

SAFETY DATA SHEET Holts Start Pilote

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product name	Holts Start Pilote	
Product number	HSTA0001A, 71011010022, 71011010033, 71011300048, 71011300033, 71011290002, HSTA0002A	
UFI	UFI: 9092-3587-X67H-K91S	
EU REACH registration notes	This is a MIXTURE; no registration information contained in this document. Holts are classed as Downstream User.	
1.2. Relevant identified uses of the substance or mixture and uses advised against		
Identified uses	Car maintenance product.	
1.3. Details of the supplier of the safety data sheet		
Company	: JASA AG Müslistrasse 43 8957 Spreitenbach Schweiz	
	info@jasa-ag.ch, www.jasa-ag.ch	
Telephone Telefax	: +41 (0)44 431 60 70 : +41 (0)44 432 63 17	
Responsible Department	: Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch	
1.4 Emergency telephone	2	

Emergency telephone : To	ox Info Suisse (STIZ), Tel: 145
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National emergency telephone	+43 1 31304 5620; chemikalien@umweltbundesamt.at (Austria)
number	+32022649636; info@poisoncentre.be (Belgium)
	+359 2 9154 409; poison_centre@mail.orbitel.bg (Bulgaria)
	+38514686910; toksikologija@hziz.hr (Croatia)
	+35722405611; cy-chemregistry@dli.mlsi.gov.cy (Cyprus)
	+420267082257; biocidy@mzcr.cz (Czech Republic)
	+45 72 54 40 00; mst@mst.dk (Denmark)
	+372 794 3500; clp@terviseamet.ee, info@terviseamet.ee (Estonia)
	+358 5052 000; kirjaamo@tukes.fi (Finland)
	+ 33 3 83 85 21 92; bnpc@chru-nancy.fr (France)
	+49-30-18412-0; bfr@bfr.bund.de (Germany)
	+302106479250; +302106479450; devxp.gcsl@aade.gr, environment.gcsl@aade.gr (Greece)
	+36 (1) 476 1135; clp.ca@nnk.gov.hu (Hungary)
	+354 543 22 22; eitur@landspitali.is (Iceland)
	+353 (1) 809 2166 / +353 (1) 809 2566; chemicalsinfo@beaumont.ie (Ireland)
	+390649906140; inscweb@iss.it (Italy)
	+371 67032600; lvgmc@lvgmc.lv (Latvia)
	+370 70662008; aaa@aaa.am.lt (Lithuania)
	+320 22649636; +352 24785551; info@poisoncentre.be; direction-sante@ms.etat.lu
	(Luxembourg)
	+356 2395 2000; info@mccaa.org.mt (Malta)
	+31 88 75 585 61; productnotificatie@umcutrecht.nl (The Netherlands)
	+4573580500; produktregisteret@miljodir.no / +47 21 07 70 00; folkehelseinstituttet@fhi.no
	(Norway)
	+48 42 2538 400; biuro@chemikalia.gov.pl (Poland)
	+351 800 250 250; ciav.tox@inem.pt (Portugal)
	+40213183606; infotox@insp.gov.ro (Romania)
	+7 495 621 6885; +7 495 628 1687; rtiac@mail.ru; rtiac2003@yahoo.com (Russia)
	+421 2 5465 2307; ntic@ntic.sk (Slovakia)
	+ 386 1 522 1293; gp.ukc@kclj.si (Slovenia)
	+34 917689800; intcf.doc@justicia.es (Spain)
	+46104566750; giftinformation@gic.se (Sweden)
	+44 121 507 4123; allistervale@npis.org, sallybradberry@npis.org (UK)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture	
Classification (SI 2019 No. 720)	

Classification (31 2019 140. 720	<u>)</u>
Physical hazards	Aerosol 1 - H222, H229
Health hazards	STOT SE 3 - H336
Environmental hazards	Aquatic Chronic 3 - H412
2.2. Label elements	
Hazard pictograms	
Signal word	Danger
Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements	 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P261 Avoid breathing spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/doctor if you feel unwell. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/ container in accordance with national regulations.
UFI	UFI: 9092-3587-X67H-K91S
Contains	DIETHYL ETHER, Hydrocarbons, C6, isoalkanes, <5% n-hexane, DI-ISOPROPYL ETHER, ACETONE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures		
DIETHYL ETHER		25-50%
CAS number: 60-29-7	EC number: 200-467-2	
Classification		
Flam. Liq. 1 - H224		
Acute Tox. 4 - H302		
STOT SE 3 - H336		
Naphtha (petroleum),hydrotreated light		10-25%
CAS number: 64742-49-0	EC number: 931-254-9	
Classification		
Flam. Liq. 2 - H225		
Skin Irrit. 2 - H315		
STOT SE 3 - H336		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		
DI-ISOPROPYL ETHER		10-25%
CAS number: 108-20-3	EC number: 203-560-6	
Classification		
Flam. Liq. 2 - H225		
STOT SE 3 - H336		

