SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	LPS® HDX
Registration number	-
Synonyms	None.
Part Number	01005, 01055, M01005, M01055
Issue date	18-October-2016
Version number	02
Revision date	19-February-2018
Supersedes date	18-October-2016

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

Identified uses	A degreaser designed to remove grease, oil, dirt and other residues from metal and other hard surfaces near ignition sources.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier	Alsco Ltd
Company name	Unit 13 Hillmead Industrial Estate
Address	Marshall Road Swindon, Wiltshire United Kingdom SN5 5FZ
Telephone	+44 1793 733 900
In Case of Emergency	+001 703-527-3887
Manufacturer	
Company name	ITW Pro Brands
Address	4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)
Website	http://www.lpslabs.com
E-mail	lpssds@itwprobrands.com

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 Directive 67/548/EEC or 1999/45/EC as amended

Classification Carc. Cat. 2;R45, Xi;R36/38, R67, R52/53

The full text for all R-phrases is displayed in section 16.

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

Health hazards		
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Germ cell mutagenicity	Category 2	H341 - Suspected of causing genetic defects.
Carcinogenicity	Category 1B	H350 - May cause cancer.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards May cause cancer. May cause heritable genetic damage. Irritating to eyes and skin. Vapours may cause drowsiness and dizziness. Occupational exposure to the substance or mixture may cause adverse health effects.

Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Specific hazards Prolonged exposure may cause chronic effects.

Main symptoms May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

2.2. Label elements

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

Contains: 1,1,2-trichloroethylene

Hazard pictograms

Signal word Danger

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist or vapour.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal

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

Supplemental label information None known.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
1,1,2-trichloroethylene	90 - 100	79-01-6 201-167-4	-	602-027-00-9	

Classification: **DSD:** Carc. Cat. 2;R45, Muta. Cat. 3;R68, Xi;R36/38, R67, R52/53

CLP: Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H336, Muta. 2;H341, Carc. 1B;H350, Aquatic Chronic 3;H412

List of abbreviations and symbols that may be used above

DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.
#: This substance has been assigned Union workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
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 R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). 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.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. 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. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. 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.

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 Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders Keep unnecessary personnel away.

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. Put material in suitable, covered, labeled containers.

6.4. Reference to other sections

Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. TRK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	13,2 mg/m3
		2,4 ppm
	TWA	3,3 mg/m3
		0,6 ppm

Belgium. Exposure Limit Values.

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	137 mg/m3
		25 ppm
	TWA	55 mg/m3
		10 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	1000 mg/m3
	TWA	135 mg/m3

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	MAC	550 mg/m3
		100 ppm
	STEL	820 mg/m3
		150 ppm

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	535 mg/m3
		100 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	Ceiling	750 mg/m3

Czech Republic. OELs. Government Decree 361

Components	Type	Value
	TWA	250 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TLV	55 mg/m3
		10 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	140 mg/m3
		25 ppm
	TWA	50 mg/m3
		10 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	50 mg/m3
		10 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	VLE	1080 mg/m3
		200 ppm
	VME	405 mg/m3
		75 ppm

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	1080 mg/m3
		200 ppm
	TWA	538 mg/m3
		100 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	540 mg/m3
	TWA	270 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	55 mg/m3
		10 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	25 ppm
	TWA	10 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	25 ppm
	TWA	10 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	10 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	140 mg/m3
		25 ppm
	TWA	50 mg/m3
		10 ppm

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TLV	50 mg/m3
		10 ppm

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	100 mg/m3
	TWA	50 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	100 ppm
	TWA	50 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	150 mg/m3
		28 ppm
	TWA	100 mg/m3
		18,5 ppm

Slovakia. OELs for carcinogens and mutagens. Regulation No. 46/2002 on carcinogenic and mutagenic substances

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	275 mg/m3
		50 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	270 mg/m3
		50 ppm

Spain. Carcinogens and Mutagens with Limit Values (Table 2)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	TWA	55 mg/m3
		10 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	140 mg/m3
		25 ppm
	TWA	50 mg/m3
		10 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	273 mg/m3
		50 ppm
	TWA	110 mg/m3
		20 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	STEL	820 mg/m3
		150 ppm
	TWA	550 mg/m3
		100 ppm

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	75 mg/g	Trichloroacetic acid	Creatinine in urine	*
	4 mg/l	Trichloroethanol	Blood	*
	0,04 mg/l	Trichloroethylene	Blood	*
	51,92 mmol/mol	Trichloroacetic acid	Creatinine in urine	*
	20,8 nmol/l	Trichloroethylene	End-exhaled air	*
	0,5 ppm	Trichloroethylene	End-exhaled air	*
	26,77 umol/l	Trichloroethanol	Blood	*
	0,3 umol/l	Trichloroethylene	Blood	*

* - For sampling details, please see the source document.

Czech Republic. Limit Values for Indictators of Biological Exposure Tests in Urine and Blood, Annex 2, Tables 1 and 2, Government Decree 432/2003 Sb.

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	70 µmol/mmol	Trichloroacetic acid	Creatinine in urine	*
	150 µmol/mmol	Trichloroethanol	Creatinine in urine	*
	200 mg/g	Trichloroethanol	Creatinine in urine	*
	100 mg/g	Trichloroacetic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Finland. HTP-arvot, App 2., Biological Limit Values, (BRA/BGV) , Social Affairs and Ministry of Health

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	120 umol/l	Trichloroacetic acid	Urine	*

* - For sampling details, please see the source document.

