Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 3/27/2014 Revision date: 10/14/2019 Supersedes: 2/6/2019 Version: 3.1

CECTION 4. How (the stick of the	and a tax a shutter and at the same and built a station	
1.1. Product identifier	substance/mixture and of the company/undertaking	
Product form	: Mixture	
Product name	: TECHNO FREINS	
Product code	: 303602	
Type of product	: Detergent	
Product identification	: Aerosol	
1.2. Relevant identified uses of the s	ubstance or mixture and uses advised against	
1.2.1. Relevant identified uses		
Industrial/Professional use spec	: Industrial For professional use only	
Use of the substance/mixture	: Degreasing, cleaning, deoxidizing for pads and brake systems.	
1.2.2. Uses advised against		
No additional information available		
1.3. Details of the supplier of the safe	ety data sheet	
IPC SAS CS 71821 - 10, Quai Cdt Malbert 29218 BREST - France T 02-98-43-45-44 - F 02-98-43-22-53 <u>ipc@groupe-ipc.com</u>		
1.4. Emergency telephone number		
No additional information available		

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	

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

Aerosol 1	H222;H229
Skin Irrit. 2	H315
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411
Full text of hazard classes and H-statements : see section 16	

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP)



Signal word (CLP) Hazardous ingredients

Hazard statements (CLP)

- : Danger
- : Hydrocarbons, C6, isoalkanes, <5% n-hexane; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
- : H222 Extremely flammable aerosol.
- H229 Pressurised container: May burst if heated.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP)	 P102 - Keep out of reach of children. 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. P260 - Do not breathe spray. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of water/ P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Extra phrases	 For professional use only. Not to be used for any purpose other than the one the product was designed for.
2.3. Other hazards	

No additional information available

SECTION 3: Composition/information on ingredients 3.1. Substances Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	(EC-No.) 921-024-6 (REACH-no) 01-2119475514-35	60 - 80	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C6, isoalkanes, <5% n-hexane	(EC-No.) 931-254-9 (REACH-no) 01-2119484651-34	10 - 20	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Carbon dioxide substance with a Community workplace exposure limit	(CAS-No.) 124-38-9 (EC-No.) 204-696-9 (REACH-no) exempté d'enregistrement	5 - 8	Press. Gas (Comp.), H280
n-hexane	(CAS-No.) 110-54-3 (EC-No.) 203-777-6 (EC Index-No.) 601-037-00-0	0.1 - 0.5	Flam. Liq. 2, H225 Repr. 2, H361f Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Specific concentration limits:			
Name	Product identifier	Specific con	centration limits
n-hexane	(CAS-No.) 110-54-3 (EC-No.) 203-777-6 (EC Index-No.) 601-037-00-0	(5 = <c 100)<="" <="" td=""><td>STOT RE 2, H373</td></c>	STOT RE 2, H373

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash with plenty of water/ Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: Obtain medical attention if pain, blinking or redness persists. In case of eye contact, immediately rinse with clean water for 10-15 minutes.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Allow the victim to rest.
4.2. Most important symptoms and effect	cts, both acute and delayed
Symptoms/effects after inhalation	: Inhalation of vapour can cause breathing difficulties. Vapours may cause drowsiness and dizziness.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830		
Symptoms/effects after skin contact	: Irritating to skin.	
Symptoms/effects after eye contact	: May cause irritation to the eyes.	
Symptoms/effects after ingestion	: Ingestion unlikely.	

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

Advice to physicians: Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Carbon dioxide. Water spray. Dry powder.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the substa	ance or mixture
Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.
Reactivity in case of fire	: Prevent fire fighting water from entering the environment.
Hazardous decomposition products in case of fire	: Incomplete combustion and thermolysis produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soo.
5.3. Advice for firefighters	
Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection.
Firefighting instructions	: During a fire, projections ignited aerosol that burst under excessive pressure have to be controlled. To avoid overpressure, cool aerosols with water. Exercise caution when fighting any chemical fire. Evacuate area.

SECTION 6: Accidental release measu	ires
6.1. Personal precautions, protective equi	
General measures	: Measures to take in the case of crushing or piercing aerosols, causing the leaking of products contained in aerosols. Ventilate area. Do not smoke. Remove ignition sources. Provide local exhaust or general room ventilation. Evacuate and limit access.
6.1.1. For non-emergency personnel	
Emergency procedures	: Do not touch spilled material. Evacuate area.
6.1.2. For emergency responders	
Protective equipment	: Wear recommended personal protective equipment. Provide adequate ventilation. Remove all sources of ignition. Avoid contact with skin and eyes. Do not inhale vapour.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify a	authorities if liquid enters sewers or public waters.
6.3. Methods and material for containment	t and cleaning up
Methods for cleaning up	: Clean up any spills as soon as possible, using an absorbent material to collect it. Collect the residue by means of a non-combustible absorbent material. Sand. Earth. Vermiculite.
6.4 Reference to other sections	