ACETONE	5-10%
CAS number: 67-64-1	EC number: 200-662-2
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
BUTANE	5-10%
CAS number: 106-97-8	EC number: 203-448-7
Classification	
Flam. Gas 1A - H220	
Press. Gas	
ISOBUTANE	1-5%
CAS number: 75-28-5	EC number: 200-857-2
Classification	
Flam. Gas 1A - H220 Press. Gas	
	atements is displayed in Section 16.
SECTION 4: First aid measu	
4.1. Description of first aid m	
Inhalation	Move affected person to fresh air at once. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. Get medical attention immediately.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
4.2. Most important sympton	ns and effects, both acute and delayed
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Get medical attention promptly if symptoms occur after washing.
Inhalation	Central nervous system depression. Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause discomfort if swallowed. May cause drowsiness or dizziness.
Skin contact	May be slightly irritating to skin. Product has a defatting effect on skin. Prolonged or repeated exposure may cause severe irritation.
Eye contact	May be slightly irritating to eyes. Prolonged or repeated exposure may cause severe irritation.
4.3. Indication of any immed	iate medical attention and special treatment needed
Notes for the doctor	Treat symptomatically.
SECTION 5: Firefighting me	asures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Water spray, foam, dry powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture		
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.	
Hazardous combustion products	Oxides of carbon.	
5.3. Advice for firefighters		
Protective actions during firefighting	Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.	
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.	
SECTION 6: Accidental release	e measures	
6.1. Personal precautions, protective equipment and emergency procedures		
Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.	
6.2. Environmental precaution	<u>S</u>	
Environmental precautions	Avoid release to the environment.	
6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion. If leakage cannot be stopped, evacuate area.	
6.4. Reference to other section	ns	
Reference to other sections	For personal protection, see Section 8. See Section 1 for emergency contact information.	
SECTION 7: Handling and sto	rage	
7.1. Precautions for safe hand	ling	
Usage precautions	Keep away from heat, sparks and open flame. Avoid spilling. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Avoid contact with skin and eyes. Avoid release to the environment.	
Advice on general occupational hygiene	Good personal hygiene procedures should be implemented.	
7.2. Conditions for safe storag	e, including any incompatibilities	
Storage precautions	Keep container tightly closed, in a cool, well ventilated place.	

Storage class Aerosol containers and lighters

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits DIETHYL ETHER

Long-term exposure limit (8-hour TWA): WEL 100 ppm 310 mg/m³ Short-term exposure limit (15-minute): WEL 200 ppm 620 mg/m³

DI-ISOPROPYL ETHER

Long-term exposure limit (8-hour TWA): WEL 250 ppm 1060 mg/m³ Short-term exposure limit (15-minute): WEL 310 ppm 1310 mg/m³

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³ Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³ Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

ISOBUTANE

Long-term exposure limit (8-hour TWA): OES 800 ppm Short-term exposure limit (15-minute): OES 800 ppm WEL = Workplace Exposure Limit.

DIETHYL ETHER (CAS: 60-29-7)