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	300 mg/g	Somme de l'acide trichioroacétique et du trichloroéthanol	Creatinine in urine	*
	100 mg/g	Acide trichloroacétique	Creatinine in urine	*
	4 mg/l	Trichloroéthanol libre	Blood	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	50 mg/g	Trichloroacetic acid	Creatinine in urine	*
	35 µmol/mmol	Trichloroacetic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	15 mg/l	Ácido tricloroacético	Urine	*
	0,5 mg/l	Tricloroetanol, sin hidrólisis	Blood	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling time
1,1,2-trichloroethylene (CAS 79-01-6)	40 mg/l	Trichloressigsäure	Urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) 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 information Use 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).

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

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

Respiratory protection Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Observe any medical surveillance requirements. 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.

Environmental exposure controls Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Colour Light brown.

Odour Sweet, Spice.

Odour threshold Not established

pH Not applicable

Melting point/freezing point Not established

Initial boiling point and boiling range 87 °C (188,6 °F)

Flash point Tag closed cup (None)

Evaporation rate 0,3 (Ethyl Ether = 1)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	8 %
Flammability limit - upper (%)	10,5 %
Vapour pressure	58 mm Hg @ 20°C
Vapour density	4,5
Relative density	Not available.
Solubility(ies)	
Solubility (water)	0,1 %
Partition coefficient (n-octanol/water)	2,4
Auto-ignition temperature	> 420 °C (> 788 °F)
Decomposition temperature	Not established
Viscosity	0,53 cP @ 25° C
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Heat of combustion	< 20 kJ/g
Percent volatile	100 %
Specific gravity	1,41 - 1,47 @ 20°C
VOC	100 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The 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 avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Carbon oxides.

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 drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity	Narcotic effects.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	Not a respiratory sensitizer.
Skin sensitisation	This product is not expected to cause skin sensitisation.
Germ cell mutagenicity	Suspected of causing genetic defects.

Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)

1,1,2-trichloroethylene (CAS 79-01-6)	Mutagenic, Category 2.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

1,1,2-trichloroethylene (CAS 79-01-6) Mutagenic, Category 2.

Carcinogenicity May cause cancer.

ACGIH Carcinogens

1,1,2-trichloroethylene (CAS 79-01-6) Suspected human carcinogen. A2

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

1,1,2-trichloroethylene (CAS 79-01-6)

IARC Monographs. Overall Evaluation of Carcinogenicity

1,1,2-trichloroethylene (CAS 79-01-6) 1 Carcinogenic to humans.

Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)

1,1,2-trichloroethylene (CAS 79-01-6) Carcinogenic, Category 1B.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Mixture versus substance information No information available.

Other information Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects. Based on available data, the classification criteria are not met for hazardous to the aquatic environment, acute hazard.

Components		Species	Test results
1,1,2-trichloroethylene (CAS 79-01-6)			
Aquatic			
Fish	LC50	Flagfish (Jordanella floridae)	3,1 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

LPS® HDX	2,4
1,1,2-trichloroethylene	2,61

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects None known.

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.

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

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow 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	UN1710
14.2. UN proper shipping name	Trichloroethylene
14.3. Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
Hazard No. (ADR)	60
Tunnel restriction code	E
14.4. Packing group	III
14.5. Environmental hazards	No
14.6. Special precautions for user	Not available.

RID

14.1. UN number	UN1710
14.2. UN proper shipping name	Trichloroethylene
14.3. Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
14.4. Packing group	III
14.5. Environmental hazards	No
14.6. Special precautions for user	Not available.

ADN

14.1. UN number	UN1710
14.2. UN proper shipping name	Trichloroethylene
14.3. Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
14.4. Packing group	III
14.5. Environmental hazards	No
14.6. Special precautions for user	Not available.

IATA

14.1. UN number	UN1710
14.2. UN proper shipping name	Trichloroethylene
14.3. Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	No
ERG Code	6A
14.6. Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

14.1. UN number	UN1710
14.2. UN proper shipping name	TRICHLOROETHYLENE
14.3. Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
14.4. Packing group	III

14.5. Environmental hazards

Marine pollutant No

EmS F-A, S-A

14.6. Special precautions for user Not available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

ADN; ADR; IATA; IMDG; RID

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 (EC) No. 850/2004 On persistent organic pollutants, Annex I 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

Not listed.

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

1,1,2-trichloroethylene (CAS 79-01-6)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

1,1,2-trichloroethylene (CAS 79-01-6)

Authorisations

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

1,1,2-trichloroethylene (CAS 79-01-6)

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

1,1,2-trichloroethylene (CAS 79-01-6)

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

1,1,2-trichloroethylene (CAS 79-01-6)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations Pregnant women should not work with the product, if there is the least risk of exposure. 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 Follow national regulation for work with chemical agents. 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.

15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
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 or R-phrases and H-statements under Sections 2 to 15	R36/38 Irritating to eyes and skin. R45 May cause cancer. R46 May cause heritable genetic damage. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R67 Vapours may cause drowsiness and dizziness. R68 Possible risk of irreversible effects. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H341 Suspected of causing genetic defects. H350 May cause cancer. H412 Harmful to aquatic life with long lasting effects.
Revision information	Physical & Chemical Properties: Multiple Properties
Training information	Follow training instructions when handling this material.
Disclaimer	ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.