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Good ventilation of the workplace required. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Not to be used for any purpose other than the one the product was designed for. Do not breathe gas, fumes, vapour or spray. During the handling of a pallet, you have to take all precaution to avoid a start of a n accident perforation of the aerosol by a fork-lift truck. During the load and unloading of the vehicle, you have to take all the precaution to avoid a fall a aerosol. Do not spray tha aerosol neither close nor towards a flame, a white-hot body, an electrical appliance in runing, DO NOT SMOCKING. Container under pressure. Do not drill or burn even after use. Store and handle as though always a serious potential fire/explosion and health hazard exists.
Hygiene measures	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including any	/ incompatibilities
Technical measures	Keep at temperature not exceeding 50°C. Proper grounding procedures to avoid static electricity should be followed. Use grounded electrical/mechanical equipment.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Storage conditions	: Recommendations applicable to warehouses and reserves which are stored aerosols. It is recommended to de-normalize aerosols in stock . The " aerosol " or area must be set with a wire mesh of mesh max 5cm, forming a cage or using walls to avoid splashing the aerosols may ignite rest of the stock . Do not smoke.
	To reduce the risk of falling, should position the pallet closest to the ground. If the packages are stacked, it should ensure that those lower layers do not crash (risk of leakage through compression).

It is recommended :

- Ventilate the premises and not store any sprays near heat sources, including sunlight, sparks and open flames

- To use the procedure of fire when working . Store in a dry, well ventilated place .

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection			
8.1. Control parameters	8.1. Control parameters		
Hydrocarbons, C6, isoalkanes, <5% n-hexane			
France - Occupational Exposure Limits			
VME (mg/m³)	1000 mg/m³		
VLE (mg/m³)	1500 mg/m³		
Hydrocarbons, C6-C7, n-alkanes, isoalkanes,	cyclics, <5% n-hexane		
France - Occupational Exposure Limits			
VME (mg/m ³)	1000 mg/m³		
VLE (mg/m³)	1500 mg/m³		
n-hexane (110-54-3)			
EU - Occupational Exposure Limits			
Local name	n-Hexane		
IOELV TWA (mg/m³)	72 mg/m³		
IOELV TWA (ppm)	20 ppm		
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC		
France - Occupational Exposure Limits			
Local name	n-Hexane		
VME (mg/m³)	72 mg/m³		
VME (ppm)	20 ppm		
Note (FR)	Valeurs règlementaires contraignantes; substance classée toxique pour la reproduction de catégorie 2		
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016)		
Carbon dioxide (124-38-9)			
EU - Occupational Exposure Limits			
Local name	Dioxyde de carbone		
IOELV TWA (mg/m³)	9000 mg/m³		
IOELV TWA (ppm)	5000 ppm		
8.2. Exposure controls	8.2. Exposure controls		

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

Eye protection:

Eye protection should only be necessary where liquid could be splashed or sprayed

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Skin and body protection:

Skin protection appropriate to the conditions of use should be provided

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Other information:

Do not eat, drink or smoke during use. Provide local exhaust or general room ventilation.

SECTION 9: Physical and chemical p	properties			
9.1. Information on basic physical and chemical properties				
Physical state	: Liquid			
Colour	: Colourless.			
Odour	: characteristic.			
Odour threshold	: No data available			
pH	: No data available			
Relative evaporation rate (butylacetate=1)	: No data available			
Melting point	: No data available			
Freezing point	: No data available			
Boiling point	: (PA)			
Flash point	: < 0 °C (PA)			
Auto-ignition temperature	: No data available			
Decomposition temperature	: No data available			
Flammability (solid, gas)	: No data available			
Vapour pressure	: No data available			
Relative vapour density at 20 °C	: No data available			
Relative density	: No data available			
Density	: 0.68 (PA)			
Solubility	: No data available			
Log Pow	: No data available			
Viscosity, kinematic	: < 20.5 mm²/s			
Viscosity, dynamic	: No data available			
Explosive properties	: Pressurised container: May burst if heated.			
Oxidising properties	: No data available			
Explosive limits	: No data available			
9.2. Other information				
VOC content	: 663 g/l (94.6%)			

SECTION 10: Stability and reactivity
10.1. Reactivity
Extremely flammable aerosol. Pressurised container: May burst if heated.
10.2. Chemical stability
The product is stable at normal handling and storage conditions. Extremely flammable aerosol. Heating may cause a fire or explosion.
10.3. Possibility of hazardous reactions
None under normal conditions.
10.4. Conditions to avoid
Open flame. Heat. Direct sunlight. Sparks. Avoid the build-up of electrostatic charge. Remove all sources of ignition. Avoid contact with hot
surfaces.
10.5. Incompatible materials
Strong oxidizers. Aerosol cases in metal, do not bring into contact with oxidize, acids or basis.
10.6. Hazardous decomposition products
Incomplete combustion and thermolysis produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons,
aldehydes and soo.
SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity (oral) : Not classified