DNEL	Workers - Inhalation; Long term systemic effects: 308 mg/m ³ Workers - Inhalation; Short term systemic effects: 616 mg/m ³ Workers - Dermal; Long term systemic effects: 44 mg/kg bw/day General population - Inhalation; Long term systemic effects: 54.5 mg/m ³ General population - Dermal; Long term systemic effects: 15.6 mg/kg bw/day General population - Oral; Long term systemic effects: 15.6 mg/kg bw/day
PNEC	Fresh water; 2 mg/l marine water; 0.2 mg/l STP; 4.2 mg/l Sediment (Freshwater); 9.14 mg/kg sediment dry weight Sediment (Marinewater); 0.914 mg/kg sediment dry weight Soil; 0.66 mg/kg soil dry weight Naphtha (petroleum),hydrotreated light (CAS: 64742-49-0)
DNEL	Workers - Inhalation; Long term systemic effects: 1286.4 mg/m ³ Workers - Inhalation; Long term local effects: 837.5 mg/m ³ Workers - Inhalation; Short term local effects: 1066.67 mg/m ³ General population - Inhalation; Long term systemic effects: 1152 mg/m ³ General population - Inhalation; Long term local effects: 178.57 mg/m ³ DI-ISOPROPYL ETHER (CAS: 108-20-3)
DNEL	Workers - Inhalation; Long term systemic effects: 850 mg/m ³ Workers - Inhalation; Short term systemic effects: 1700 mg/m ³ Workers - Dermal; Long term systemic effects: 121.4 mg/kg bw/day General population - Inhalation; Long term systemic effects: 151 mg/m ³ General population - Inhalation; Short term systemic effects: 302 mg/m ³ General population - Dermal; Long term systemic effects: 43.1 mg/kg bw/day General population - Oral; Long term systemic effects: 43.1 mg/kg bw/day

PNEC	Fresh water; 0.19 mg/l marine water; 0.019 mg/l STP; 37 mg/l Sediment (Freshwater); 2.79 mg/kg sediment dry weight Sediment (Marinewater); 0.28 mg/kg sediment dry weight Soil; 0.47 mg/kg soil dry weight
	ACETONE (CAS: 67-64-1)
DNEL	Consumer - Oral; Long term systemic effects: 62 mg/kg/day Workers - Dermal; Long term systemic effects: 186 mg/kg/day Consumer - Dermal; Long term systemic effects: 62 mg/kg/day Workers - Inhalation; Short term local effects: 2420 mg/m ³ Workers - Inhalation; Long term systemic effects: 1210 mg/m ³ Consumer - Inhalation; Long term systemic effects: 200 mg/m ³
PNEC	Fresh water; 10.6 mg/l marine water; 1.06 mg/l Intermittent release; 21 mg/l Sediment (Freshwater); 30.4 mg/kg Sediment (Marinewater); 3.04 mg/kg Soil; 29.5 mg/kg STP; 100 mg/l
8.2. Exposure controls	
Protective equipment	
Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicat

eye contact is possible. The following protection should be worn: Chemical splash goggles or

face shield. Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Rubber (natural, latex). To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. Other skin and body Wear appropriate clothing to prevent any possibility of liquid contact and repeated or protection prolonged vapour contact.

Use engineering controls to reduce air contamination to permissible exposure level. Do not Hygiene measures smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.

Respiratory protection Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Aerosol.

Colour	Colourless.
Odour	Ether.
Flash point	< 0°C
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1 % Upper flammable/explosive limit: 36 %
Vapour pressure	3500 hPa @ 20°C
Solubility(ies)	Immiscible with water.
Auto-ignition temperature	170°C
9.2. Other information	
Volatile organic compound	This product contains a maximum VOC content of 637.2 g/l. This product contains a maximum VOC content of 92 %.
SECTION 10: Stability and rea	ctivity
10.1. Reactivity	
Reactivity	Vapours may form explosive mixtures with air.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures.
10.3. Possibility of hazardous r	reactions
Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
10.4. Conditions to avoid	
Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.
10.5. Incompatible materials	
Materials to avoid	Strong oxidising agents. Strong mineral acids.
10.6. Hazardous decompositio	n products
Hazardous decomposition products	Oxides of carbon.
SECTION 11: Toxicological inf	ormation
11.1. Information on toxicologic	cal effects
Toxicological effects	Information given is based on data of the components and of similar products.
Acute toxicity - oral Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD∞)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.
Skin corrosion/irritation	

Serious eye damage/irritation Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Does not contain any substances known to be toxic to reproduction.
Specific target organ toxicity -	single exposure
STOT - single exposure	May cause drowsiness or dizziness.
Specific target organ toxicity -	repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard Aspiration hazard	Not relevant.
Inhalation	Central nervous system depression. Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause discomfort if swallowed. May cause drowsiness or dizziness.
Skin contact	May be slightly irritating to skin. Product has a defatting effect on skin. Prolonged or repeated exposure may cause severe irritation.
Eye contact	May be slightly irritating to eyes. Prolonged or repeated exposure may cause severe irritation.
Route of exposure	Inhalation Skin and/or eye contact
Toxicological information on in	gredients.

