash point 242,6 °F (117,0 °C) estimated

Auto-ignition temperatureNot available.Decomposition temperatureNot available.pHNot available.Kinematic viscosityNot available.

Solubility

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water) (log value)

Vapor pressure 0,02 hPa estimated

Density and/or relative density

Density 0,92 g/cm3 estimated

Vapor densityNot available.Particle characteristicsNot available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No relevant additional information available.

9.2.2. Other safety characteristics

Specific gravity 0,92 estimated

VOC <10 g/l

SECTION 10: Stability and reactivity

10.1. ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoidContact with incompatible materials.

10.5. Incompatible materials Peroxides. Phenols.

10.6. Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns. Harmful if swallowed.

Symptoms Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may

include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

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

Acute toxicity Harmful if swallowed.

Components Species Test Results

ethanol; ethyl alcohol (CAS 64-17-5)

Acute Oral

LD50 Rat 6,200000000000000 g/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory sensitizationDue to partial or complete lack of data the classification is not possible.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

11.2. Information on other hazards

Endocrine disrupting

properties

This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than

0.1% by weight.

Other information Not available.

SECTION 12: Ecological information

Harmful to aquatic life with long lasting effects. Based on available data, the classification criteria 12.1. Toxicity

are not met for hazardous to the aquatic environment, acute hazard.

12.2. Persistence and

degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

ethanol; ethyl alcohol -0,31

Bioconcentration factor (BCF) Not available. 12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB

assessment

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties

This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

12.7. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

12.8. Additional information

Estonia Dangerous substances in soil Data

ethanol; ethyl alcohol (CAS 64-17-5) Chemical pesticides (As the total sum of the active substances)

0,5 MG/KG

Chemical pesticides (As the total sum of the active substances) 20

MG/KG

Chemical pesticides (As the total sum of the active substances) 5

MG/KG

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions)

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

The Waste code should be assigned in discussion between the user, the producer and the waste EU waste code

disposal company.

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow Disposal methods/information

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN2289

ISOPHORONEDIAMINE 14.2. UN proper shipping

name

14.3. Transport hazard class(es)

8 Class Subsidiary risk R Label(s) Hazard No. (ADR) 80 **Tunnel restriction code** Ε 14.4. Packing group Ш

14.6. Special precautions

Read safety instructions, SDS and emergency procedures before handling.

for user RID

> 14.1. UN number UN2289

14.5. Environmental hazards No.

14.2. UN proper shipping **ISOPHORONEDIAMINE**

name

14.3. Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8

14.4. Packing group III

14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

ADN

14.1. UN number UN2289

14.2. UN proper shipping ISOPHORONEDIAMINE

name

14.3. Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8
14.4. Packing group III
14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

IATA

14.1. UN number UN2289

14.2. UN proper shipping ISOPHORONEDIAMINE Solution, Limited Quantity

name

14.3. Transport hazard class(es)

Class 8
Subsidiary risk
14.4. Packing group III

14.5. Environmental hazards No.
ERG Code 8L

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

14.1. UN number UN2289

14.2. UN proper shipping ISOPHORONEDIAMINE Solution, Limited Quantity

name

14.3. Transport hazard class(es)

Class 8
Subsidiary risk 14.4. Packing group III
14.5. Environmental hazards
Marine pollutant No.
EmS F-A. S-B

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

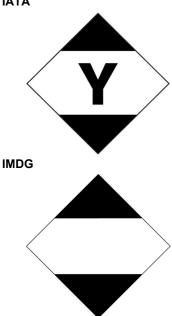
14.7. Maritime transport in bulk Not established.

according to IMO instruments

ADN; ADR; RID



IATA



SECTION 15: Regulatory information

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

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

UFI:

Austria: 0880-F02M-Y008-AJ1V Belgium: 0880-F02M-Y008-AJ1V Bulgaria: 0880-F02M-Y008-AJ1V Croatia: 0880-F02M-Y008-AJ1V Cyprus: 0880-F02M-Y008-AJ1V