Acute toxicity (dermal) Acute toxicity (inhalation)

: Not classified

: Not classified

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hydrocarbons, C6, isoalkanes, <5% n-hexane	
LD50 oral rat	> 16750 mg/kg
LD50 dermal rabbit	> 3350 mg/kg
LC50 inhalation rat (mg/l)	> 259354 mg/m³

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			
LD50 oral rat	5840 mg/kg		
LD50 dermal rat	> 2920 mg/kg		
LC50 inhalation rat (mg/l)	> 25200 mg/m³		
Skin corrosion/irritation	Causes skin irritation.		
Additional information	Based on available data, the classification criteria are not met		
Serious eye damage/irritation	Not classified		
Additional information : Based on available data, the classification criteria are not met			
Respiratory or skin sensitisation	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Germ cell mutagenicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Carcinogenicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Reproductive toxicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
STOT-single exposure	May cause drowsiness or dizziness.		
Additional information	Based on available data, the classification criteria are not met		
STOT-repeated exposure	Not classified		
Additional information	Based on available data, the classification criteria are not met		
Aspiration hazard	May be fatal if swallowed and enters airways.		
Additional information	Based on available data, the classification criteria are not met		
DEGRAISSANT FREINS			
Product identification	Aerosol		

Viscosity, kinematic	< 20.5 mm²/s
	Eye contact : Stinging and temporary redness. Repeated exposure may cause skin dryness or cracking. Nausea. May be irritating to the mucous membranes and to the respiratory system.

OFOTION 40. Feels vised information				
SECTION 12: Ecological information				
12.1. Toxicity				
Ecology - general	: Avoid release to the environment.			
Hazardous to the aquatic environment, short-term (acute)	Not classified			
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.			
Hydrocarbons, C6, isoalkanes, <5% n-hexane				
LC50 fish 1	18.3 mg/l			
EC50 Daphnia 1	31.9 mg/l			
EC50 72h algae (1)	13.6 mg/l			
NOEC chronic fish	4.09 mg/l			
NOEC chronic crustacea	7.14 mg/l			
NOEC chronic algae	3 mg/l			
12.2. Persistence and degradability				
Hydrocarbons, C6, isoalkanes, <5% n-hexane				
Biodegradation	98 % Readily biodegradable			

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.3. Bioaccumulative potential			
Hydrocarbons, C6, isoalkanes, <5% n-hexane			
Log Pow 3.6			
12.4. Mobility in soil			
No additional information available			
12.5. Results of PBT and vPvB assessment			
No additional information available			
12.6. Other adverse effects			
Additional information	: No other effects known		

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	: Dispose used or damaged aerosol cans at permitted disposal sites. Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use.
	A satisfiest of the second s

Ecology - waste materials

: Avoid release to the environment.

SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / ADN						
ADR	IMDG	ΙΑΤΑ	ADN	RID		
14.1. UN number						
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950		
14.2. UN proper shipping name						
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS		
Transport document descr	iption		I			
UN 1950 AEROSOLS, 2.1, (D), ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, MARINE POLLUTANT/ENVIRONME NTALLY HAZARDOUS	UN 1950 Aerosols, flammable, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1 ENVIRONMENTALLY HAZARDOUS		
14.3. Transport hazard o	class(es)		1			
2.1	2.1	2.1	2.1	2.1		
14.4. Packing group						
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
14.5. Environmental haz	ards					
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes		
No supplementary informatio	n available					
14.6. Special precaution	s for user					
Overland transport						
Classification code (ADR)	: 5F					
Special provisions (ADR)		0, 327, 344, 625				
Limited quantities (ADR)	: 11					
Excepted quantities (ADR) : E0						

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content	: 663 g/l (94.6%)
Other information, restriction and prohibition regulations	: Aerosol Generator Directive 75/324/EEC and its adaptations. Regulation 648/2004 / EC and its adaptations of detergents.
Detergent Regulation : Labelling of contents:	

rgent Reg

Component

aliphatic hydrocarbons

15.1.2. National regulations

France

: RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel

%

>=30%

	Installations classées Désignation de la rubrique	Code Régime	Rayon
4511.text	Dangereux pour l'environnement aquatique de catégorie chronique 2.		

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information Indication of changes: Section **Changed item** Change Comments Revision date Modified Supersedes Modified REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 Data sources December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Other information : Imp. DL4.

Full text of H- and EUH-statements:		
Aerosol 1	Aerosol, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
10/14/2019 (Version: 3.1)	EN (English)	8/9

Occupational diseases

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

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