DIETHYL ETHER

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	1,200.0
Species	Rat
ATE oral (mg/kg)	500.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	20,000.0
Species	Rabbit

Acute toxicity - inhalation	
Acute toxicity inhalation (LC50 vapours mg/l)	97.0
Species	Mouse
ATE inhalation (vapours mg/l)	97.0
Skin corrosion/irritation	
Skin corrosion/irritation	Not irritating.
Serious eye damage/irritati	on
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	No information required.
Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies. REACH dossier information.
Reproductive toxicity - development	Maternal toxicity: - NOAEC: 430 ppm, Inhalation, Rat Teratogenicity: - NOAEL: 500 ppm, Oral, Rat Teratogenicity: - NOAEL: 80 mg/kg/day, Oral, Rabbit
Specific target organ toxicit	y - single exposure
STOT - single exposure	Central and/or peripheral nervous system damage.
Target organs	Central nervous system
Specific target organ toxicit	y - repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	Not relevant.
	Naphtha (petroleum), hydrotreated light
Acute toxicity - oral	
Notes (oral LD₅₀)	LD₅₀ > 16750 mg/kg, Oral, Rat
Acute toxicity - dermal	
Notes (dermal LD₅₀)	LD₅₀ 3350 mg/kg, Dermal, Rabbit
Acute toxicity - inhalation	

Notes (inhalation LC₅₀)	LC50 259354 mg/m³, Inhalation, Rat
Skin corrosion/irritation	
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritati	
Serious eye	Based on available data the classification criteria are not met.
damage/irritation	
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met. NOAEC 31680 mg/m³, Inhalation, Mouse
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEC 31680 mg/m³, Inhalation, Rat F1, F2
Specific target organ toxicit	y - single exposure
STOT - single exposure	May cause drowsiness or dizziness.
0	v - repeated exposure
Specific target organ toxicit	y - Tepeateu exposure
	Based on available data the classification criteria are not met.
STOT - repeated exposure	
STOT - repeated exposure Aspiration hazard	Based on available data the classification criteria are not met.
STOT - repeated exposure Aspiration hazard	Based on available data the classification criteria are not met.
STOT - repeated exposure Aspiration hazard Aspiration hazard	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways.
STOT - repeated exposure Aspiration hazard Aspiration hazard	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness.
STOT - repeated exposure Aspiration hazard Aspiration hazard Inhalation Ingestion	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
STOT - repeated exposure Aspiration hazard Aspiration hazard Inhalation Ingestion Skin contact	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May be slightly irritating to skin.
STOT - repeated exposure Aspiration hazard Aspiration hazard Inhalation Ingestion Skin contact	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May be slightly irritating to skin. May be slightly irritating to eyes.
STOT - repeated exposure Aspiration hazard Aspiration hazard Inhalation Ingestion Skin contact Eye contact	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May be slightly irritating to skin. May be slightly irritating to eyes.
STOT - repeated exposure <u>Aspiration hazard</u> Aspiration hazard Inhalation Ingestion Skin contact Eye contact <u>Acute toxicity - oral</u>	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May be slightly irritating to skin. May be slightly irritating to eyes. DI-ISOPROPYL ETHER
STOT - repeated exposure <u>Aspiration hazard</u> Aspiration hazard Inhalation Ingestion Skin contact Eye contact <u>Acute toxicity - oral</u> Notes (oral LD ₅₀)	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May be slightly irritating to skin. May be slightly irritating to eyes. DI-ISOPROPYL ETHER
STOT - repeated exposure <u>Aspiration hazard</u> Aspiration hazard Inhalation Ingestion Skin contact Eye contact <u>Acute toxicity - oral</u> Notes (oral LD ₅₀) <u>Acute toxicity - dermal</u>	Based on available data the classification criteria are not met. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May be slightly irritating to skin. May be slightly irritating to eyes. <u>DI-ISOPROPYL ETHER</u> LD₅₀ 4600 mg/kg, Oral, Rat