Czech Republic: 0880-F02M-Y008-AJ1V Denmark: 0880-F02M-Y008-AJ1V Estonia: 0880-F02M-Y008-AJ1V EU: 0880-F02M-Y008-AJ1V Finland: 0880-F02M-Y008-AJ1V France: 0880-F02M-Y008-AJ1V Germany: 0880-F02M-Y008-AJ1V Greece: 0880-F02M-Y008-AJ1V Hungary: 0880-F02M-Y008-AJ1V Iceland: 0880-F02M-Y008-AJ1V Ireland: 0880-F02M-Y008-AJ1V Italy: 0880-F02M-Y008-AJ1V Latvia: 0880-F02M-Y008-AJ1V Lithuania: 0880-F02M-Y008-AJ1V Luxembourg: 0880-F02M-Y008-AJ1V Malta: 0880-F02M-Y008-AJ1V Netherlands: 0880-F02M-Y008-AJ1V Norway: 0880-F02M-Y008-AJ1V Poland: 0880-F02M-Y008-AJ1V Portugal: 0880-F02M-Y008-AJ1V Romania: 0880-F02M-Y008-AJ1V Slovakia: 0880-F02M-Y008-AJ1V

Siovakia: 0880-F02M-Y008-AJ1V Slovenia: 0880-F02M-Y008-AJ1V Spain: 0880-F02M-Y008-AJ1V Sweden: 0880-F02M-Y008-AJ1V

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

ethanol; ethyl alcohol (CAS 64-17-5) 40

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP

Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation

(EC) No 1907/2006, as amended.

National regulations Young people under 18 years old are not allowed to work with this product according to EU

Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

France regulations

France INRS Table of Occupational Diseases

ethanol; ethyl alcohol (CAS 64-17-5)

Affections engendrées par les solvants organiques liquides à usage professionnel : hydrocarbures liquides aliphatiques ou cycliques saturés ou insaturés et leurs mélanges; hydrocarbures halogénés liquides; dérivés nitrés des hydrocarbures aliphatiques; al 84

Product registration number

UFI: 0880-F02M-Y008-AJ1V **Austria Belgium** UFI: 0880-F02M-Y008-AJ1V **Czech Republic** UFI: 0880-F02M-Y008-AJ1V **Denmark** UFI: 0880-F02M-Y008-AJ1V **European Union** UFI: 0880-F02M-Y008-AJ1V **Finland** UFI: 0880-F02M-Y008-AJ1V UFI: 0880-F02M-Y008-AJ1V **France** Germany UFI: 0880-F02M-Y008-AJ1V UFI: 0880-F02M-Y008-AJ1V Greece UFI: 0880-F02M-Y008-AJ1V Hungary Italy UFI: 0880-F02M-Y008-AJ1V Netherlands UFI: 0880-F02M-Y008-AJ1V Norway UFI: 0880-F02M-Y008-AJ1V
 Poland
 UFI: 0880-F02M-Y008-AJ1V

 Portugal
 UFI: 0880-F02M-Y008-AJ1V

 Slovakia
 UFI: 0880-F02M-Y008-AJ1V

 Slovenia
 UFI: 0880-F02M-Y008-AJ1V

 Spain
 UFI: 0880-F02M-Y008-AJ1V

 Sweden
 UFI: 0880-F02M-Y008-AJ1V

 Switzerland
 UFI: 0880-F02M-Y008-AJ1V

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland

Waterways.

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

CAS: Chemical Abstract Service.

CEN: European Committee for Standardization. IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk.

Not available.

IMDG: International Maritime Dangerous Goods.

MAC: Maximum Allowed Concentration.

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative and toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit. TLV: Threshold Limit Value. TWA: Time Weighted Average. VLE: Exposure Limit Value. VME: Exposure Average Value.

vPvB: Very persistent and very bioaccumulative.

References

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H350 May cause cancer.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Revision information

Training information

None.

Follow training instructions when handling this material.

Disclaimer

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