Skin corrosion/irritation	
Clain companion/invitation	Not irritation
Skin corrosion/irritation	Not irritating.
Serious eye damage/irritati	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	No information available.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL 1000 mg/kg/day, Oral, Rat F1 One-generation study - NOAEC 3560 mg/m³, Inhalation, Rat F0
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 1000 mg/kg/day, Oral, Rat Developmental toxicity: - NOAEC: 1800 mg/m³, Inhalation, Rat No evidence of reproductive toxicity in animal studies.
Specific target organ toxicit	y - single exposure
STOT - single exposure	Central and/or peripheral nervous system damage.
Specific target organ toxicit	ty - repeated exposure
STOT - repeated exposure	Read on available data the electricities exiteria are not met
	Based on available data the classification criteria are not met.
Aspiration hazard	based on available data the classification chiena are not met.
Aspiration hazard Aspiration hazard	Not relevant.
.	
.	Not relevant.
Aspiration hazard	Not relevant.
Aspiration hazard Acute toxicity - oral Acute toxicity oral (LD50	Not relevant.
Aspiration hazard Acute toxicity - oral Acute toxicity oral (LD ₅₀ mg/kg) Species	Not relevant. <u>ACETONE</u> 5,800.0
Aspiration hazard <u>Acute toxicity - oral</u> Acute toxicity oral (LD ₅₀ mg/kg) Species ATE oral (mg/kg)	Not relevant. ACETONE 5,800.0 Rat
Aspiration hazard Acute toxicity - oral Acute toxicity oral (LD ₅₀ mg/kg) Species	Not relevant. ACETONE 5,800.0 Rat 5,800.0
Aspiration hazard Acute toxicity - oral Acute toxicity oral (LD ₅₀ mg/kg) Species ATE oral (mg/kg) <u>Acute toxicity - dermal</u> Acute toxicity dermal (LD ₅₀	Not relevant. ACETONE 5,800.0 Rat 5,800.0
Aspiration hazard Acute toxicity - oral Acute toxicity oral (LD ₅₀ mg/kg) Species ATE oral (mg/kg) <u>Acute toxicity - dermal</u> Acute toxicity dermal (LD ₅₀ mg/kg)	Not relevant. ACETONE 5,800.0

Species	Rat
Skin corrosion/irritation	
Skin corrosion/irritation	Not irritating.
Serious eye damage/irritat	ion
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies. REACH dossier information.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.
Specific target organ toxic	ity - single exposure
STOT - single exposure	Central and/or peripheral nervous system damage. Narcotic effects
Specific target organ toxic	ity - repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	Not relevant.
	BUTANE
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
	PROPANE
Acute toxicity - oral	
Acute toxicity oral (LD ₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

ISOBUTANE

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
SECTION 12: Ecological information	

Ecotoxicity

Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Ecological information on ingredients.

DIETHYL ETHER

Acute aquatic toxicity	
Acute toxicity - fish	LC ₅₀ , 48 hours: 2840 mg/l, Leuciscus idus (Golden orfe) LC ₅₀ , 96 hours: 2560 mg/l, Pimephales promelas (Fat-head Minnow) LC ₅₀ , 14 days: 2138 mg/l, Poecilia reticulata (Guppy) LC ₅₀ , 96 hours: > 10000 mg/l, Lepomis macrochirus (Bluegill) LC ₅₀ , 96 hours: > 10000 mg/l, Menidia peninsulae (Tidewater silverside)
Acute toxicity - aquatic invertebrates	EC₅₀, 24 hours: 165 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 72 hours: 100 mg/l, Desmodesmus subspicatus
Acute toxicity -	EC₅₀, 5 minutes: 3536 mg/l, Pseudomonas putida
microorganisms	EC₅o, 15 minutes: 5620 mg/l, Photobacterium phosphoreum luminescence inhibition
	study IC₅₀, 15 hours: 17000 mg/l, Activated sludge
Chronic aquatic toxicity	
Chronic toxicity - aquatic invertebrates	LOEC, 21 days: > 100 mg/l, Daphnia magna
	Naphtha (petroleum), hydrotreated light
Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 18.27 mg/l, QSAR
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 31.9 mg/l, QSAR
Acute toxicity - aquatic plants	EL50, 72 hours: 13.56 mg/l, QSAR
Acute toxicity - microorganisms	EL50, 48 hours: 15.81 mg/l, QSAR
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	NOELR, 28 days: 4.089 mg/l, QSAR

Chronic toxicity - aquatic	NOELR, 21 days: 7.138 mg/l, QSAR
invertebrates	

DI-ISOPROPYL ETHER

Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 402 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 190 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC₅₀, 96 hours: 1000 mg/l, Pseudokirchneriella subcapitata EC10, NOEC, 96 hours: 1000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC₅₀, 3 hours: 2249 mg/l, Activated sludge EC10, NOEC, 3 hours: 370 mg/l, Activated sludge
	ACETONE
Acute aquatic toxicity	
Acute toxicity - fish	LC₅₀, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout) LC₅₀, 96 hours: 11000 mg/l, Marinewater fish LC₅₀, 96 hours: 8300 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 8800 mg/l, Freshwater invertebrates
Acute toxicity - aquatic plants	EC₅₀, 96 hours: 7200 mg/l, Algae NOEC, 96 hours: 430 mg/l, Algae
Acute toxicity - microorganisms	EC10, NOEC, 30 minutes: 1000 mg/l, Activated sludge
Acute toxicity - terrestrial	LC₅₀, 48 hours: 100-1000 µg/cm2, Eisenia Fetida (Earthworm)
Chronic aquatic toxicity	
Chronic toxicity - aquatic invertebrates	NOEC, 28 days: 2212 mg/l, Daphnia magna

12.2. Persistence and degradability

Ecological information on ingredients.

DIETHYL ETHER

Persistence and
degradability

Not readily biodegradable.

Naphtha (petroleum), hydrotreated light

Persistence and degradability

98% 28 days Rapidly degradable

DI-ISOPROPYL ETHER

Persistence and degradability

Not readily biodegradable.

ACETONE

Persistence and	90 +/- 2.2%; 28 days Rapidly degradable
degradability	

Stability (hydrolysis) The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No specific test data are available.

Ecological information on ingredients.

DIETHYL ETHER

Partition coefficient

log Pow: 1.05

DI-ISOPROPYL ETHER

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.4

ACETONE

Bioaccumulative potential Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility

The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

DIETHYL ETHER

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current UK criteria. assessment

Naphtha (petroleum), hydrotreated light

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current UK criteria. assessment

DI-ISOPROPYL ETHER

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current UK criteria. assessment

ACETONE

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current UK criteria. assessment

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods

Holts Start Pilote

Empty containers must not be punctured or incinerated because of the risk of an explosion.

Disposal methods	Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Avoid the spillage or runoff entering drains, sewers or watercourses.
SECTION 14: Transport inform	nation
14.1. UN number	
UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950
14.2. UN proper shipping name	8
Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS
14.3. Transport hazard class(e	s <u>)</u>
ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1
Transport labels	
14.4. Packing group	
ADR/RID packing group	None
IMDG packing group	None
ICAO packing group	None
ADN packing group	None
14.5. Environmental hazards	
Environmentally hazardous su No.	bstance/marine pollutant
14.6. Special precautions for u	ser
EmS	F-D, S-U
ADR transport category	2
	17/10
	17714

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

SECTION 15: Regulatory information

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

Authorisations (SI 2020 No. No specific authorisations are known for this product. 1577 Annex XIV)

Restrictions (SI 2020 No.No specific restrictions on use are known for this product.1577 Annex XVII)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE: Acute Toxicity Estimate. BOD: Biochemical Oxygen Demand. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. ECss: 50% of maximal Effective Concentration. GHS: Globally Harmonized System. IARC: International Agency for Research on Cancer. IATA: International Maritime Dangerous Goods. Kow: Octanol-water partition coefficient. LC50: Lethal Concentration to 50 % of a test population. LD50: Lethal Dose to 50% of a test population. LD50: Lethal Dose to 50% of a test population. LDAEL: Lowest Observed Adverse Effect Concentration. NOAEL: No Observed Adverse Effect Concentration. NOAEC: No Observed Adverse Effect Level. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. SVHC: Substances of Very High Concern. UVCB - Unknown or variable composition, complex reaction products or Biological materials.
Classification procedures	vPvB: Very Persistent and Very Bioaccumulative. Aerosol 1 - H222, H229: Calculation method. STOT SE 3 - H336: Calculation method. Aquatic
according to SI 2019 No. 720	Chronic 3 - H412: Calculation method.
Issued by	Regulatory Specialist
Revision date	01/02/2022

Revision	9
Supersedes date	27/05/2021
SDS number	14751
Hazard statements in full	 H220 Extremely flammable gas. H222 Extremely flammable aerosol. H224 Extremely flammable liquid and vapour. H225 Highly flammable liquid and vapour. H229 Pressurised container: may burst if heated. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.